

Teachers' Beliefs in Successful Education in China and Germany

Yingxi Xing

Wirtschafts- und Sozialwissenschaftlichen Fakultät
Eberhard Karls Universität Tübingen

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Yingxi Xing

from Shandong, China

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Dean:

Professor Dr. rer. soc. Josef Schmid

1st supervisor:

Professor Dr. Bernhard Schmidt-Hertha

2nd supervisor:

Professor Dr. Sigrid Karin Amos

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Preface

In 1999, I graduated from a Normal College in the major of psychology and minor in English, and became an English teacher in a public junior high school in the countryside. Like every new teacher, I had beautiful ideals on the education and wanted to be a good friend of my students and tried to make them happy in class. Very soon I found more and more students didn't do their English homework, but were busy with other subjects even during the break time before my English class, and they told me that their teachers of other subjects would beat or punish them harshly if they didn't finish the homework. So the situation was the more they feared a teacher, the more time they spent on his/her teaching subject, and in the end of the semester, the English exam results of my students were really bad. Then I started to think about what a good education is for children's healthy development, for it is very sure that children should not be the victims of teachers' hegemony along with different kinds of punishment physically and psychologically.

With a strong desire on learning more about education, after 3-year teaching, I left the school and went on with the study in a Master's program of Curriculum and Instruction in a university. During that time of my study, an ambitious reform on elementary and secondary education started nationally in China, which put forward some advanced educational concepts like student-centered teaching, school-based course, comprehensive practical activity, etc. Unfortunately, due to the great pressure of examinations, the reform didn't shake the old-fashioned educational foundation or change the face of school education. The new concepts of reform became formalistic and abortive in the schools, and the rehearsal and training for final examinations turned increasingly intensified.

All the time the national college entrance examination, which is well-known as the Gaokao, has been a big life turning point of senior high school students, the hard and stressful school life speaks for itself as a harsh competition that is not only among individuals and schools, but also provincial and national. In 2016, over 10 years later after the reform, I visited some schools for my thesis interview and was totally shocked by the situation that even some junior high schools had changed themselves into boarding schools, where students have almost the same rhythm of study as senior high school students who study throughout the whole day of every day and also most of the weekends, from early morning till late night

except one-hour physical activity. It reminds me of a picture that olives are squeezed harshly again and again into olive oil, and it makes me sad. There's no wonder that in senior high school a high proportion of students is nearsighted.

With this precious opportunity of doctoral study in Germany, I couldn't wait to explore the topic of successful education, which has been burning my heart all the time since I became a teacher. After the discussion with my dear supervisor Prof. Dr. Bernhard Schmidt-Hertha, I got this topic "teachers' beliefs in successful education in China and Germany", since a lot of research has proved that teachers' beliefs have very close relationship with their behaviors in class and they show a big consistence with each other, and for me it's not interested to read what's written in the book of educational policy, but it's important to figure out what really happens in teachers' classes. Therefore, to uncover teachers' beliefs in successful education is very helpful to answer the question I have been seeking for.

Vasyl Sukhomlynsky has said that the true humanitarianism in pedagogy is to cherish the joy and happiness that children have rights to enjoy, and education is not omnipotent, but education must protect children's tremendous spiritual wealth – joy and happiness. Children should have a happy and healthy school life with proper training and development in minds and behaviors, which is not an easy topic for teachers when at the same time they have to face the pressure and expectations from all the sides. Hereby this thesis is also to pay a sincere tribute to all teachers who dedicate their passion, love and lives to the cause of education, and who would like to be candles burning themselves to light up the lives and souls of children.

Introduction

Robinson & Kuhlmann (1967) have cited the statement of Friedrich Edding in their article that “a large part of public opinion in all countries is now convinced that educational achievement is not only an expression of material wealth, but that the future wealth of a country in any sense and its position in the world are strongly influenced by education” (Phillips, 1995. p.18). Indeed, education acts as a powerful lever of the comprehensive national strength and a driving force of a nation’s sustainable development, and on the individual’s whole life its influence is undeniably self-evident, profound and lasting. As the main body of education, teachers play a dominant role in the implementation of education, and their teaching minds and behaviors crucially affect the results or quality of education. Dozens of research have proved that teachers are the decisive factor to the success/failure of educational reforms, and historically many reforms ended incompletely or unsuccessfully mainly because teachers didn’t fully understand the concepts of reforms or didn’t apply them to their daily teaching practices due to a variety of reasons.

In 2004 I published an article about the nationwide curriculum reform and described the divorce between teachers’ educational theories and their teaching practices (Xing, 2004). For example, the advocacy on the integration of knowledge in the curriculum reform made teachers’ existing single-subject knowledge structure become an obvious disadvantage in the teaching of new multidisciplinary textbooks; due to the lack of consciousness on self-improvement and self-innovation, teachers were found, instead to search for new teaching methods, still adhere to the old teaching ways that were believed very “effective” by their years’ experiences, which consequently led to the dilemma of “wearing new shoes to walk on the old path” and resulted in the conflict between teachers’ teaching practices and reform’s concepts.

In Chinese school system, educational evaluation is the measurement not only on students’ study performance but also on teachers’ teaching performance which, however, mainly depends on students’ examination results. So when the reform strived for all-round development of students, but the educational evaluation remained unchanged, the implementation of reform in schools inevitably slipped into the quagmire of formalism, and became perfunctory just for the inspection of superior departments, e.g. some schools had

two different lesson timetables – one was fake only for the inspection and the other was for daily teaching, or some teachers had to make up some files or exhibition works according to the reform’s concepts, but in fact nothing new happened in the real school life. Those phenomena were called “two pieces of skin” in school education.

Nevertheless, what teachers could actually do was to have to follow the educational evaluation that acted as the baton of teaching, and when the evaluation only focused on students’ examination performance, teachers were pushed to defend the traditional examination-oriented education and become spokesmen of educational utilitarianism, because the activities related to reforms were good but couldn’t really help students in higher examination scores, on the contrary, could most likely lower the scores because of taking up much time that should be fully input in examination exercises. Teachers also very concern about the honor of “Excellent Teacher” that is normally given to the teacher whose class has the highest average examination results of students, and with this honor the teacher can have a big chance to be promoted to higher professional titles along with more salary and benefits, otherwise, the chance is very slim.

What’s more, as far as Chinese parents and the society are concerned, they usually judge whether a student or a teacher is good or not only by examination results, and keep the neglect in students’ moral education, personality development, life skills, physical and psychological health. If students got lower exam scores because of participation in some activities based on their interests or talents, parents would strongly oppose and stop their children. So perhaps teachers had no problems to accept the new concepts of the reform, but without the supports of parents and society and without the soil of practice, teachers’ attempts on the new concepts in their teaching would be like throwing straws against the wind, and they just got frustrated in the end, which also helps to explain why educational reforms in most cases ended up halfway or abortively.

Consequently, no matter what concepts of educational reforms or plans, what teachers think and do in their daily teaching can tell the true stories about what is on earth happening in school education. Thanks to the development of cognitive psychology, researchers paid more attention on the study of teachers’ cognition, and tried to discover the relationship between teachers’ thinking and their behaviors. Soon researchers, in order to explore the whole mental activities of teachers, extended the scope of study to teachers’ emotions, attributions, judgments, reflections, evaluations and so on, among which teachers’ beliefs

were found to play a more important role in the implementation of instructional strategies in class. Wallace and Kang (2004) believe what teachers do in their classrooms are the actions and representatives of their beliefs on education.

Quickly the word of belief caught a lot of interest and attention, and struck a chord among an increasing number of researchers in different countries. Till now there are countless articles about teachers' beliefs. As it's widely discussed and found, "beliefs are instrumental in defining tasks and selecting the cognitive tools with which to interpret, plan, and make decisions" (Pajares, 1992), and beliefs usually can be potently affective, evaluative, episodic and act as a filter through which new phenomena and situations are interpreted, so they can play a critical role in selecting information, organizing knowledge and defining behaviors (Abelson, 1979; Pajares, 1992; Johnson 1994; Ballone & Czerniak, 2001). It is believed that teachers' beliefs are important dispositions and strong predictors of their teaching behaviors, and teachers' beliefs largely affect and guide their classroom practices (Abelson, 1979; Pajares, 1992; Ballone & Czerniak, 2001; Levitt, 2001).

Moreover, teachers' beliefs, as the foundation of the educational philosophy, have significant influences on their ways of thinking, understanding, and doing (Johnson, 1994; Aston & Hyle, 1997). When teachers construct their identity and seek professional development, educational beliefs are acknowledged to play an important role (Fang, 1996; Vartuli, 1999; Hermans et al., 2008). It's also found that teachers' decisions "made extemporaneously in the midst of stress, uncertainty, and tensions of the classroom are based mainly on teachers' beliefs", and when some problems occur in class, teachers often make decisions based on their beliefs to solve the problems (Vartuli, 1999).

Generally, it is agreed that beliefs are acquired through the process of schooling, social construction, enculturation or cultural transmission (Pajares, 1992) in the "educational and socio-cultural circumstances in which teachers live, the institutions in which they were educated, and the places where they currently work" (Al-Amoush et al., 2014). Therefore, teachers' beliefs are specific in time and context, and highly depend on the socio-economic and cultural circumstances where the educational system is embedded (Pajares, 1992; Al-Amoush et al. 2014).

It is said that within the past years "understanding and describing teachers' beliefs has become a priority for educational researchers" (Luft & Roehrig, 2007), which is "essential

to improve teaching practices and professional teacher preparation programs” (Johnson, 1994), can “significantly contribute to enhancing educational effectiveness” (Fang, 1996), and has been seen as one of the most valuable psychological constructs for teacher’s teaching and teacher education (Ballone & Czerniak, 2001). Because of the close relationship between beliefs and behaviors, the study on teachers’ beliefs is realized very critical to understand and expect educational outcomes (Prime & Miranda, 2006).

As to the topic of educational reform, it has been increasingly discussed about the importance of recognizing teachers’ beliefs as an important factor of the reforms’ results (Al-Amoush, 2014). Some research also supports the idea that teachers are crucial change agents leading the actual directions of educational reforms, and are affirmed as the central power in the realization of reforms, so teachers’ beliefs are called as precursors to change and main determinants of the reforms’ success (Ballone & Czerniak, 2001; Prime & Miranda, 2006). Thus, for the reforms to be successful, teachers’ beliefs must be taken into account, which also help to identify and remedy the problems and failures in educational reforms (Beck et al., 2000; Ballone & Czerniak, 2001; Al-Amoush et al., 2014).

Based on the large quantity of former research, this study got a rich theory support to reach a good understanding on teachers’ beliefs. However, till now there has been no research touching the topic about successful education in teachers’ beliefs especially in a cross-cultural comparative perspective between Germany and China. So this thesis could be expected to fill in this blank and open a fresh angle to look into the education and school systems in both countries. Through the description of teachers’ beliefs on successful education, it might be helpful to not only portray a realistic picture about what kind of education teachers believe are successful, but also figure out the problems and conflicts making teachers struggle between their beliefs and the reality, which hopefully could provide a valuable reference for teacher education and educational reforms.

Correa et al. (2008) have highlighted that “a cross-cultural investigation of teachers’ beliefs can be particularly valuable because the comparison of two distinct culturally embedded belief systems can make implicit beliefs and assumptions more transparent”. And they further explain that “teachers’ ways of thinking about learning and teaching may be difficult to access without cross-cultural comparison,...the advantage of a comparative process is that it can make familiar and widespread beliefs within one culture suddenly seem distinctive and unusual”, and can lead to a more explicit understanding on their own

implicit theories (Correa et al., 2008). Besides, another outcome of this comparison is hopefully to help China and Germany to get mutual understanding among different types of schools within the education systems and to learn from each other for the future educational reforms.

Research questions

1. What is successful education in teachers' beliefs?
2. What kinds of students are successful in teachers' beliefs?
3. Do teachers think their beliefs can be changed?
4. Do teachers think their beliefs direct their teaching?
5. What is the success teachers think in the education system?

According to the questions, the interviews with teachers were recorded and written down into transcripts as the basic research data, and the main research questions are added behind following the part of reference. Based on those questions, I led the interviews to be done one by one in Germany and in China, but sometimes I was also led by the teachers into new topics and questions when what teachers mentioned got my interest. Therefore, I also asked every teacher some different extended questions, so that they could explain more details about what they thought or did. Objectively speaking, I'm not only a researcher, but also a participant in generating the interview materials or data.

Data collection

Education system can never be properly understood and explained apart from the larger socio-economic, political, and cultural contexts which actually have significant effects on school education and define the limitation for the teaching process beyond the control of teachers (Mansour, 2009). In some sense, it can be said that teachers are the products of

their culture and experiences with the inevitable influence from their own families, educational background, friends, peers or someone special to them (Correa et al., 2008). Therefore, every teacher has his/her own different story, and teachers' beliefs carry a strong sense of personal branding and have very personalized characteristic, which, however, "may be easily recognizable or unconsciously held convictions" (Aston & Hyle, 1997).

Pajares (1992) refers to beliefs as a system of messy constructs that have not always been described into much precision, but travel in disguise and are often named by some other aliases, like attitudes, values, ideology, perceptions, conceptual systems, repertoires of understanding, action strategies, and so on (Mansour, 2009). Rokeach (1968) has cautioned that understanding beliefs requires making inferences about teachers' underlying states, but the inferences are usually fraught with some difficulty, because teachers "are often unable or unwilling, for many reasons, to accurately represent their beliefs, ... which cannot be directly observed or measured but must be inferred from what teachers say, intend, and do" (cited in Pajares, 1992).

As Johnson (1994) has also argued, "investigations into teachers' beliefs entail inferring beliefs not only from the statements that teachers make about their beliefs, but also by examining teachers' intentionality to behave in a particular way and, ... what they actually do", which supports that it's feasible and credible for this research to use interview to collect research data. And interview is also believed by some researchers as a natural direct way to reach teachers' cognitively perceived beliefs to "understand the complexities of a belief system as it played out in context" (Wallace & Kang, 2004).

Wetherell and Potter (1988) state that "interview talk is by nature a cultural and collective phenomenon", and the meaning of an answer to a question "is not a straightforward matter of external or internal reference, but also depends on the local and broader discursive system in which the utterance is embedded" (cited in Talja, 1999). It's true that not only do different interviewees tell different stories, but also throughout one interview it is not easy to summarize the viewpoints of one interviewee, however, "the variability of interpretations does not mean that there is no regularity... it only signifies that regularity cannot be pinned at the level of the individual speaker" (Talja, 1999).

Wittgenstein (1971) has noted that "in normal language each expression not only states, but also evaluates", and the fact, as Potter and Wetherell (1987) have declared, is "descriptions,

evaluations, and large-scale cultural models of accounting are inseparably bound together” (cited in Talja, 1999). Thus, interview is also seen as a reflexive, theoretical, and context-dependent expression of common interpretative resources, which is not equally interpreted as some kind of story with clear and distinguishable messages, instead, all the discourses produced by the interviewees have to be taken into consideration in order to identify the main patterns of consistency and variation within and among them (Talja, 1999).

As we know, Germany’s secondary school system is structured into three different tracks of schooling (Jones, 2000): the Hauptschule (practical vocational orientation), providing a basic education to prepare students for employment in manufacturing industry or manual work; the Realschule (technical vocational orientation), providing preparation for employment in the technical, financial, commercial and middle management sectors; and the Gymnasium (academic orientation), providing the entry qualification for higher education. Besides, almost all states have been putting some efforts to remedy the segregation effect of the tripartite system through the provision of additional comprehensive schools, but the three separate types of secondary schools do have a long and distinguished history in Germany, so I chose 6 teachers from Gymnasium (code name GG), 6 from Realschule (GR), 6 from Hauptschule (GH) for the interview.

In China, there are no such 3 differentiate school types as in Germany in the public school system, China has the same school type throughout the whole country, and the schools are named by different sequential school years, like junior high school and senior high school, which compose the secondary education, but not all students in junior high school can go to senior high school. Since many Chinese researchers have discussed the different situations of education in big cities and in rural areas, I decided to choose 6 teachers from senior high school (3 from the school with a high proportion of students admitted to colleges – code name is CHH, and 3 from low proportion - CHL), 6 teachers from rural junior high school (boarding school where students come from many small villages) - CRB, 6 teachers from city junior high school (day school) - CCD.

Every type of school includes 2 male teachers (1 older and 1 younger) and 4 female teachers (2 older and 2 younger), in order to see whether gender and age/teaching years, except the school types, could affect teachers’ beliefs and behaviors. As to one teacher’s code name, except the code name of school, teaching year and gender are also included, for example, CCD5F means a female teacher with 5 years’ teaching from China city junior

high day school; GGD15M means a male teacher with 15 years' teaching from Germany Gymnasium, D is a letter from his name in order to distinguish teachers who have the same teaching year and gender and also same school type, e.g. GGB5F and GGS5F. Among Chinese teachers, there are no such coincidental cases.

Research methods

Considering the characteristic of individual interview's non-repeatability and research's scientific universality, in this qualitative research committed to intercultural comparison and interpretation, the main research methods here are including the qualitative content analysis (QCA) and hermeneutics. It is convinced that "qualitative content analysis is most often used to analyze interview transcripts in order to reveal or model people's information related behaviors and thoughts" (Zhang & Wildemuth, 2009). However, Schreier (2012) explains that qualitative content analysis can help to describe the data only in some certain respects which have to be specified, but cannot interpret the full meaning of each respect (p.3).

Because the interview transcripts in this research contain very rich and diverse information, QCA alone cannot satisfy the full need of the research. Therefore, hermeneutics becomes very indispensable and helpful to hopefully overcome the limitation of QCA by taking more diversity into account and arriving at the interpretation in a more inclusive and comprehensive way. Especially for a qualitative approach, "we know — at least since the important discussion on subjectivity and objectivity in the Social Sciences — that no research is completely objective, i.e. the interests, values and decisions of the researcher always guide the analysis" (Wodak, 1990). So, hermeneutics is a right choice to fit this research and a good match for QCA.

1. Qualitative Content Analysis (QCA)

Content analysis came into being as a research method in the year 1941 when Harold Lasswell started to refine and apply the method in the propaganda analysis. In 1948, Berelson and Lazarsfeld firstly published an introduction to this method that was

afterwards used in different areas, like communication studies, political science, psychology, education and literary studies. Later, Berelson in 1952 defines content analysis as “a research technique for the objective, systematic and quantitative description of the manifest content of communication” (cited in Bengtsson, 2016).

Meanwhile, according to the Bengtsson’s understanding, Berelson “underlines the process of analysis as a reliable and learnable method that precludes the personal authority of the researcher. However, Berelson's definition does not capture the qualitative and latent perspective of the analysis.” (Bengtsson, 2016). Even though Kracauer (1952) and George (1959) suggested a more qualitative type of content analysis that didn’t limit itself to manifest content and frequency counts, content analysis, for a long time, was dominant as a quantitative research technique (Schreier, 2012, p.13-14).

Only recently QCA was known as a distinct research method in English-speaking countries, and was developed as a qualitative method in its own right especially in Germany (Schreier, 2012, p.15). Downe-Wambolt (1992) states that content analysis is “more than a counting process, as the goal is to link the results to their context or to the environment in which they were produced”, and points out that “content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena” (cited in Bengtsson, 2016). But that statement has gotten a little bit suspicion still on more quantitative approach.

Till 2004 Krippendorff started to relate the concept of context to QCA, saying content analysis is “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (cited in Bengtsson, 2016). Finally, Hsieh and Shannon (2005) make it clear and define that QCA is “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (cited in Zhang & Wildemuth, 2009). So, different from the quantitative approach, QCA “pays attention to unique themes that illustrate the range of the meanings of the phenomenon rather than the statistical significance of the occurrence of particular texts or concepts” (Zhang & Wildemuth, 2009).

As a practical comparative research method for qualitative data analysis, in this research QCA is much more helpful to reduce the big volume of interview transcripts into some aspects related to the main research questions that I have brought forward in the beginning, then it's quite clear to see the main aspects that teachers have mentioned and much easier to come into a brief but systematically in-depth description and an integrated view with some specific classification about the questions. It is believed that meaning understanding is contextual and influenced inevitably by researcher individual background, so here QCA also gives a possibility to examine latent meanings and interpret the reality in a subjective but scientific approach (Zhang & Wildemuth, 2009).

In some sense, the process of understanding is a construction of attributing meanings, in which the individual background is involved, and because the "background can be different in different situations, the idea of the correct meaning of any piece of data loses its appeal", but the manner of description and interpretation becomes salient and plays a bigger role (Schreier, 2012, p.20). Interpretation, as the heart of the research process in this qualitative research, is a process of actively constructing meanings that depend invariably on certain contexts and are context-specific, so the context becomes inevitably an inseparable and integral part of the data (Schreier, 2012, p.21-22).

When using the QCA method, it's necessary to know its specific features. Schreier (2012) concludes some certain characteristics of QCA, such as "focus on latent meaning, attention to context, variable handling of reliability, validity checks just as important as reliability checks, at least partly data-driven, more inferences to context, author, and recipients, more flexibility in going through the steps" (p.17), which are also the guidance or the main rules that this research follows to go through all the transcript data, especially the attention to the context where every teacher works, because it can be seen very clearly during the interviews that without paying close attention to the contexts teachers' beliefs couldn't be properly understood.

Different from the ground theory, as Schreier (2012) also declares, QCA is more about summarizing what is there in the data, and less about creating some new theory from the data (p.41). It actually "involves a process designed to condense raw data into categories or themes based on valid inferences and interpretation", and a process of inductive reasoning to produce data-based categories through the researcher's repetitious reading and constant comparison (Zhang & Wildemuth, 2009), which is the

main part of work I do with the transcripts. Hence, QCA also defines itself “as an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytical rules and step by step models, without rash quantification” (Mayring, 2000).

In order to do the QCA in a successful way, the researcher must be very familiar to the transcript data, which can only be achieved by many times of reading. The first step what I do is to cut one entire transcript into several big pieces according to the main questions, their derived questions and the questions related. After a process of compression and extraction on the condition of keeping the teachers’ original words without change, which also means some parts of transcript from each teacher have to be neglected and dismissed, then it comes to a step of comparison and summarization among teachers and countries within one main question.

As far as QCA is concerned, the most important step in my knowledge is to create coding and categories based on the data, which can be theory-based or data-driven, but for the qualitative manner of QCA data-driven or partly data-driven is highly recommended, for example, also in this study, they come directly from the original data or be created in a summary and brief way based on the data. It’s been known that QCA requires researchers to choose and focus on the specified main aspects of data to create ‘coding frame’ that plays a role as kind of ‘filter’ to reduce and structure materials, so as to help to organize the probably out-of-order or intertwined data in a clearly summarized way and classify them into different coding and sub-categories in particular.

It’s necessary to go through the materials again in order to check the validity of coding and categories to see if they can fit and represent the main meanings of data. Afterwards, one step that cannot be missed in QCA is to re-classify and re-summarize the raw data for more than one time by use of the coding frame, which is also called as reliability check. Like this research numbers are also used in QCA for the coding frequency, which, however, “doesn’t automatically make QCA a quantitative method” (Schreier, 2012, p.36). In the end, during the process of understanding and interpretation, the analysis can only be proper and meaningful when the description of specific contexts and teachers’ individual backgrounds is involved.

In conclusion, a main goal of QCA is to “provide sufficient description to allow the reader to understand the basis for an interpretation, and sufficient interpretation to allow the reader to understand the description”, among which the description is to inform readers of the rich backgrounds and contexts, and interpretation means the researcher’s “personal and theoretical understanding of the phenomenon under study” (Zhang & Wildemuth, 2009).

Besides, it’s also necessary to note that the teacher interviewees essentially play a main ‘co-producing’ role in the research’s process and findings like in this research. Likewise, it’s also important for the researcher to acknowledge his/her role in co-producing data by making “interpretation transparent so that it can be shared by others” to achieve the goal of QCA, which is to reach a socially shared and consensual understanding that is expected to transcend the researcher’s individual background and assumptions (Schreier, 2012, p.32).

2. Hermeneutics

Hermeneutics, as an interpretive philosophical theory, is a very important research method in this paper, which helps to transcend the QCA’s limitation on specified aspects and to methodologically understand and catch the rich meanings throughout all interview transcripts. The principal advantage and contribution of QCA are not on the understanding or interpretation, but in the classification and summarization, for which QCA could provide a methodological support in a specific manner. Therefore, hermeneutics is supposed to give the understanding and interpretation a theoretical basis and grant the way of understanding and interpretation as a reliable methodology.

As it’s well known, the theoretical basis of hermeneutics comes from Friedrich Schleiermacher, ‘the father of modern hermeneutics’, who made a big move from “the illumination of biblical text to the illumination of human understanding” (Paterson & Higgs, 2005), and “offered the important view of hermeneutics as a general theory of textual interpretation and understanding” (Prasad, 2002), which was later largely developed by Martin Heidegger and Hans-Georg Gadamer into a philosophical hermeneutics, and Wilhelm Dilthey contributed to broaden “the field of interest of hermeneutics beyond the individual to include cultural systems and organizations” (Paterson & Higgs, 2005).

However, in the hermeneutics, “interpretation and understanding are not two separate cognitive acts performed by the subject”, rather, understanding actually is aimed to catch the meanings that emerge or occur in the interpretation, and interpretation turns itself out as an “explicit form of understanding” (Eger, 1993). Therefore, “interpretation belongs to the essential unity of understanding” (Gadamer, 1976, cited in Chau, 1984), and it not only refers to interpreting the texts in the socio-cultural and historical contexts, but more importantly means reconstructing and re-experiencing the author’s intended psychological processes by “developing an empathetic understanding” (Prasad, 2002), which begins when the texts “find expression in the interpreter’s own language”, and “involves more than analysis, description and classification” (Chau, 1984).

A big reason to use hermeneutics here is that it advocates the “productive role of ‘tradition’ and ‘prejudices’ in the act of interpretation” (Prasad, 2002), because, with the experience of an English teacher in a public junior high school in China, I’ll inevitably bring my own history, culture, tradition, values, interests, and prejudices into my understanding and interpretation, about which Gadamar has also argued that all start from the tradition or historical consciousness, and “it is tradition that produces the necessary prejudices which inform and originate the subject’s interpretative act” (Francis, 1994).

Thus, as long as I try to understand what the teachers have talked in the interviews, the interpretation comes through the colored glasses of my mind, so understanding is always subjective, which depends on my perspective and knowledge. I agree with Walker (1997) that “there is no such thing as a totally disinterested or objective researcher”, but it doesn’t mean that the research is of no value or credibility. By importing Gadamar’s opinions, prejudices are simply the conditions that I have experienced in my life, and they are undoubtedly one part of my research work and the foundation of my analytical structure, for it is prejudices “that define the limits and the potentialities of our horizon of understanding”, and that are also the indispensable “conditions of all understanding” (Prasad, 2002).

Besides my teaching experience, my educational background on Psychology and Curriculum & Instruction expectantly facilitates the so-called ‘fusion of horizons’ in hermeneutic dialogue leading to conscious assimilation for the authentic understanding and interpretation (Prasad, 2002). Therefore, my own prejudices, as one part of me,

could become more visible and favorable to the empathetic understanding on teachers' beliefs, and also help me to be more sensitive in understanding their teaching conditions, sometimes I could feel that I was also there in the same situation as where they are, and I could understand their struggles and why they think like that.

Of course, respecting the subjectivity of research does not mean to deny its objectivity and reliability. Johnsen and Olsen (1992) cite the statement from Schleiermacher (1986) to make it clear that, "before the art of understanding can be practiced, the interpreter must put himself both objectively and subjectively in the position of the author". As for me, I believe that keeping the rigorous scientific attitude on doing research is first and foremost, besides, keeping teachers' viewpoints as original as possible in the interpretation is another way to avoid the excessive subjective prejudice and judgment in this research. But, since hermeneutics developed from a general theory to a philosophical theory, it has been highlighting more and more subjectivity, which I have to respect and apply as it should be.

Meanwhile, 'understanding circle' is another important concept for philosophical hermeneutics, that is, understanding must take turns constantly between the parts and the entire text, which means the understanding of a part is dependent on the understanding on the whole text, and the understanding on the whole text also counts on the understanding of each part. As Duke (1977) also mentioned, "interpretation involves constant movement back and forth, for it is always open to revision and supplementation" (cited in Smith, 2007). Therefore, "hermeneutical understanding is a process, is not an end in itself, and is never complete" (Francis, 1994). That's why "perfect understanding is an ideal which is ever approximated but never attained" (Duke, 1977, cited in Smith, 2007).

I prefer hermeneutics also because "methodologically, hermeneutics is also a deeply self-reflexive and self-critical process" (Prasad, 2002). As a researcher, it's very important to be aware of his/her own finitude or prejudice which is also called as pre-judgment, or pre-understanding, or pre-suppositions, or fore-sight, or fore-having, etc. (Francis, 1994; Smith, 2007), and which is a preconceived notion emanating from the past experience and the process of socialization (Byrne, 1998). It is important to be critically self-reflective no matter from an alien culture or from his/her own culture, especially in a qualitative research where the researcher is not someone standing only

outside, but also a participator in the interactive conversation with interviewees and in the interpretive dialogue with the data of transcripts.

It must be underlined that, for the hermeneutics, education “is a never-ending process of openness and a perpetual fusion of horizons, arising through dialogue, in which the ideal is never to stop learning” (Blacker, 1993), and is “the product of a socially and historically conditioned agreement” by means of ‘meaning-bounded interpretations’ that “can be undertaken only within a context of values, interests, and purposes” (Smith & Blasé, 1991). So, understanding and interpretation on teachers’ beliefs in this research are contextual largely based on teachers’ opinions and experiences, which can be seen through the context description that always comes along with every opinion of individual teacher, in order to explain and understand them properly in every concrete situation.

It’s true that the “interpretation must be contextual”, and the “text cannot be considered in isolation but in light of relevant cultural traditions and values as well as related historical events and ideas” (Walker, 1997). From that perspective, hermeneutics provides an extended platform for the understanding in an intercultural research, for hermeneutics itself is also historical or socio-historical. Interpretation can be meaningful and reasonable when it happens in a real life context with some specific cultural tradition. From that sense, to understand is also “to participate in an event of time and tradition in which common meaning comes to be realized in the ‘to-and-fro’ of language and dialogue” (Kerdeman, 1998).

It’s believed that open-ended interviews are narratives on some particular phenomena in the world of human activities, and the “hermeneutic approach is used to interpret and understand these narratives” involving different events of discourse and the possibility to look at things in different ways (Wiklund et al., 2002). Gadamer (1975) has asserted that “the meaning of a text always goes beyond its author”, so the “interpreter must understand more than the author, and interpretation, accordingly, is not merely a reproductive activity, but always a productive one” (cited in Prasad, 2002). Rather than to say a text, I would like to see those transcripts as narratives, and each transcript is essentially a story with its own meaning and background, and the most important is the story has life, which should be appreciated, respected, understood, and heard.

So my goal of this intercultural research is to let all stories speak in their own voices, to talk what teachers talked and to see the education systems through their eyes, which I believe could be possible only through the hermeneutical narrative that goes through the whole thesis. Another important element in hermeneutical understanding is the idea of dialogue, the “term ‘dialogue’ is metaphoric and conveys the conversational style of hermeneutics, of ‘listening’ to texts and letting them ‘speak’ to us” (Francis, 1994). In this study, the dialogue is not just between one teacher and me, but multi-subjective that can be seen that one teacher talks to the others, or many teachers talk about the same topic in different ways, which is essentially an interesting comparison applied in this research, so as to narrate broadly the life’s richness, vividness and concreteness.

Stories of teachers

Before jumping into the comparison directly, it’s very necessary at first to take a short time to get to know each teacher, the main characters of our stories, to know who they are and what they have experienced in their teaching life. It helps to learn some background information for understanding the reasons that they have different beliefs in successful education.

1. Gymnasium - GGB5F, GGS5F, GGF7F, GGH7M, GGM10F, GGD15M

- 1) GGB5F is a female teacher with 5 years of teaching in a Gymnasium, and she teaches German, biology and psychology in Grade 5, 6, 7, 9 and 12, 5 classes and in total 149 students. During the experience working with students, she got an impression that the students learned something and then they could forget it 2 days later after a test. So she thought about the questions like “what is important for students”, “what can I teach them for their life after school”, and she realized that it’s not the things on the paper, but how they could work or study successfully. In her belief, education is successful when students learn to be independent and work on their own, and they know how and where to get the information they want to know, not the things that some people think are

important, because she thinks what students learn at school is always something some people think is important, but different people believe in different important things.

She believes it's important for students to be creative, and it's not the smart ones or the ones who work hard are successful, the creative ones sometimes in the end are successful. For students to be successful at school, it's very important that they have support from parents, for she believes, because of that support, children can have a good start and go on in the school, and can go to Gymnasium, otherwise, it's difficult and most of time they go to the Realschule or Hauptschule. The support means parents show their children that education is important and has a value, and children can see their parents read or are interested in different things, not only sit at front of the TV a whole day.

She doesn't think the grades of exams are always the only one measure to tell somebody would be successful, but it helps, because "if you are good at Abitur, you can study everything you want". She prefers the students who don't have good grades but have other qualities, like creativity is an important thing even though it's difficult to measure. She describes herself as a supporter to students, and believes the best way of learning is they want to find something out by themselves, so she tries to give them some tools or tips how they can find it out. She believes what a teacher should do is to be there and support the students if they need help, but let them do on their own if they are able to, and if they are not motivated, the teacher has to try to motive them, but it doesn't work every time in her teaching.

As to her belief, she has had it for a long time and not changed, and whenever it's possible, she tries to let students do things alone, or work independently with the internet, or let them read a text and think at first, and then she talks about it with them together. For the smaller students, sometimes she brings some animals to the classroom, so that they can look at them, try and see. She does want her students to be independent, so she's not the person who always tells the students that they have to do this and learn that.

However, she also admits that in the reality she can't always do it like that, and sometimes she has to tell them what to do, sometimes she writes something on the board and tells students to copy and learn it, because she does not always have time to

think about how they can find out by themselves, and the whole school atmosphere is not there for students to be educated in the way of independent learning. So it always works like, it's something she wants to achieve, but is impossible in the reality. In order to fulfill her belief, she thinks there should be more teachers, more time and smaller classes. Now one class has around 30 students, she prefers to have 15 or 20, so she could work with every student, and have everybody with his/her needs. She also would like to have more time to practice, to think, or to talk with students about things they are really interested in.

- 2) GGS5F is a female teacher with 5-year teaching in a Gymnasium, and she teaches German and English for Grade 6, 8, 11, 12, altogether 5 classes and 103 students. She believes education is successful if students like what they do, and want to do what they have to do, if they have a good relationship with what they learned, and have good memories about what they did, because she thinks children are at school for 12 years, at least they should have more than half of the time that they can enjoy, otherwise, it's terrible. So it's important that students have a good time at school, and they remember not only the facts or things they were told, but also their time there. Additionally, they also learn social competence and learn how to behave socially, a kind of learning for life experience. She also believes that teachers are successful if they can motive students to learn something.

As far as students are concerned, they are successful if they can be motivated quite easily, and have the right attitude on study, which is a big reason for her to give some student a better mark at the end of the year than someone better in the tests, because it's important for her to see that they try and they really want to learn even they don't succeed, for her that's a sign of being successful. Moreover, success is not only about good marks, but also being socially competent, being able to get in touch with people, and being able to integrate into a group, because if good marks are all a student can do, he/she won't enjoy the school time very much, he/she has to have both sides.

When she was a student, she had a good time at school, she liked the subjects and had some good teachers as her role models that she could follow. Till now she still remembers many situations in the school, friends she made and teachers she had, which is a big reason why she became a teacher. After she got to know that some students in her classes had very bad social background or tragedies in their families, she understood

those difficult situations were the main part of their life, and realized it's more important to teach them how to behave, how to be a social person, and how to get together to help each other, than to teach them how to speak English or German.

Therefore, her belief changed a little bit after becoming a teacher, and she doesn't stress too much on learning facts, but pays more attention to teach students how to be a good person. Of course, she has to make sure students do learn some facts, and learn how to speak English or read German literature, because that's her teaching subjects. However, what she always does is to talk with students more personally, and to tell them they should try to fight for their aims, even for something they don't want to learn, and tell them they should learn how to interact with others, which is more important for her and shows her belief in her teaching.

However, she also admits there's conflict between her belief and the reality, for example, she wants students to have the best education with personal care, but sometimes she even has no chance to talk to them individually, she cannot reach all of them, only some who are very easily reached, so she thinks she can never fulfill the aims that she mentioned, there will always be pupils who drop out of school, because they have problems that she couldn't help them, which makes her feel this job very hard. But she also thinks that she would kind of destroy herself if she tried to be there for everybody, and often some students don't want help, so sometimes she feels helpless.

She thinks what she needs are more time and smaller classes, in order to get to know students quite well, she also needs people like psychologists to help her in students' psychological problems, and needs more cooperation with other colleagues. She believes teachers need a good preparation to face students who have bad family background and social problems, and maybe another kind of teacher education, so that she can find out how she can help the students. She also wishes to have an office to work at school, so as to have more contacts with students, not just to sit at home and prepare the classes. And she believes it will be the best to have more money to realize better education more pragmatic for teachers, more money for schools to get more teaching materials, different kinds of media, more rooms and more teachers.

- 3) GGF7F is a female teacher having 7-year teaching experience in a Gymnasium, and teaches the subjects of German, history and religion from Grade 5 to 12, 8 classes and

192 students. Personally she studied a lot of German literature of the 18th century, on which she got a PhD and got to know the enlightenment thoughts, debates about education and what human beings should be like, which became the important parts of what she believes on education. For example, her perspective on human beings is “you can live your life better, when you have the potentials to be critical, to be open-minded, and to think for yourself, and you don’t believe everything what they tell.”

So she believes education is successful when teacher can put students on the fire, inspire them to love things talked about, make them think, and help them change their ways of life a little bit to become more critical and more open-minded. The successful students are the ones who are independent, know many facts, have the ability of combining facts, can make their own thoughts and arguments, be critical and come to their own solutions. She thinks that the student, who finds his/her own way that is right for him/her after school, is successful, and usually it comes together that they have good marks and they are successful students, but it’s not always like that.

In her opinions, some students are successful because they have an increase of knowledge, they can’t get the highest grade because they don’t have the ability, but they try and they get the highest they can, which is also a success. She also admits that, if students have very good marks in the last exam of Gymnasium (Abitur), they are more or less gonna have a good career afterwards, because they show that they are intelligent and they can play with thoughts, not only that they learn and do all well, otherwise, they don’t get really good marks in Abitur. There’re also some students, usually the girls, who always do what teachers tell them, they learn everything, and they do everything very nice, but they are not always very intelligent. In the end, the intelligence counts, she thinks.

She is sure that her belief hasn’t changed, and her teachers in her school time of Gymnasium and university had the same kind of belief as she has now. In her teaching, she is free to choose literature and materials for students, which supports her belief on how teaching should be. Her experience convinces her that it’s very different to teach 10-year-old children from the ones at the age of 18 years old. Therefore, with smaller children who she believes need strict rules, she is very straight to tell them what to do, to be quiet and concentrate, they have to learn a lot of facts, but they can always say what they think or something against what she said. The older ones have more freedom

in class, and she doesn't say anything if they drink or have gums, but they have to read more texts and discuss a lot more to find arguments for some opinions.

She likes a good discussion with students about how to do something sound with their life when reading literature. She tries to encourage the students and give them some tips or structures to help them find solutions, and tells them how to calculate and use their time. Sometimes they don't do the homework, then they are sanctioned with bad marks, which she believes can help to push them to do better, but normally they do their stuff because marks of German subject are very important. She is quite satisfied at her teaching job, and it's usually a good time for her to teach students, and she can do what she wants to do, so she is confident that her belief works and has no conflict with the reality.

- 4) GGH7M is a male teacher with 7 years of teaching in a Gymnasium, and he teaches politics, Spanish, and religion in Grade 6/9/10/11/12, 9 classes and 205 students. He believes successful education should prepare students sufficiently for the next step in the professional information for the university or job education, they have to learn common knowledge of the society and culture, and also intercultural knowledge that is very important nowadays; they have to learn and follow different values and reach a certain level of respect; they have to be able to do research and solve problems by themselves to gain the skill of solving problems; they should have the capability to learn new things, to orient themselves in subjects very quickly to reach certain knowledge, to project and structure the information; they have to be responsible for what they do and reach some social communication skills; they have to know how to organize themselves and how to live independently.

Students with all of the points above are successful, he thinks. For a student, being good at exams is only one part of success, and cannot guarantee the success in life. However, he believes that, if they don't have good exams, or aren't good at school, it can be very frustrating and block their development, they will always have problems with their parents and teachers afterwards. So good exams are very helpful to concentrate on other things, but students shouldn't only study to have good exams, and not realize that other things are very important, so it's very important for students to find the balance.

He thinks his belief is based on the knowledge about history of Germany – how German society has evolved to have a better social community, and his belief also came from his life experience and his own education, and was influenced by parents, some friends, and some people who impress him much about how they manage their life. When he observes how people interact and how things go right or wrong in the public life, he thinks about it and reads more. So, his belief changed a lot since he became a teacher, in the beginning he didn't pay attention to social interaction, but more focused on the subjects or topics of teaching, now he focuses more on social skills, since he's learned it's very important for school life too.

He has noticed that, due to the fact of the world globalization and European immigration, different values have become more important than before, like tolerance, openness to the new, and experience with different ways of life, so it becomes more necessary to learn to live together with very different people, and more important to be able to interact in a diplomatic way, or in a way to achieve the goals without struggling too much, but “if you don't know how social interaction works well, how you have to treat people, it's very difficult to succeed your profession”.

In his teaching, on one hand, he tries to regard exams and concern the knowledge and skill development, on the other hand, he provides students some examples of success or how things work out very well, and he tries to motivate them by showing how to make life easier. He believes when he leads students into a discussion about social problems or social values, it helps students to learn kind of problem-solving skills, assume responsibility and realize how important to respect and cooperate. Problem-orientated social education is helpful for students to change perspectives and think about ways to get together, and sometimes it's also necessary to make them aware of negative consequences, when they don't cooperate in their group or treat others in a sympathetic way.

Even though he answered positively that his belief directs his teaching, he also mentioned that he cannot really have the educational part in his work as he believes, because sometimes he's not influenced by the belief, and it's always the problem that he doesn't have enough time and space to really reach the objectives as well as he wants, especially if he wants to concentrate on individual students, that's quite impossible. So, as a matter of fact, students only have the normal level of education, and he can't afford

doing in the ideal way, for he doesn't have the people, doesn't have the time, and the educational system has to be more effective.

Facing the conflict between his belief and the reality, he chooses to accept that there's always kind of difference between what he can do and what's possible to be done, and he understands there's always a limit in every job, and he has learned to be more pragmatic and tries to adapt to the system a little bit, and concentrate on the most important thing that he can do. If possible, he would like to teach fewer classes and have less work of administration, so that he would have more time and be able to concentrate more on what he wants to achieve.

- 5) GGM10F is a female teacher teaching the subjects of English and history, who was having parental leave at the time of interview, and had taught for 10 years in the Gymnasium. During her teaching, she got an impression that those, who have talents on languages, get at the first time, and the others who have difficulties in languages still do wrong after three times of the test. So she believes it's important for students to find out where their strengths are and later to do something what they are good at, like her own experience that she found she was good at languages at school, and then she became an English teacher. For her, successful education is that students can find out what they want and where their gifts are during the study of so many different subjects, so that they get an idea about what their jobs could be, they can put their focus and lay a good basis for their jobs later on.

In her belief, the aim of education should always be to prepare for life, and Gymnasium should prepare students for the university, so successful education also means teaching students the basic things like reading and writing, without which it is not possible to succeed anywhere in this world, and in English study it's successful that students can communicate in English when they finish school. Moreover, she believes successful education is that students learn how to learn, how to acquire knowledge, and where to look for it, it's important that they learn how to deal with the internet, and they know they can't use every page online as a reliable source.

What also belongs to successful education is when students are together in the school, they don't bully others, but try to help each other and learn to work in a team, and teachers should also teach students social skills and good personality, and make them

do something they wouldn't have done to gain self-confidence, for example. Another thing is important for successful education is students should have respect for teachers and others, they should have an understanding on the rules and can keep them. Besides, the personality of teachers is also important for successful education, e.g. teachers should have the authority over students in order to have a good study environment, otherwise, the students won't learn much or teachers won't reach any of teaching aims in an inefficient class.

In her point of view, successful students are those who are intelligent, work hard, do their homework well on their own, prepare for tests, and do all the tasks that teacher said, and who know how to organize themselves, have self-discipline, and have the sense of duty on school. The students good at exams are also successful, for they show they are brilliant on the papers, they know how to learn and how to acquire the knowledge, but that's one of the skills, they are not the only ones who are successful. When a student manages to improve according to his/her ability and gets a better mark, that's also a success. In general, success for students means they can finish the school and don't drop out, and "you can't expect everyone to have excellent exams".

She couldn't tell what or who exactly influenced her belief, but her belief didn't change much after she became a teacher. For instance, from the beginning on, she has kept the same opinion on the bully problem that should be stopped as early as possible, and she always takes it as a topic to talk to class. But the ideas about a good lesson have changed over the time from group work to diversified tasks in class, which she learned from teacher trainings. Obviously she doesn't agree with this new "diversify" teaching, because she believes the gap between the strong and weak students will be much bigger, and "you need to get through the book, you cannot take too long time for one topic, otherwise, you get stuck in the middle of book". The solution would be to have two teachers in one class, but that won't work in the reality because there're no enough teachers. So she is not sure how to organize it, but sometimes she can manage to make different levels of worksheets for students, or introduce some books for fast students to read.

She thinks her belief directs her teaching, for she always tries to give students feedback after tests, and support them with extra exercises. But she also had the experience that "practically you may have a class where teaching is almost impossible, and all your

methods and what you thought about don't really work", so actually sometimes her belief doesn't really work in class. But she tries to create an atmosphere where students can learn and listen to her or each other, for which she believes discipline and respect are indispensable, but unfortunately in the reality she doesn't think there's much respect from students, and the discipline doesn't work well sometimes.

She expects to have smaller classes, for it's pleasant to teach a class with like about 20 students, but she doesn't think it will happen, for it's expensive to have more teachers, and the government and school don't have the money. From her experience, it's not the case in Germany that students all want to be good, instead, they think it's cool to get bad marks and they want to be cool, and don't want to put any effort to what they should do at school, so in the end of the interview she also wondered if smaller classes would be a solution to the problems in class.

- 6) GGD15M is a male teacher teaching Latin and religion in Grade 5-12, 9 classes and 194 students, and he has been a teacher for 15 years in the Gymnasium. According to his belief, the main thing to reach successful education is that students like the teacher and the subjects, they know it's important to reach their personal development, and they really want to learn things from their inside, and understand they must learn on a certain time a day/week, not five minutes before the lesson. For that, it's important for teachers to show students that they have to learn, and to be a bit tough to train students on the vocabulary and forms every day, for they don't like to learn at their ages, but teachers should also be friendly to students for it's very important that children do like the teacher, otherwise, it's very difficult for teaching and learning. He thinks that teachers should always teach the subjects and let students learn by heart, and sometimes make students explore things by themselves as well.

He believes the students who do what teachers want them to do are always successful, and a good student is the one who works more and harder. The students can be successful, when they don't have TVs in their own rooms at home, they don't spend too much time at front of the computer in playing games, and they live in a family where they talk about things at school and have a bit support from their parents who more or less let their children work alone but have an eye on what they do. Usually a student good at exams is successful, but it doesn't mean he/she will be a lucky or successful person in life. However, in Germany it's also true that if students are bad at school, they

cannot study medicine or other programs that many students want to study, which need the best marks of the Abitur.

When he was studying in the university, he learned from his professor that study is an inner process and the motivation should come from the inside, which can make students more successful than just being told to reach the best result – outward motivation. He practiced it himself and also witnessed many of his friends, who were not successful at school but really wanted to study the subjects at the university, and they developed in an incredible way and became the best ones ever. In the teacher training, he had very brilliant teachers whose teaching was an ideal model for him, and he learned a lot from them. In his school he has a colleague whom students like very much, so he tried to talk with him and got a bit of idea about how he did with students to make them like him. Mainly based on all the experience above, he built his personal belief.

He doesn't think his belief has a big difference from the beginning of being a teacher, but the teaching methods have been changing from teacher's didactic teaching to students' group study on different topics. However, he believes that 'let students explore things' is just idealistic, because of huge classes with too many students, lack of time, and many other things that have to be done in the school. And it's very important that students want to explore, but sometimes they don't, sometimes it's very fast and much easier for him to write something on the board and let them write down to learn by heart. Sometimes students' attitudes make teaching very difficult, because many students don't think it important to be good at school, and it's not cool to be the best one in the class, they want to be cool and not to work a lot.

Therefore, his belief doesn't direct his teaching all the time, for sometimes he just can't do what he wants to do. Usually, he likes students to work in groups on different levels of topics, but it's difficult to do it in Latin because they all have to learn the same. In his teaching, he tries to be friendly to students, tries to talk to them and reach their hearts, tries to write more tests to make them recognize Latin vocabulary easily, let their parents subscribe the tests, and talk to parents quite often by emails or calls. In Theology, it's not important to learn the stuff by heart, but to develop the attitude to the questions like life and death, how to handle different religions, and how to live together, which, however, is not easy to check.

To his concern, what makes the teaching condition worse is the 9-year system has one-year cut at the Gymnasium and became G8, he notices almost all teachers are complaining about 'having no time', and he doesn't like that either. He believes students should be given more time to develop their interests out of school, to be together on their own way, to do extra courses and more practical things. So in his opinion, the former educational system is better, and he hopes the system to be changed back. Besides, he would like to have smaller classes and 20 is a good number, because it's very easy to deal with 20 students and to see who needs extra help, and it's important to have the possibility to talk to each student and work with everyone.

2. Realschule - GRR1F, GRK4M, GRF10F, GRD21F, GRB33F, GRE35M

- 1) GRR1F is a female teacher with only 1 year of teaching in a Realschule, and she teaches English, history, and social science (including politics, geography, social work) for 4 classes of Grade 7 and one class of Grade 9, 128 students in total. Personally she doesn't remember much about her own school life, because she just had to sit there and listen to teachers, which she really didn't like. So when she became a teacher, she wanted to change that and do something different and special in her classes.

She believes successful education is that students come together and learn something, they are happy, and don't regret what they have to do at school, and she believes that the goal of school is not just to teach students the knowledge, the students of today need methods about how to learn and how to handle their life. Since kids have fantastic ideas, teachers have to be creative and make lessons full of fantasy, give students great topics and questions for the lessons, let them work on the projects on their own or together in groups, then they will find out everything by themselves, she believes. On the contrary, when students just sit at front of the teacher, they will simply stop listening and thinking, that's not really education.

She thinks positive classroom atmosphere can help to realize the successful education, for instance, when the light colors, everything is clean and neat, and everyone knows how to work. When a student likes to go to school and wants to finish school, it's a success even though he/she has no good marks. When a student gives up on study, but with the help of parents and teachers, he/she starts to learn again, that's also a success. When a student is independent or starts to be independent, it's successful. But she

doesn't think a student good at exams is successful, because it's a wrong age to be successful in exams, they do need exams to start their jobs, but she doesn't think it's good for them to write good exams now, for at the age of 16, they don't want school but have other topics in their mind.

In the teacher training, she learned how to organize the classroom, but when she started to be a teacher, she didn't know exactly what to do and how to work with students. So she visited some schools to take a look, and was very impressed by a school where they made open lessons in class, and the students could walk around to every station and decide by themselves what they want to learn, which helped her make clear her mind and decide to do in that way. Now in her teaching, she is free to teach the topics, to organize the classroom, and to decide the ways of teaching, which she think is fantastic.

She believes most of the time her belief directs her teaching. She tries to be creative in her lessons, she puts a lot of energy to create materials on her own, and she tries to be motivated every day because sometimes students don't want to learn. She thinks practice makes perfect, so she lets students do a lot of practice for tests. She is a very organized teacher and also teaches her students to be organized and prepared, because she believes, when they are organized, they don't really need teachers but can be successful in their study and exams. Sometimes she spends extra hours after school with students who want to learn more or need extra help, so as to help them be successful with small steps and feel confident in the subjects.

However, she also admits that she can do creative work only sometimes when the students really work on their own and have fun with learning, but most of the time she is just a normal teacher having normal lessons, also because some students cannot change the way of learning. Sometimes the lessons can be terrible, when students just sit there and switch off their brains, they don't listen and don't try to work, so they have to go out of the classroom or sit in front of the classroom. About diversified teaching, she thinks it's difficult and complicated, and she cannot handle it as a fresh teacher.

She hopes to have more books, new media for teaching, and some laptops for students so that they can work on their own. But she knows they are very expensive, and the school can't buy anything, because they have to wait for the money at first. Sometimes she brings materials from home or makes by herself, but she is quite positive on the

situation, and tries to do the best with what she has, being polite and happy, not being frustrated because she doesn't have good teaching materials. She thinks it very important that students can work on projects to learn more about the society, or they make some work experience in companies who should think about how to help students be more successful and prepared for the jobs later, not just saying they want educated people to work.

- 2) GRK4M is a male teacher with 4-year teaching experience in a Realschule, he teaches the subjects of German, history and politics in Grade 8 and 10, 4 classes and 96 students in all. He believes successful education is about the relationship between teachers and students, if a teacher gets very much trust of students, he/she has the opportunity to build the relationship with them, gets to know what's going on in their mind, and more easily finds out their secrets and enjoys how they develop the secrets. But if a teacher can't touch the souls of children, then he/she can't educate them anything, because he/she is working with human beings, not working with machines, everybody gets his/her own idea of exploring the world, so the teacher just has to talk with children about their wants.

Of course, he has to help the students in reading and writing, so that they can find jobs later, but he believes it's more important to help students find out what they can be proud of themselves, learn to stand for their rights at the right moment, hold their heads up and have the force to fight against the bad things in the world. In his eyes, successful students are happy and open-minded, are interested in things that he could offer, are of solidarity and want to help each other, and can handle their own life. Students good at exams are also successful, but first of all, they have to have success in the life. The mark is not everything, but it's also important, otherwise, they cannot get to the next class.

Personally he was a very bad pupil at school, and had bad teachers and bad situations with his teachers, his parents were shamed about his exams all the time, saying he was stupid. That's why now he pays so much attention on the relationship, he always tries to build good relationship with his students, make friends with them, look at their possibilities, and show them he has time for them and is interested to listen to them, which he believes helps to touch their souls. He also tries to be a straight role model for them, and shows them he's just a human who can make mistakes, so they can make

mistakes too. His students said he's not like a teacher, but more like a brother and a good friend.

In the preparation for lessons, he always tries to look for what the students want and don't want, and tries to make some big inventions, so they can see he is fantastic and puts a lot of energy in the lessons, and they could understand they are important for him to do that, which also helps the relationship be built up. For instance, he could teach history like a theatre, and he acted as a person in the history by dressing clothes of that time to show students how the past looked like, and the students were also part of the stage. In the 4 years of his teaching, he made a lot of movies with his students and 28 projects about the world and environment, which he believes became an important part of their study experience, and in the process the students also learned a lot of knowledge and developed many skills.

A professor in the university had a nice discussion with him, and helped him figure out what kind of teacher he wanted to be, and what he could develop students. He understood everybody got opportunities to develop himself/herself, and he could teach his students in a different way, not like to put water in a big pot and wait, or just to open the book and go further. But in the reality, the education system and environment don't give him much possibility to develop what he wants, so his belief changed in some way, for example, in the beginning he only wanted students to be happy, but now he's realized that he shouldn't forget the subjects a teacher should teach.

However, he tries very hard to keep his belief in his teaching by taking fewer lessons and less salary, because he needs a lot more time to create everything by himself, and he doesn't decide by himself which parts of the textbooks students have to learn, but asks them what's important for them, and then he organizes the communication with students. Still it's very difficult for him to hold on his belief, in fact, he is very disappointed and cannot handle the system, as a result, he has made his decision to quit the job.

- 3) GRF10F is a female teacher teaching English, French and geography in Grade 7-9, 3 classes and 88 students altogether, and she has been a teacher in a Realschule for 10 years. She believes education can be successful when teachers have a good relationship with students who feel appreciated and liked by the teachers; when teachers teach

students to be responsible; when teachers can differentiate students to look at the students at first and decide what they need, then give them individual work on different levels and individual feedback; when there're many books, a great variety of teaching techniques, a good class atmosphere, classroom management and rules of class. Successful education also needs a good working school where the headmaster has rules and appreciates the work of teachers.

When students learn how to organize themselves, how to learn, and how to talk to teachers, when they understand themselves, where their difficulties are and what they're good at, when they know when to pay attention and concentrate, they are successful students in her belief. But those who always do what teachers want or say are not successful. It's sure that a student who is good at exams and gets good marks is successful at school, but she doesn't think the student can also be successful in life, so it depends. For students, it's more important that they have good social competence, they learn personality, learn to be self-confident to stand and speak in front of the class, and learn to solve problems and handle the stress and pressure.

She learned in the university that all the points she believes are important, and some pedagogists have those principles as well. She also found from her own experience of teaching that students could learn in a well-organized classroom with a trustful atmosphere, so in the beginning of school year, she always talks about rules, and do games from which the students learn to trust each other and talk to each other with no fear, and before students she always tries to be a reliable person, to be herself and be transparent. Sometimes she teaches them learning skills, like how to understand texts and words, how to learn vocabulary and prepare for tests, and how to use the brain.

She doesn't think her belief has changed, but she admits that all the points she mentioned are very difficult to do in the reality, because often she has to stop lessons to communicate with troublemakers, or many students misunderstand disciplines and think she dislikes them, which makes her feel difficult to work on the relationship. But she always tries to give her best, and she thinks her belief directs her teaching, for example, she tries to work on the relationship all the time, most of the time it works, but if there're too many students in class or too many troublemakers, it can't work. She wants to differentiate in class and does try to teach on different levels that students can decide

and learn to be responsible for their work, but when she has 30 students, she can't really do that because of too many students and the lack of time.

Honestly she gets the feeling that she's never reached her ideals on education, also because she constantly has to do something else, like talking with parents, and motivating students, when she already has too much work and too many students. So sometimes she feels she is trying to survive, not trying to teach, which makes her feel very unhappy. She would love to have fewer students - 15-20 would be good in one class, and have fewer hours of work, work in a team with another teacher who can deal with the troublemakers or the students who have problems with listening, paying attention, or organizing themselves. But in the reality, she just goes on and on with the situation, and tries to persuade herself that she is just a normal person, and she already gives her best and can't do more.

- 4) GRD21F is a female teacher with an experience of 21-year teaching in a Realschule, and she teaches English and biology in Grade 5/7/9/10, 5 classes and 118 students. In her opinions, every student has to learn a certain amount of knowledge and develop the character, so successful education has two things to do, one is to pass on the knowledge, and the other is to develop children's characters, so that they could be self-confident, open-minded, and tolerant, could keep the rules and become strong individuals fit for life when they leave school. A student with good marks is successful, and marks are important to get a good job or go to university. But she also believes not only do the marks count, it's more important to be a socially active person to behave well in the society.

She thinks what she believes on education has something with her own life history, and there were 2 or 3 teachers who influenced her a lot when she was a student at school, and a few adults who also had influence on her. Somehow they have become her certain role models at her back during her teaching, and have impact on her way of teaching. In the teacher training, she got different ideas as well. She thinks, after she became a teacher, her belief changed a little bit, which mostly is that she learned certain methods that help her teach better with her own experience, but the main part of her belief stays. Frankly she doesn't realize if her belief really directs her teaching, and all the time she even is not aware of it, but she believes it's there in the background somehow.

She always tries to be an honest person, to be open and friendly to students, to behave in a certain way, for she wants to be a role model for her students. When she sees that her students don't know or are not able to do the exercises, she tries to explain again and let them do easier ones or make them repeat. In her class, the students have different nationalities and sometimes there're some bully cases among students due to the cultural gaps, so she takes it as a class topic and lets them speak about their traditions and habits, so as to help them learn to be more tolerant and more empathetic to other people.

From her experience, she learned that children can learn a lot easier if there are positive feelings in the classroom, for which humor and laugh play an important role, so she tries to have some fun in the classroom. However, sometimes it's hard for her to succeed in teaching in some classes, and when the conflict happens between her belief and the reality, she doesn't think there's a lot that she can do, she said she just tried to do a good job as she could, and wouldn't go out to demonstrate for better working condition or a different system.

- 5) GRB33F is a female teacher on the subjects of English, Arts, and religion in Grade 6/8/9, 3 classes and 79 students, she has been teaching for 33 years in a Realschule. During so many years of experience with students, she has found that, if a student is not motivated or organized, even though he/she is very intelligent, it's difficult for him/her to use that intelligence successfully. So she thinks to be successful a person needs more components and different things, like good intelligence, good structure, self-management, curiosity and motivation, with which he/she can go forward to learn new things that he/she wants to know.

Therefore, she believes successful education is that students can use their intelligence to deal with subjects, they are very self-motivated, and they are self-organized at studying alone and in groups as well. If students bring their personality and develop it at school with the help of teachers, if they can use the strengths of their personality, use the things teachers teach them, and use the methods to do good learning, like doing homework regularly, listening to others, organizing with exercise books, having a good management, and if they also use the social together for class, they can be successful. For her, a student good at exams is successful, a good mark is also a good feedback and can give him/her a good feeling.

She noticed that a lot of students today don't get used to live in the social groups, some of them only see themselves and all others are not important, "if you have a lot of students who only think 'I am very important', it's not a good base for learning". Hence, she changed her belief a little bit and put more stress on social community, group work and social learning. And she believes social together is a very important behavior, because "you are not only a single learner, if you are accepted in the group, you can bring your intelligence, personal strength, and your motivation, you can work with others and they help you to work, it's easy for you to be motivated to find solutions, and go forward with others to have a good progress in learning". So for students, to be a good role in class or a good member of a group is important, also because it helps students to know about and deal with social things, and learn to be a member of the society.

She is sure that her belief directs her teaching practice. In her teaching she does a lot of social learning and asks students to work in groups or pairs where they do things together and come to discussion in changing opinions, for which she believes it's important to have rules for the class, so that one speaks and the others listen. She always gives students encouraging feedback to tell them what they are good at and what they are able to do, which she believes is a motivation to bring them forward. Because of big classes, lack of teachers and lack of equipment, she has to be encountered to the conflict between her belief and the reality, but she understands that things need time, she has to be patient and creative, and sometimes she offers students extra lessons after school or meets them outside of school to help them as she can.

About how to fulfill her belief, she thinks it's important that she has colleagues who have the same belief as she has, and have team teaching with her to learn from each other, and it's also important that she has a school principal who supports her belief and gives her responsibility and possibility to do things. The school atmosphere and teacher training courses are also important supports for her. She wishes all classrooms are equipped with computers, TV and a kind of library, so that the students can have a good learning arrangement and don't always need to change room to the one with a TV or computers. She prefers smaller classes with 21/22 students, so that students could have better development.

- 6) GRE35M is a male teacher with 35 years of teaching in the Realschule, and he teaches science and German in Grade 8 and 10, 2 classes and 48 students. He believes to reach successful education it's important that teachers are good at what they studied, can be good role models for students, and they have clear ideas on education about what's important and right, and they can show students how to live with others together. His belief comes from his wish on a good life and a good world, for he wants to live in a society that's democratic and free, a society that has good people who are friendly and do their jobs, and a society where people can live together in a way they show respect and tolerance, all of which students have to learn in the school he believes.

He believes it's important that students have their own development, and it is the duty of teachers to make sure that the students can develop in their own way and develop for the society too. It's also important in the successful education that students are able to listen and think about the things they do in class, and they can concentrate and have the will to learn. Good at exams is a success at school, which shows students really learn and do their examinations well, but it's not enough to be successful in life, because personal development is also important. There's no change in his belief and he believes in the same things that are important for him till today.

He thinks his belief directs his teaching, for example, he tries to show students what respect and tolerance mean, show them what's right and wrong, and he also gives students chances to make their own experiences, and lets them decide what's right and wrong, also because he puts a high value on human rights, and he believes it's important for students to feel on their own what's good or not and to find their own ways. In his teaching he tries to do his lessons well, for he believes students have to learn basic things, and he also tries to combine the educational part into his subject teaching, and to help the students find their own development. He would like to show students that they must have no fear on him, even though he is very strong, for fear is not good. If they have problems to understand something, he always tries to help to explain, so they know they can ask any time when they have problems.

Even though he tries to hold on his belief firmly, there're still a lot of differences between his belief and the reality, mainly because he has no much time for students. He sees them at school, but he can talk perhaps 5 minutes between lessons with only a few of them, so the contact is not intensive enough to know what students want and what

their problems are. Therefore, he has learned to be sensitive to students and takes his free time to speak with them. If possible, he wishes to have more time for students, smaller classes, more teachers, and no new reforms because there's one reform after another all the time, and those "so-called reforms are really not reforms" which "reduced the knowledge finally, and the students would not be better".

3. Hauptschule - GHW2F, GHK5F, GHO7M, GHG30F, GHU32F, GHH38M

- 1) GHW2F is a female teacher having 2-year teaching experience in the Hauptschule, and she teaches German, English and P.E. in Grade 5 and 9, 3 classes and 72 students in all. Her students come from quite problematic family background and different foreign countries, German is their second language, they have problems in speaking, reading and learning knowledge in German, and they are not good learners and have problems in memorizing stuff, so she realizes that in her type of school it's very important that the connection between the teacher and students works out, if not, no learning is possible.

Successful education she believes is that teachers and students work together as kind of a team, and teachers have good contacts with students, show empathy to them, show that they are able to be someone and to get into the system, and show them they are somebody who are cared of and who are important for the social life and the whole community, even though they are in the Hauptschule. She believes teaching is not standing in front of the classroom, but more like showing ways and giving possibilities to students to start their own learning process. So the task of teachers is to motivate students, and prepare learning environment which can motivate students to gain knowledge, know the topics and be engaged into learning to have good marks. It would be perfect for teachers to take each student as an individual, and make it possible for each student to reach their own optimum.

In her points of view, a successful student is someone, who understands that learning is important for the later life, who works a lot and studies at home and does homework, and who tries to take part in lessons. As to her, it's important for students to show that they understand everything or ask questions, they are active participants and get done everything that teachers said. Good mark doesn't automatically mean that the student is

going to be successful later, but it's very important to easily get a job, or to have a better or easier start in life after school than students with bad marks.

She always wanted to be a Werkrealschule (Hauptschule) teacher since the school time of her own study, because she's very interested in the educational part in this kind of school, she didn't want to focus on the topics or subjects like in the Gymnasium and Realschule, but to be someone to tell students, who misbehave, how to act. Besides, her former teachers and some famous pedagogists, like Pestalozzi who saw every child as an individual person, influenced her a lot in the way of her teaching and her belief about how education should work and how school life should be.

She thinks her belief changed, but not a big change, actually it is more like a match between theory and practice, and she puts her belief in a more practical way. In her teaching she loves to create a very good structured learning environment, make the topics in different levels for students, work with them as a partner, believe in them and help them reach whatever they are able. However, she realizes it's quite hard and impossible to do the individualization for every single lesson, on which her belief changed quite a bit, now she tries to do for groups, but not for each student and each lesson, because the classes are too big for her.

She thinks her belief directs her teaching for sure, e.g. she always tries to create lessons where learning is made very practical, visual or more understandable for students to better memorize, she tries to raise their motivation and interest in learning knowledge by contacting with the real life or putting into stories, and she always tries to make clear why they do something, so that they understand what they are doing, not just to ask them to learn by heart. She doesn't think there is a conflict between her belief and the reality, she just finds it hard to reach the goals she has in her mind, for they are quite high. In her class there're 27 students including 5 handicapped children, she can't have the personal contact with each single student because of the big class, so she wishes to have fewer children and 2 teachers in one class.

In her school there're 2 parent meetings every school year, but hardly anyone comes and some parents are just not really interested. Therefore, she thinks it's very important that teachers work together very closely to help each other in the teaching materials for different levels or groups of students and think about ideas of one another, and it's

important that there're social workers who can deal with students with big problems, because she thinks teachers' main duty is to present knowledge and make learning possible, not always to be there for everyone.

In her personal opinion, the students in the Hauptschule have a variety of problems, to which the best solution is a whole-day school with sports and additional courses for students in the afternoon, instead of the once-or-twice-per-week afternoon school at present. She wishes to have smaller classes with 15 or 18 students in each class, and 15 would be really perfect for teaching, which, however, needs the policy to be changed and more money to be put in education.

- 2) GHK5F is a female teacher who started her teaching 5 years ago in a Hauptschule, and she teaches 3 classes and 71 students altogether in Grade 7/8/10 on the subjects of English, German, history, geography, biology, arts and social studies. She believes successful education is that teachers try to teach students good behaviors, like how to talk to other people, how to deal with trouble, and how to go on with things. Successful education also means students are confident and believe in themselves, they think about things of school, try to do as they can and find out how to get information, even though it's hard in the beginning, because that's they need later in the life.

Her belief gets the root in the experience she has every day with her students, e.g. she finds, when her students have to do something, they often cannot concentrate, and they don't fight for the exercises, but just sit there saying, "it's too difficult, I can't do it, it's not possible for me", then they just easily give up. That's why she really wants them to try and just to do it. For her, successful students are those who really try to do things, who are quite independent, who are able to organize themselves, and who know what they have to do.

She doesn't think students good at exams are successful, it depends, perhaps it shows they are really hardworking, but it doesn't mean they will be successful later, because it's just a small part of the personality. Some students really have bad marks in exams, and when they have to learn things by heart, it's difficult for them, but during the lessons they are open-minded, they listen and talk a lot, in the end she puts better marks into their reports by thinking of their good social abilities.

As she recalled, after she came to this school, she was quite a bit shocked and disappointed, because here there're very difficult students who have very difficult social background, have given up themselves and don't do as much as they can. In the beginning, she thought to do a lot with students, and now it's more like that she has to teach them very basic things, and they just can't sit, or think, or be calm. Sometimes she's really happy to see a student raising his/her hand in class when normally he/she just sits there and never does anything.

She tries to hold on her belief by thinking "when you know what you want to do, every day you try to be", and in her teaching she has learned to be patient with her students, because she wants them to think and work slowly, which is better than to do nothing. And she tries to give them some exercises that she does not say too much, but lets them find the answers by themselves, or work together with a partner or in a team. With the belief of "never give up", she always encourages her students to think, fight, and work, and try to do something as good as they can, and she tries to give them different levels of tasks so that everybody tries in his/her own level and has a little success every day.

In her opinion, the traditional structured lesson is also very important, because all students can concentrate on the teacher and they listen and ask questions. But that's difficult because everyone has another way of learning, and in their heads there're other things which are more important for them than school, or some students just don't want to learn, they are not interested at all, and they really give up themselves. So she cannot always do what she believes and wants to do, but she doesn't give up on students, she tries again and again to narrow the gap between her belief and the reality. Sometimes when she realizes some personal problems of students are more important for them at that moment than the lessons, she tries to be flexible and stops the lessons to talk about their problems.

She thinks the classes are too big, and she would love to have more time for each student, but with 26 students it's difficult. If it is possible to have more teachers, she really likes to have team teaching with other teachers, so they can do more interesting things in class, and the students know they have somebody they can always talk to. She hopes, for the weak students, there're more extra classes to repeat things to help them learn.

- 3) GHO7M is a male teacher in a Hauptschule where he teaches mathematics, physics, and science (including biology, chemistry and technology) for Grade 5 and 10, 2 classes and 50 students totally, and he has been a teacher for 7 years. He thinks students need to learn different things for their life after school, e.g. to learn some general things, to know how the world functions, and to learn rules and punctuality, which can make their life easier. In his belief education is successful when teachers do their jobs very well and know what to do, not only standing at front of students teaching, but also giving them small tasks to work in small groups to find out on their own. The main thing for teachers is to help students learn knowledge, learn about life or some personal things, teachers must have humor in teaching, and there should be laugh in class at least once a day.

It's successful when teachers have personal contacts with the students and talk with them about their problems, and give them some help, because if teachers had more contacts with all students, it would be helpful to the better climate of classroom, and education would be better. It's necessary to put some pictures or paintings on the white walls of the classroom, put a couch in the corner to give students a good feeling like at home, and make them feel comfortable in class, which is good for learning. Since his first class he has made this system of harmony, and the next teacher who took over his class gave him the feedback that it's a very good class, so he proved what he did was good and his belief was formed from the teaching experience.

For him, every student is different and there's no optimal student, he takes students as they are, but he expects they can also be friendly, motivated, honest, fair to other students and would like to help each other, and it's really important for students to have good exam notes, because all companies and factories look at the notes. He thinks his belief changed but is a not very big change, because each year he thinks about what he has made in the whole year and what to do to make it better in the next year. In the beginning his level that he expected from students was a little bit high, year after year he found he had to come a little bit down.

He is sure that his belief directs his teaching. For him it's necessary that students learn things in groups or on their own with a little help, so he gives them different levels of tasks, and sometimes divides them into small groups where good students and weak ones work together, but in physics and chemistry, it's also necessary for students to do

experiments on their own. Sometimes he makes holidays to go somewhere with his students, during the time he gets chances to talk with them in a more private way and to share his own experience with them, and he believes a teacher's personality can affect students to bring them forward. He thinks most problems of students come from outside of school, and they bring the problems to school, but it's his job to work with them to solve the problems.

The students know that after Grade 9 or 10 they must leave school and many of them can't get a real job, so in Grade 9 all students are down and they have no motivation on study. He realizes that 50% of his students work not hard, they can, but they don't, for it's not important for them, and they just learn 7 days before the exams. Usually the students go home at 1 o'clock after class and do nothing for school, but go outside making bad things together and then come with the trouble to school in the next day, so his wish on educational reform is a whole-day school from 7 o'clock until 16 o'clock, so that students could do their homework at school or make some sports and music, but he also knows the whole-day school can cost a lot of money.

- 4) GHG30F is a female teacher who has been teaching for 30 years in a Hauptschule and she teaches one class with 28 students in Grade 8 on the subjects of English, German, history, biology, geography, and social study. She believes her successful education is that she has to take care of students, love them and respect them, she tries to act in a nice way and get well along with them, she always picks them up where they are and builds a good relationship with them and her students respect her very much. When she sees or feels something wrong with students, she always talks with them about their problems, and keeps very tight contacts with the parents. For her it's not just a job, but a profession.

She believes obedient students are successful, and she prefers the difficult students whom she really has to take good care of. The students good at exams are successful, but it depends on how they prepare for the exams and work out with knowledge, because some of them just learn by heart and days later they forget, which is not successful. To be successful, she thinks the students have to speak in class, explain things and present themselves, and successful students in her eyes are defined by the way they give their hands, the way they look in the eyes of others, the way they are dressed, and the way they're smelled.

When she was a student, her study experience was horrible, she was kicked out of school twice, and had a lot of problems to get the final examination, since that time she always had the feeling that something or somebody is unfair, that's why she thinks she can feel very deep inside about her students till now, for most of them are from low-class parents and can't go to Gymnasium or Realschule, the education in the Hauptschule isn't very lifted-up. However, she wants exactly to be a teacher in this type of school, and she believes it's the love on the students to make her become a good teacher. One year later she would retire, and she believes in her life what she really did right was to become a teacher.

She doesn't think she has changed what she believes on education, and she thinks her belief directs her teaching in the reality. She has respect on students and can feel them from the way they look and act, sometimes she is really mad at them, but when she looks at their eyes, the way they look back makes her feel sorry, then she tries to put it in a nice way. She always makes clearly what she means, so the students understand her behaviors. When students tell her that they don't like the way she acts, she immediately apologizes and changes it. She always tries to help them as they are, and give them additional work to do, sheets to prepare, or put them at front of her table so she can watch them doing.

Whenever she prepares a test or a lesson, she always thinks about her students, about what kind of questions she has to ask them to get the right answers, so she tries to get everything good out of each student. She lets them do a lot of reports with different topics, and she likes to ask them in different ways, so they have to explain something to her. She likes to help students, but if someone doesn't want help, she could get angry. If she gets some volunteer teachers watching her teaching, they are always very pleased with the way she teaches, because she makes a lot of jokes in class. She thinks it's always different between belief and the reality, but it's important for a teacher to be who he/she is, he/she doesn't have to be an actor/actress, if he/she is not in a good mood, tell the students, they can feel it anyway.

- 5) GHU32F is a female teacher with 32 years of teaching in a Hauptschule, who teaches 25 students in one class of Grade 6 on the subjects of English, German, mathematics, geography, biology, history, music, and arts. She believes successful education is when teachers are able to teach students to help themselves, teach them how to learn, where to

get information and how to do with the information, and when teachers can manage to motivate students and trust in their abilities.

From her own life experience, she notices her own children have to know and do things she has no idea of, and when she was a student, there were no computers, and the world is changing so rapidly and no one knows what students need to know when they are grown-up, so she believes it's not important for students to know the knowledge, but to know how to learn. She thinks her belief on education is also supported by some educationists' ideas about learning methods.

In her opinion, successful students are self-confident students, who are loved and supported by the parents who are interested in what their children do, not the students who are very much disappointed at themselves, because students in the Hauptschule are very disappointed about themselves, for they are not able to go to Realschule or Gymnasium. When they started the school, maybe they also wanted to know everything eagerly, but very soon they realized they didn't fit this system, or they need more time, or their creativity was not important for the school, then quickly they started to get disappointed, and their situation only got worse and worse year after year and then in the end they came to the Hauptschule with very much disappointment.

Therefore, she also believes the students, who are able to handle their failure and must not give up, and who are able to concentrate and do things by themselves and want to do, are successful. It's certain for her that students good at exams are successful, at least are better than the ones who are afraid of the exams. On the other hand, it's also true that there're some students who are very good at exams, but cannot manage their life or jobs later. As a matter of fact, she thinks in Germany students have a lot of various possibilities to show what they can and to find a good mark in the end, so it's not only the exams.

She changed her belief after becoming a teacher, because in the beginning she was convinced that she's teaching very important things to train the brains of students, but later she started to teach them more on attitudes and abilities, which were also influenced by the great change of students. For example, in the first 10 years of her teaching, at least 60-70% students wanted to learn, to have good marks, to be successful or have a good job later, but at this moment in her class only perhaps 5-10% students

want to be good and have concrete goals. As a result, in the beginning she did 80% of her work on teaching and 20% on educating, but now it's the other way round, 20% on teaching and 80% on educating, she even has to help them keep things in order, structure things, trust themselves and so on.

She thinks her belief directs her teaching, e.g. it's more important for her to let students use information than learn it by heart, so she doesn't stand often at front of the blackboard to explain things, but prepares materials for students to work and find solutions by themselves, or with a partner, or in groups. For the difficult students, she believes the education system doesn't give much room to wait for them to understand what is necessary for them, so she tries to invite them to the extra classes as much as she can. She tries to have a good relationship with her students, so they can talk to her in a free and relaxed way, and she also tries to reach the parents, even though most of them are not interested in the study of their children or can't care for their children.

After a lot of struggles in her job, she gave up the idea of making her students successful, for she realized they just can't, so she has decided just to accompany them and treat them with respect, then at least they can realize and feel in a way that they are important. She always tries to start any topic with very easy tasks and to show them in a very small point again and again, so they can think over that they can do something, and then slowly and surely go on with a little higher level. However, in the end she can't handle the failure and she can't see much success after she has done everything she can, because the students don't really suit the system, they are in difficult situations privately, and are in the difficult ages that 'who is my boyfriend/girlfriend' is a much more important question for them than 'what's the homework for today'.

The reality of her teaching has very big differences from her belief, she even mentioned that she would like to change the job or go to a different school if she was younger, but now 5 years left before her retirement, she won't change anything but has to go on with the frustration. About 4-5 years ago, she was very ill and stayed in hospital for 2 months, where she figured out that a teacher should give his/her best, but save himself/herself from resignation and getting ill, keep in a distance and have a break for several weeks or months because of the burnt-out. She wishes to have smaller classes, which she thinks would be the most effective support on her belief at the moment.

- 6) GHH38M is a male teacher having 38 years of teaching experience in the Hauptschule, and he teaches German, English, ethnics, informatics, WZG (history, geography, social study) in Grade 8-10, 3 classes and 70 students in all. He believes successful education is the teachers can try out what has to be done every day in a new form with students together, e.g. change the methods of teaching, find out what could be the right topic for each student, look at what's different now from last year to find new ways and new topics around. From the side of students, he believes it's necessary to have basic knowledge of general things and to find their personal ways in life, and if they are also curious enough and want to know everything, they are successful students.

However, it's hard to say those good at exams are successful, sometimes being a good student helps, but it's not a guarantee for life, for there's a certain type of students who are nice and do everything that teachers ask and expect, they are successful at school, but might be not successful outside school. He thinks, when he met his students again years later after their graduation, and he looked at their faces and talked with them, he could know if his teaching was successful or not. For him it's a big success that after school students can do something special with what they learned at school.

He believes his parents must have been the ones who influenced his belief, and probably his teachers also affected him no matter if he wanted or not. The biggest influence is the social background of his generation who were called six-eighters, they had the special belief that they could do things in another way and they wanted to do everything new, but in the end he realized it didn't work. His belief changed after becoming a teacher, in the beginning, he thought he would have much more possibilities to do a lot of very new things, later he found it's not possible to manage all the things that he thought he could, and now he has to accept it.

He believes his belief directs his teaching, and he tries to teach his students important and reasonable things, but he cannot manage many things that he'd like to do, so he learned to try not to do too much but do less in a better way, because he's in a type of school where he has to wait for slow ones. Due to the rather big variety of students' levels, he must not only reflect the topics that he has to teach, but also think about his students individual to find the right task for everyone to have a bit success, so that they don't lose consciousness to try their best. He is curious and also tries to show students

how to be a curious person, and he tries to be interested in them to learn about their families, and listen to how they feel in his lessons.

He believes his job is to give students possibilities to try things out, not just to tell them to sit there and learn, but take the time to wait and listen, keep them going on and push them a little bit. In his school he's involved in many different projects to help students get some practical training or social experience to open their ways to the society. However, the fact he found is that he won't reach everyone and will never achieve 100 percent, so he must accept there're always differences between his belief and the reality. He thinks a big support is to have colleagues who are open-minded and are able to talk frankly about everything that went well or bad, and to have the school authority who could give teachers enough time out of lessons, so that they could help each other by talking and reflecting together, which is an important part of teacher's job he believes.

4. Senior high school - CHH6F, CHL10F, CHH10M, CHL17F, CHH18F, CHL35M

- 1) CHH6F is a female teacher with 6 years of teaching in a top senior high school, and she teaches English for 2 classes of Grade 11, 120 students totally. Top means this school is the best one among all peer schools locally, and it has a very high percentage (at least 90%) of students enrolled in college. She believes successful education includes good character, cultivated mind, and efficient behavior. Good character means being able to control the temper and get along well with others, cultivated mind means being able to consider things in different or more aspects and having own minds and high EQ, and efficient behavior means being able to complete things correctly in a short time.

In her viewpoint, high scores in examinations could mean the students are smart enough or they study hard enough, but "you cannot say they are successful students", because success includes many aspects, for example, be friendly, be ready to help people, be strict with themselves, be able to control themselves, behave well, get along well with others, study hard all the time, and have good handwriting, with all of which the students can be called successful and can do something great later, even though they don't get high exam scores. So scores shouldn't be the only way to measure students, and going to college is not the only way to change the fate, some students who cannot go to college learn some skills in some fields, they can also be successful.

In China, most families have one child or two, and some children are spoiled very much, they cannot control their temper and cannot finish things successfully, although they have learned enough knowledge, they don't know how to use the knowledge. Sometimes their bad EQ could bring disasters to others and the society, for example, there were some cases that students in the university killed or poisoned their roommates, which affected her belief a lot. Sometimes she thinks about her students, and their school life is hard indeed, but she notices that the benefit from the hard study is that students can also learn to face things they are not good at or dislike, and learn to bear all kinds of uncomfortable situations, as a result, in those struggles their characters can be developed, and the character really matters a lot more in the daily life than the knowledge.

When she started her job, she did get the reality shock, for she found the situation in senior high school was completely different from what she thought in the university, and she couldn't believe or accept it. She thought there were many things more important for students to learn than the knowledge, and students should be encouraged to do more sports and activities. However, in fact, students have to study the whole day all the time without any activity, and they have tons of homework every day. Little by little she accepted the reality, and tried to understand it's up to the country's economy, and it's a problem of the society which is very competitive because of the big population. So she thinks her belief changed gradually.

Only in the first two or three years her belief directed her teaching, but the result was bad that her students got lower scores in exams than other English teachers' students in the same Grade. She didn't think her ability was worse than other teachers, but she realized that she couldn't get good results if she insisted to practice her belief, so she gave in, and has gradually acted like other teachers with the only concern on improving students' study performance. Now she even believes this kind of teaching cannot be abandoned, also because in the reality going to college is the only way for many students from poor families to change their fates, and they have no other choices except through hard study.

What she likes to do in her teaching is encouragement, and she encourages students a lot. Her students have to read a lot, and sometimes in class she takes 5 or 10 minutes to talk with them about the topics in reading materials, and share her opinions which she

supposes to have discussion with or among students, but to her sad, there's no discussion and no feedback from students, and they don't have their own minds, for they are educated from the beginning of school that they must listen to and remember what teachers tell them, otherwise they will be punished. Facing the conflicts between the reality and the ideal education she believes, she can do nothing and cannot change the situation, so she learned to adjust herself to the reality, and only keeps the belief in her mind.

She thinks the whole educational environment should be changed, which, however, needs time and the development of economy, and for the time being, students have to go through this hard time by studying hard without sources or feelings or activities. To her knowledge, besides exam scores, no other kind of evaluation can be better, since human's characters, emotions or behaviors cannot be measured in an easy way like scores. Within her teaching subject, she simply thinks it means a big support for her belief if the school allows her to show students some English movies for helping them understand better about English literature.

- 2) CHH10M is a male English teacher in a top senior high school, he has been teaching for 10 years, and has 2 classes of 116 students totally in Grade 12, the last school year. He believes the best education has no mode, and if students can grow up according to their individual conditions and abilities, that's successful education, simply because education is not a factory, every child is different, and they shouldn't be shaped in the same mode as a product.

Education should not be that students must get good study performance on some subjects, but just let them study, explore and experience, and make them feel happy during the process, which will largely benefit their future and their whole life. When a student is able to grow up better than before, he/she is successful. When a student doesn't think parents should do everything for him/her, but understands the love of parents and helps them do something at home, he/she is successful. A student good at exams is only successful on getting high scores, but not on other sides.

He often reads books and magazines, which help a lot in shaping his educational belief. He always thinks, as long as students make progress and become better than before, that's a success, for success doesn't mean all of them must be the same or reach the

same high level. He thinks he has never changed his belief, however, it's very difficult to practice his belief in the teaching because of the hard situation. What he can do is to talk with students, who failed tests or got lower scores than before, and tell them it's all right and they can make some progress next time.

So, mostly his communication with students is to release their bad emotions after exams or the big pressure from hard study, which he thinks is very helpful for their grow-up and their improvement of study performance. Usually he gives extra tasks for top students, and easier tasks for weak students whom he pushes a little bit or encourages a lot to help them in self-confidence, and he likes to tell them that they can also succeed in different fields of the society in the future.

In his school, students have courses from around 6:00 till 21:35 every day and also often on weekends and in the holidays, he has no chance to pay attention to their other abilities that are also difficult to be measured or are not counted in the Gaokao, and students have no time to spend on activities in developing some capabilities. So the main thing he does is just to train the ability and skill for exams, and to help them gain more knowledge and have better performance in his teaching subject. Because in Grade 12 it's just about knowledge reviewing, the focus of his class is not on his teaching, but students' learning on their own or in groups, and he guides them to learn how to think and work out different questions.

In his opinion, the education in China always tries to pursue only one mode and only one goal, which limits all other development, teachers' lessons need follow some kind of mode or procedure, and teaching methods also have certain mode, which is mainly because there's the Gaokao that directs the education, leads the teaching, decides the future of students, and restricts everything in the school. He hopes that the circumstance of teaching could become better, and the education system could be changed to at least encourage students to do more activities, the education shouldn't have only one purpose – make children be admitted to universities.

However, he can do nothing about the situation that he thinks is a matter for government and educational experts who, however, even have not solved the problem of education imbalance. In his point of view, quality-oriented education, which was advocated for years but never implemented really in the school reality, is very good for

students, and if it could come into effect, students would get all-round development at school and the current situation of education would be improved and changed a lot. He believes that the influence of education is subtle and unconscious, which cannot be seen immediately, therefore, education needs waiting.

- 3) CHH18F is a female teacher with 18 years of teaching in a top senior high school, and she teaches history for one class with 60 students in Grade 12. She believes education is successful if it can achieve a lifelong influence on children's souls, because the highest realm of education is to have a dialogue with the soul, not with a person. Whether students can be enrolled in colleges or not is less important, the more important is that they after graduation can adjust to the society, harness the society, know how to live, and reach the highest realm – the pursuit of life. So, it's successful education that teachers lay emphasis on the cultivation of children's personality and moral character.

According to her understanding, success has many meanings. Chinese Gaokao has a score line, above the line, students can go to college, so in the assessment of the society, success is simply a score, and parents do pay too much attention on the scores. She doesn't agree with that, and she believes success for each student, first of all, is to be a good person with good character and personality charm, who can reach self-transcendence and have spiritual growth, can face the failure and frustration, can properly deal with interpersonal relationship, and can arrange his/her own life well.

A student good at exams is successful in some sense, but personally she doesn't accept a student who gets high scores but is very cold to others in the class and makes no contribution. She's happy that in her class most of the top students are active in class activities and work very hard on study, and she believes their success really tells their high intelligence, high EQ and good personality as well, to whom she gives her sincere praise and high appreciation.

Her belief comes from her life experience and unceasing study, which continually enlarge and deepen her cognition, understanding and reflection on education. In-service teacher training is also very helpful for her self-development and professional knowledge increase, and due to personal interest, she got a certificate as career planner, in favor of not only her own career planning but also her students' life development planning. She thinks her belief has changed a little bit, mainly because she pays more

attention to the development of abilities that changes continually based on her richer knowledge, and with age she becomes more confident in the dialogue with souls, but her love on this job and her passion on education have never reduced.

She thinks her belief directs her teaching. For instance, she puts a lot of concern on morality, such as love, responsibility, loyalty, and properly facing criticism and praise. In her class she advocates students' class management, independent study and self-exploration, and she gives them chances to give lectures by turns like the teacher, for she realizes such an experiential education is very successful, which helps students grow up in experience and learn to be thankful to value the hard work of teachers. She likes to bring students up-to-date ideas and cultivate their leadership ability, and she also acts as a leader and a role model to show them how to behave, for she thinks the ability of leadership can greatly benefit them later in the college, society and the whole life.

In her opinion, the Gaokao is a challenge and also a process of exploiting potentiality, students must have the ability to cope with the examination to give the society a satisfied answer. If students can do well in that striving process and treat the examination reasonably, calmly, positively and self-confidently, their results will be good for sure. So she believes process education is far better than result education, for which she always gives every student of a new class a note book, in which they should write down what they do every day, to help them have a sense of time and reasonably make their plans, so that they can form a good habit and do things efficiently. Besides EQ, she also pays attention to the cultivation on AQ, for nowadays students are always looked after very well in the palms of parents' hands and they have no abilities to withstand the frustration and solve emergent problems.

There's kind of conflict between her belief and the reality, mainly because of the resistance of students who exclude new things, for at their age around 17 years old, inwardly they want to be independent, but actually they can't, in such a contradiction, they are usually self-centered and easy to exclude or resist. She thinks, if she wants students to accept her belief, she has to be able to touch their souls, for which she believes in all-round subtle education. For example, she always celebrates every student's birthday with the whole class, and she writes by hand a letter of congratulation with words of appreciation and praise and also some advices, she

believes this kind of warm educational way can take root in their hearts and make them accept her easily.

The key point to fulfill her belief is that the belief must be very new, high-level, credible, executable, and applicable to the future, and she believes it's very important for teachers themselves to have executive force and persistent practice on the belief, and be able to accompany students to grow up. When teacher and students like each other and trust each other, it can reach the successful education she believes. She thinks she does it very well, and her self-confidence is built on her hard work and enough involvement, and in her school she is indeed an advanced model among teachers.

- 4) CHL10F is a female teacher who teaches English for 2 classes with 115 students in all in Grade 11, and she has been teaching for 10 years in an ordinary senior high school where students are leftovers from top ones and the percentage of student enrollment to college is very low, at most 20%. Personally she believes successful education is not only on the knowledge, but also on the personality and ability, and the more important is to teach students how to be a good person with honesty, politeness, good manners, management ability, and the like. Successful students in her eyes are those whose study may be not the best, but are honest, willing to help people, and care for others.

She doesn't think being good at exams is successful or good at study means good, she prefers to give praise to students who like to help others. Education in China now is indeed focusing on study and on knowledge, but school is not the only place for the knowledge acquisition, and the time during the senior high school is the most important years for children to grow up, so she thinks senior high school should focus more on personality or character cultivation. She often tells her students that in the future they will face many other things rather than exams, and now they have to learn how to face other challenges besides study.

When she was a student, her senior high school did a very good job on forming her character, and her experience in senior high school is the most important factor influencing her belief. She thinks her belief has changed since she became a teacher, because in the beginning of her teaching, she didn't pay much attention to students' study, but often showed them English movies or songs, told them English jokes, and made some fun in class, in the end of semester her students' exam results were very bad.

Under the pressure from the school leadership and the Gaokao, she had to change her teaching way, and started to focus only on the study of students, in her class there's no fun any more, and she becomes a teacher she doesn't want to be.

She thinks her belief directs her teaching, and she does pay more attention to students' characters, and tells them how to be a better person, for which she often has to spend a little less time for the knowledge teaching in class. She likes to hold the class meetings with different topics that students can make some discussion or speeches, and learn the importance of being a good person not only at school but also in the society. However, she has little time for those activities, and actually most of the time it's more like that she just takes a little time in class to talk to them about the topics, because she very much worries about the Gaokao and has to finish her teaching task within the limited time.

Sometimes she gives some really hard tests for students to work in groups, and tells them they will face such kind of challenge in the future. She always tries to teach them some reading skills and learning methods, and tries to discover their strong points and encourage them to improve or to focus more on their favorite subjects by giving them a little less homework and low requirements in English. However, every day she has to deal with many school stuffs which are not related to students' study or her teaching, so that she has little time for her teaching preparation or her own study, which makes her sad and really upset.

Therefore, she thinks the conflict between her belief and the reality comes out every minute, e.g. she wants to teach students more than text knowledge, but she just simply doesn't have time even to show them a movie by which she believes they can learn English easily. She has no solution for the conflict, but has learned to be numb to the situation, and learned to make a boundary between the job in the school and her life at home. So a big support she would like to have is the basic understanding for her and not so much pressure on her, for example, maybe her students cannot get good results in exams, but when they graduate, they can communicate with foreigners fluently, which she thinks is also successful and her success.

- 5) CHL17F is a female English teacher with 17 years of teaching, and she has totally 110 students in 2 classes of Grade 11 in an ordinary senior high school which has low

percentage of students admitted to the college. She thinks teacher is the server of education, and students should be put at the first place to get what they need, for example, if they need to learn knowledge, then it's successful education when they learn knowledge. So in her belief, successful education is that students develop their abilities and methods on gaining knowledge, and in the process of study they learn to get along with people and to use different resources, and to lay a good foundation for the future study and life.

She believes success comes from a very steady mentality that a student allows himself/herself to have up and down in study, and his/her mood is not very much influenced by the evaluation of classmates or teachers or his/her own study performance. Successful students in her eyes are those who know themselves very well and know what they want, who know how to find solutions to problems and are able to finish some tasks, from which they can feel some sense of achievement. She also thinks that happy students are successful, and it's better to be positive and happy with average study performance than to have good performance but being unhappy every day.

In her point of view, it's indeed successful for students to get high scores, for which they must have high intelligence, good ability in self-control and some learning methods especially problem-solving method, which are not easy to grasp. She realizes that, in English exams, if students don't have logical reasoning ability, good knowledge of grammar, and comprehensive ability, they cannot get high scores, so, high scores definitely mean good study capacities in some sense, even though there're really some students with 'high scores and low abilities'.

There's no special thing or person to affect her belief. After she has her own child, she found getting along with her students is very similar to being with small kids, and she understood students' grow-up and learning are a process, which need time, so she started to be more patient to students, and her thought to put them at the first place became stronger and stronger. She feels that in her teaching she grows up together with her students, and her belief changes gradually.

In the beginning of her teaching, she didn't think too much, but just did in the way as the older colleagues taught. Later she started to pay more attention to students' scores, because the school leadership wanted to see her good teaching performance, and they

paid very much attention on student's exam score that's the main factor in the assessment of teaching performance. With the richer experience of teaching, she can make students study well in class without too much stress on scores, so now she doesn't look at scores as the only evaluation criteria, instead, she thinks the individual vertical comparison is more important than comparison with other peers, that is to say, as long as a student makes some progress or even finishes the homework better, it's good enough for her to encourage and praise him/her.

She thinks her belief directs her teaching, and she always designs or changes her teaching plan according to the students' feedbacks from tests or communication. She often lets students work on difficult questions in small groups, so that they can find solutions together and help or tutor each other. She doesn't think harsh reproach can make students behave better, however, she finds that teachers' emotions can directly affect students' mood, and "it's important for teachers to be able to control their emotions, and to be encouraging, positive and passionate in class" (translated). So she rarely loses her temper before students or reproaches them, but usually talks gently and euphemistically to touch their hearts.

The reality that scores are paid too much attention has a conflict with her belief. As a result, due to the limited time, she has to follow the instruction of the examination outline to teach the knowledge that would appear in the Gaokao, and ignore the parts that would not be tested. She thinks the examination is indeed a 'baton' of the teaching, and as long as the exam's content changes, the teaching way will surely follow to change. But in fact, she has no choice, and what she can do is only that once a while she tries not to think of the exam, but teach students something she thinks very necessary to learn.

- 6) CHL35M is a male teacher who teaches English for one class with 55 students of Grade 10 in an ordinary senior high school, and he has been a teacher for 35 years including some years being a headmaster in a junior high school. He believes successful education is that students can finish their study and learn the required knowledge well, they explore their potentials and develop their EQ, they learn how to live their life and communicate with people, and they can be admitted to college or successfully start to work after graduation.

In his viewpoint, only a high rate of enrollment to college is absolutely not successful education, unfortunately, now the education in China is only focusing on IQ, not EQ that's actually more important and needed to be cultivated indeed. As to Chinese students, he thinks, they have to study well and listen to teachers, but shouldn't be fully obedient, because those who follow all that teachers say are not or cannot be successful. However, the problem in Chinese education is that most teachers like obedient students.

He believes that success has a close relationship with the character, e.g. concentrated, insistent, and having perseverance, etc., and it's not necessary for students to be very outstanding in study, but it's good to learn more knowledge at school, and they should basically listen to teachers, can communicate with teachers, get along well with classmates and don't pursue only high scores, then they are more likely to be successful in the future. In his opinion, it's for sure that students good at exams are successful, at least successful at study, and also the possibility for them to reach the success is bigger or they have more chances to be successful in the future.

There's no big influence on his belief, he thinks, but it's formed based on many small things during so many years of teaching. His belief changed mainly according to the big change in the education system, for instance, in the beginning of his teaching, he did all kinds of activities with students, while at that moment President Mao said having strong body firstly and then enriching the knowledge. Now in China it's exam-oriented education, and whether school education is successful or not depends on how many percentage of students going to college and top universities, which becomes the only concern of school, and students have to study hard to pass the Gaokao for a better future, so he also has to focus on their study performance instead of activities.

He thinks, without question, his belief directs his teaching. Always he tries to have more personal communication with students, and build close relationship with them, for he believes "when students like you, they like to learn what you teach" (translated). As a teacher, he must regard students' study and help to improve it, because it's his task to help them to study well enough to pass the Gaokao in the end. He always likes to correct their mistakes or improper behaviors to help in the development of their characters. And he notices many students are afraid to answer questions in class, so he talks to them with encouraging words and gives them easier questions to answer so as to build their confidence little by little.

He thinks there's some conflict or gap between his belief and the reality, but his belief has to submit to the reality, he tries to optimistically look at the gap and adjust to the reality. For example, this "one score decides a whole life" is caused by the educational policy of the country, and he personally cannot change it, but he can change his teaching way. So within his ability, he thinks the support to fulfill his belief is that he must enrich his own knowledge, such as the advanced educational concepts and teaching theories, and improve continually his teaching ability.

5. City Junior High School - CCD5F, CCD6M, CCD14F, CCD19F, CCD23F, CCD28M

- 1) CCD5F is a female teacher in a junior high school located in a city, she teaches 2 classes in Grade 8, 112 students in all, and has been a physics teacher for 5 years. She believes successful education is that teachers can make students interested and happy in study, and help them learn the knowledge and the problem-solving method. In her opinion, a good mood is important for students' development in body and mind, if students are not happy at school, their school life will be very suffering. As to physics, the knowledge in textbooks is about 100 years ago, which she thinks is basic to learn but not more important for nowadays students than to learn the methods about research and problem solving, and to apply the knowledge into the real life.

She believes self-confident students are the successful students who are not necessary to be very smart, but should reach the basic goals on knowledge and abilities mentioned in the curriculum outline, and should be healthy in body and mind. It's not always that students good at exams are successful, e.g. if an exam is about basic knowledge, a high score only tells that a student studies very hard. Even if a student got a high score in a comprehensive exam, he/she would not certainly be successful later in the society, because success depends on many factors, and the abilities like social communication and self-management on emotions for example, which can be much more important than working ability.

It's her own study experience forming her belief, since personally she had very happy study experience and had several good teachers who could make students learn more knowledge with a happy mood and became her role models. She doesn't think her belief has changed, for she always tries to have close relationship with students, which

she believes is very important for a high teaching efficiency, and when students like her, they can like her teaching subject too. She often gives students chances to stand before the whole class to express their own opinions or answer questions, so as to cultivate their self-confidence. During the break time of classes, she often makes some communication with students and tutors them individually on study.

She does try to make students interested in her lessons, to make some fun in class by showing them some cartoon fragments involved in physical knowledge or some videos of physical experiments to help them in better understanding. However, the reality she has to face is none of the students in the classes like study and only perhaps about 20% has the willingness to think about and explore the unknown, all the others are very passive on study, and it's also very hard to get them interested, which, unfortunately, happens most of the time, so she doesn't think her belief directs her teaching all the time.

Sometimes she has to push her students to study with a little bit punishment, because she, like all other teachers, bears too much pressure from the teaching objective on improving students' study performance, which makes teachers eager for quick success and instant benefit, not the long-term development of students, for "our system is exam-oriented, and 70%-80% in the exams are about basic knowledge, which leads our teaching to focus on passing knowledge onto students and have very few chances to develop their other abilities" (translated).

In her opinion, the fact is, if teachers don't spend all of the time on the knowledge's exercise and consolidation, students cannot get high scores in the examination for the admission to senior high school. For students, they also think high scores are very important and are the most useful to guarantee them to go to the top or key senior high school. So she believes her first and foremost teaching goal is to help students get good scores in the examination of Zhongkao, also because Zhongkao is the main measurement not only for students, but also for a school to assess a teacher and for the society to evaluate a school.

There's always some difference between her belief and the reality, e.g. she would like her students to be happy in the study, but actually students are not happy in the school. However, on the other hand, she believes that simply being happy in class could be also

an inefficient teaching, mainly because the Chinese students have been subdued since the childhood and never learned how to act in a freely communicative atmosphere of class, once they were in a relaxed class, the classroom would be in an uproar and they would learn nothing. Each time when her teaching doesn't reach her expectation, she always reflects herself to see if some steps of her lecture have problems or her lesson design is not interesting enough to attract students.

Besides, she continually improves her own teaching ability and strengthens her management ability on students, for she believes treating students is the same as treating her own child, she shouldn't be always nice to them, but can get angry sometimes to make them have a little bit fear on her so that they could do better in study. She thinks she has had enough support on her teaching, and the school environment now is much better than the time when she started her teaching job, for example, the teaching research of her subject physics among teachers is much more frequent than before, and her school leadership encourages teachers a lot to try their own styles in their teaching.

- 2) CCD6M is a male teacher with 6-year teaching in a junior high school of a city, and he teaches Chinese in 2 classes of Grade 9 with 80 students totally. He thinks the aim of education is teaching students how to adjust to the society, how to continually improve their self-cultivation and promote themselves onto a higher level. Therefore, successful education in his belief is to guide students to develop their potentials into full, and help them grow up continually, and cultivate them in good and positive personality, e.g. they are curious and have interest in things around, they love life and love this society, they are positive and have no anti-social or dark thinking, they actively participate social activities to integrate into the society and make their contribution.

He believes successful students are those who are optimistic and self-confident; who are not afraid of difficulties but able to bravely and self-confidently face any problem; who have rich knowledge and good learning abilities with their own learning methods; who have good abilities of communication and get along well with teachers and classmates, and are easy to integrate in class collective; who have high EQ and abilities to improve themselves constantly; and who can make a speech or express their own opinions in public. It would be better if they also have the organizing and management ability, and are able to organize activities in the class or at school. He doesn't think students only

good at study are successful, because there're some students who can get almost full scores in exams, but their characters are unsocial and have few friends.

He, as a class teacher, has more chances of teacher trainings, which have a big influence on his belief, and he has learned a lot of teaching theories including teaching cases in the lectures of famous professors. Each time after the training, he always reflects his own teaching behaviors, tries to put what he learned into practice, and proves some of the theories work very well on the students and class management. Besides, personally he often thinks back his own study experience, and writes down what had big effects on him as teaching cases. Through continual self-reflection he has been changing his teaching belief little by little.

Therefore, his belief changed after he became a teacher. In the beginning two or three years, he focused mainly on teaching students knowledge and methods about how to get higher scores of exams. But recent years, he started to care about students' mentality, for he realized that to enter into their hearts, inspire their learning motivation and build a healthy relationship with them, is more important than teaching knowledge. So during the break time of lessons, he often goes to his class to talk with students individually about their study or families, or share with them something new or interesting, for he believes small talk makes students feel teacher's attention and care on them personally. He always tries to make his teaching interesting, for which he prepares lessons very well, so that students can be active in class, like him, put trust on him and follow his teaching way.

He doesn't think his belief exactly directs his teaching, but only affects in some way because of the limitation from the reality. What he can do is that he doesn't look at students with colored glasses, but always keeps a tolerant heart to see their good sides, and constantly encourages and praises them. In his teaching subject of Chinese, the textbooks have many texts about good personality, like sincerity, honesty, goodness, virtue, cooperation, etc., so in the teaching he always leads students to discover the good meanings of the texts and explains how they can practice in their daily life.

However, he also finds that sometimes it's not realistic to only rely on professors' theories, for example, encouragement and praise cannot work well on some students, especially those who give up themselves. When it's really hard to push them forward,

he has to give up on them too. So there's a big gap between his belief and the reality. He wants to practice the belief more, but when there's no effect or improvement on students, he has to turn to like punishment or discipline, but tries not to hurt students' self-respect or physical and psychological health.

In his classes, the situation is very few students have interest in learning, most of them are forced to study under the big pressure from teachers, parents, the exams and competition in the enrollment to senior high school. Therefore, what he wishes is that students could open their hearts to him, agree with and accept the values he tells them, they could keep curious to knowledge and their surroundings, and work hard on study with more motivation, then he thinks for sure his belief would be fulfilled in the reality.

- 3) CCD14F is a female teacher having 14-year teaching experience in a junior high school located in a city, and she teaches Chinese in Grade 7, 2 classes and 71 students in all. She believes successful education is to cultivate students into wholesome persons with noble character and good personality, especially they can be kind-hearted and positive, are able to restrain their behaviors well, at least break no laws or do no harm to the society, and are able to handle all kinds of livelihood on their own. It would be perfect when their study performance could be also good enough to go on to senior high school.

In her viewpoint, high exam scores doesn't mean success, because "education in China is kind of malformed, usually those with very good study performance show no concern to the world, but only focus on their own study, then they can get good scores and enter into very good universities in the end" (translated), but they might have very poor abilities in practice and communication, or have some defect in the character with low morality. She thinks there're many cases like that in the reality, so successful students in her belief are those who have good and positive attitude to life, and who are happy and able to do what they like, which for her are more important than study.

It's her own experience, including what she saw and heard, that built up her belief, and there's nothing special or particular person to affect her. Since she became a teacher, she thinks her belief has changed. In the beginning 2 years, she didn't think much about education, what she did in class was just to make students happy and she was always full of passion on her lessons. After 5-6 years of teaching, she had a clear mind on what she should cultivate students, and the experience of being a class teacher helped her

learn to be strict with students. So instead of making fun with students, she started to have more discipline on them, sometimes she also punishes them, e.g. call the parents, put a bad record in their files, or make them stand a whole day but not often.

She thinks that her belief directs her teaching. In her point of view, Chinese is an educational subject, for every text either tells a life principle or covers human's good affections, which can guide students to learn good personality and shape their outlook on life and values, so she always tries to connect those topics with students' real life to teach them better behaviors. In her own class as a class teacher, she makes everyone take part in the class management with different duty or role, so they can learn to be responsible and to communicate with other classmates, which she thinks is very helpful for them to develop in other abilities besides study.

she's sure that there's difference between her belief and the reality, in an idealized way, education should provide a lot of different activities for students to develop more abilities, but actually they don't have time, because they have heavy burden and big pressure from the study and exams, and they have to fight for good scores in the examination for senior high school. But personally she is quite content with things as they are, and tries to do what she can do. When there's something she cannot handle or solve, she just leave it alone, because she believes it's very hard to promote something by one single person in her teaching situation, the system needs a top-down reform and the school environment needs continually creative changes.

- 4) CCD19F is a female teacher teaching English in two classes of Grade 9, 70 students altogether, in a junior high school located in a city, and she has been a teacher for 19 years. She believes education is successful when students have good study performance and can be admitted to their wished senior high schools, which is also a success for teachers in their teaching career. She thinks her opinion is the same as the society who measures the success of a junior high school according to how many percent of students enrolled in top senior high schools. Therefore, those, who cannot go to senior high schools, she thinks, are not successful at study, at least not successful in this period of life no matter how good their personality is, but in a long run, it doesn't mean they will be unsuccessful in the future after they enter into the society.

She believes, when students can get high exam scores, it really means they have very good perseverance, they are able to conquer themselves and overcome a lot of difficulties, and they can keep themselves going forward to their goals. If their personality is not bad, they are also good at interpersonal communication, and have some special talents or develop themselves in other aspects, they are really successful and excellent students. However, she also admits that there're some students who only focus on study but have bad relationship with teachers and classmates, or have some kind of psychological problems, maybe they are successful on study, but are not successful persons. So success in exams doesn't tell a student can be also successful in other areas.

She doesn't think she has some specific belief, all the time she just tries to do a good job. In the beginning she wanted to pay attention to every student, later on she became somewhat utilitarian by giving up the difficult students and putting her limited energy on those who can improve themselves on study, because the school assessed her teaching performance according to the exam scores of target students who don't include several very difficult students at the bottom of ranking in one class. With time going, she realizes that she still has to care for and educate those difficult ones, because they really need teachers' help. So every day she just works hard on improving her students' study performance, and doesn't forget difficult students.

There's no specific thing or person to change her opinions, which she thinks is a long-term teaching experience accumulation and a kind of educational rules that she found after having deeper understanding on teaching little by little. Although she denied she has a belief that directs her teaching, her teaching behavior is highly consistent with what she believes. She even thinks that students have no much interest in study is because they can't learn what they are studying. So she tries to help them learn by testing them again and again in different ways, until they bear the knowledge in mind. Moreover, tutoring students individually or in a small group is what she does every day in class and after class.

In her opinion, it is a pity that it's written in the education outline that schools should pay attention to the students' all-round development, and organize all kinds of activities for students' ability development, but superior departments of schools prefer to see high enrollment rate of school on the strength of good study performance of students, and

unfortunately, there's no positive correlation between study performance and participation in activities. So students' activities are very rare in the schools, and the time has to be saved and spent in more lessons and more training of exam skills, even so, still most of students will not be enrolled in senior high school, and some even have no proper schools to go on with study.

So she feels the big pressure the students have to bear, and that's the reason that she tries her best to help them in study and to keep a positive mood at work. She doesn't agree with some teachers who are very harsh to students, and make students scared so that they have to study very hard on their teaching subjects. She's of a gentle temper, and seldom gets angry with students even when they make mistakes or do things wrong, she never rebukes or humiliates them, but often encourages them, so students like her and her class atmosphere is good too, which she believes helps them more in a good learning.

As far as she is concerned, she wishes to get more understanding and support from the leadership of school, higher authorities, and the whole society, because no one cares about teachers, but when there's some problem, people immediately come together to be against teachers and blame teachers, which makes her feel the social status of teachers is very low and she wants that to be changed. She believes, even though she and other teachers have some good and creative ideas, without the support of the school leadership and the society, they can do nothing in the reality.

- 5) CCD23F is a female teacher with 23 years of teaching, and she teaches Chinese for 2 classes of Grade 8, 111 students totally, in a junior high school of a city. In her opinions, the first thing we live is to enjoy life and be able to gain happiness, and the precondition to gain happiness is having certain knowledge and also the ability of acquiring knowledge, and being able to get along with people. Therefore, she believes successful education is that students have the ability to acquire knowledge and get along with others, and they have wholesome characters and can live a happy life when they grow up. For her, students' EQ and abilities are very important, the process of acquiring knowledge is important, but the knowledge itself is not so important.

She believes successful students are those who are happy and can live a happy life. Students good at exams are not successful in her standpoint, they might have good

foundation and ability on knowledge, but they are not surely successful either in other aspects of life. Perhaps they have unsound personality and cannot feel the happiness of life, and in the end actually many of them are not successful. To her knowledge, the reality in the school is that those top students do have the strongest sense of crisis and biggest pressure from inside and outside, some of them nearly reach the point of breakdown.

Her belief has grown and changed due to her life experience. When she started her job, she found almost all the knowledge she learned at school was useless, and what left was “if you have the ability to get along with others and work together as a team, if you can put yourself in others’ shoes to think and act, if you are creative, and if you have a lifelong plan for your own profession” (translated), which turns out more important than the knowledge. However, in the first 7-8 years of her teaching, she had no understanding on education, and didn’t know what kind of teacher she wanted to be, so she just simply followed the teaching ways of her colleagues and her former teachers.

8 years later, she became a mother and had the maternal love inside, and then she got the understanding that love is the source of education, without love there’s no education, so she started to love her students, be responsible for them, and put more energy in the teaching. The habit of reading has helped her a lot in the better understanding on education, and her belief was also greatly influenced by some educational researchers or professors in teacher trainings and also some colleagues who’re very aspiring in the plans of professional development.

She thinks her belief directs her teaching. For example, she always connects her daily teaching with the cultivation of emotions, attitude and values, and, as a class teacher, she pays a lot of attention to the development of students’ personality and EQ, e.g. through reading a text, she can teach students to be thankful to what they have, be sensitive to the love of their parents and teachers, and have a heart with love. She asks students to write down the merits of classmates, so as to help them see good sides of others and get along well with each other. She is cautious of speaking and doing before students, and always tries to lead them to the positive way, as a result, they are really influenced by her optimistic character and become more self-confident.

She doesn't think there's conflict between her belief and her teaching, because she holds onto her belief and always tries to fulfill it in her teaching. But she is not sure if her belief works on every student, for not all of them accept her belief or opinions. She tries to help them to experience the happiness of learning Chinese and to feel the beauty of life, but she realizes she alone cannot make them happy in their school life which depends more on the exam system and social institution. To her sad, in fact, very few students are happy and most of them have poor ability to face frustration, they are easy to feel unfair on little tiny things, but don't try to find ways out.

She realizes that a big problem is many parents don't or can't care about their children's personal development and psychological health, and some parents are not interested in parents' meetings or school activity at all. So she thinks a very big support on her job is to increase parents' knowledge and ability about family education, because some parents don't know how to play the role of parents, and they often scold loudly their children and even beat them a lot, as a consequence, when she talks gently with the students about their problems or mistakes, they are kind of numb and don't think she is criticizing them.

- 6) CCD28M is a male teacher having been teaching mathematics for 28 years, and he teaches one class with 56 students of Grade 8 in a city junior high school. He believes successful education is to shape the wholesome characters of students who can be optimistic to handle what is happening in life, and are able to face the situation of frustration; who like themselves and can tolerate others; who are able to communicate with people and cooperate with teammates; who have ideals and look objectively at this world; who are healthy and are active to finish tasks that they should do. From his observation at his former students' development, he finds students, as he describes above, are more successful after school and make more contribution to the society than those only good at exams.

He thinks that having the ability to get admission to senior high school is still a very important factor of success. Besides, if they are also healthy and have high EQ, they're successful students. A high exam score, in some sense, has a positive correlation with success, at least it has more competitiveness and more chances for a better school, but it's only one factor of success, and still far away from success, because success includes

many factors, like morality, intelligence, health, opportunity, and tenacity of not giving up after many failures.

He thinks there's no big influence on his educational belief, it's year after year that he got to know how to do his job better by reflecting the development of his students, and after 15 years of teaching he started to have clear understanding about education. His belief changed a little and it's more about that he learned to think in different perspectives, e.g. in the beginning he thought he could reach everyone, but now he has realized children are different, and not all children can be reached. He thinks the main part of his belief stays firmly and never changed.

He thinks his belief directs his teaching. He likes to let students study in groups and finish some tasks together, so they learn to be responsible for their own sub-tasks, learn how to act in a team and find solutions in a cooperative way. He doesn't reject difficult students, or show partiality to those with good scores, and he doesn't insult their personality or hurt their feelings, doesn't give failed students a blow but encourages them, because in his opinion teachers should deliver positive energy to students. He often takes his free time to play with the students, for he believes character's cultivation happens more out of class.

He doesn't think students need his help to reach success which, however, depends on their own efforts, and the students who need help are those having difficulties in study, but very few students need long-time attention of teachers. He believes there're many other ways for students to gain knowledge except from teachers, so his main job is to be a good role model for them, inspire their learning interest, develop their ability of experiencing life happiness, accompany them and help them to grow up with healthy body, good character and morality. It's very important that "students like you, for which the only one thing you need do is you like students, and don't give up any chance of communication with them, even a small talk or a nod" (translated).

Besides the role of a math teacher, he is also the headmaster of the school, so he doesn't think there can be a conflict between belief and the reality, because it's the duty of him and the administrative team to find ways to solve problems and create conditions to overcome difficulties. However, the fact is that "our educational mode and assessment methods lead us to run after exam scores that require students to think deeply and put a

lot of energy on daily study, as a result, school activities are absent in the whole educational environment of China” (translated), so the situation will not be changed, as long as the examination system stays the same. From the other side, the examination does offer an equally competitive chance for students from poor families to further the higher education.

6. Rural Junior High School - CRB3F, CRB4F, CRB6M, CRB21F, CRB22F, CRB25M

- 1) CRB3F is a female teacher having been working for 3 years in a rural junior high school, and she teaches Chinese for one class of Grade 9, 29 students. She believes education is successful when it doesn't kill student's individuality, but keep it and guide it to meet the social generality, and when students are educated into good persons who can adjust to the society and are useful for the society after leaving school. Good person means someone who can do what most people think is right, and do what meets the social values.

In her opinion, Chinese students must follow the ideas of the national leadership, not be against the society, and they should have the sense of honor and sense of national pride, and have the belief that they should study as well as they can in order to make contributions to the country in the future. When students graduate from school, they don't regret but feel proud of the education they had at school, and the school time is their most beautiful memory, then they are successful students and the education is successful too. For those who are not good at study, if they can finish the nine-year compulsory education and graduate successfully, it's also a success.

She thinks it's a social phenomenon that students with high exam scores have poor abilities in other aspects, so in her class usually some top students are appointed as different roles in the class/student management to hopefully develop their other abilities. Although it's also true that students good at exams are affirmed to be intelligent, actually, in her opinion, many of them just have dead knowledge and need more education on psychological anti-setback ability, because they can hardly face or accept failures. From that point, students good at exams cannot be called successful.

During her school time as a student, when her teachers talked about how many students they taught, she felt it amazing and got a sense of reverence on this job that one person can cultivate and influence so many people. So since that moment, she has decided to be a teacher and even started to think what kind of teacher she wanted to be. What one of her teachers said had a big influence on her, he said, “no matter what you would do in the future, even you cleaned streets, you were also making contribution to the social environment” (translated), which has been a part of her belief till now.

From her work experience, she finds that the children who are bad at study can be good at other areas, and everyone has different shining points in need of appreciation and no student should be belittled. So she doesn't reproach students, but encourages them a lot and repeatedly tells herself everyone is lovely, as a result, she has a very good interaction with students in class and they can study well with a happy mood. At the same time, she is also becoming more careful and cautious, for fear to say or do something wrong before students, because she has realized even her small action could affect students especially when standing on the platform, which makes her feel the job is stressful sometimes, so she tries to work harder to enrich herself in knowledge and prepare her lessons very well.

She believes the precondition to cultivate students into good persons is that she, as their teacher, must be herself well, set her own heart right and keep passing positive energy onto students. Therefore, she always tries not to show students negative emotions, but tells them something positive and builds a benign competition among students to inspire their crisis awareness and self-motivation on study. The advantage of her teaching subject, Chinese, is that every text in the textbooks is full of emotional education which she believes is more important than knowledge teaching and fits her belief. So she thinks her belief directs her teaching and never changed.

The difference between her belief and the reality is that she would like students to be good persons, but some students could get a wrong impression from the society that good deeds have no good returns, and then they might doubt what she said, many students could change their mind of being good persons because of some bad social phenomena. She often tells them everyone is unique and all of them can be useful for the society in the future, but students might not think so, partly because the society could look at them with 'colored glasses' and measure them only with their exam scores,

thinking “they are useless if they cannot even be enrolled in the senior high school” (translated).

There’s not much in the present situation that she can change, but she insists on passing positive energy onto students and doesn’t want them to say ‘I can’t’, because she thinks belief education is powerful when students believe in themselves and believe they are useful members of the society. She wishes the technical or specialized schools can be further developed in China, so as to become places for students, who fail the examination for senior high school, to learn some skills or develop their special talents. In order to fulfill her belief, personally she thinks she should study hard unceasingly to enrich her professional knowledge that is the key to make students trust her and believe what she said is right.

- 2) CRB4F is a female teacher with 4 years of teaching in a rural junior high school, and she teaches chemistry in Grade 9 for 2 classes, 71 students totally. She believes successful education is to cultivate students to be kind persons who can make contributions to their families and the society. In her opinion, it’s impossible to make everyone be a leader, and most students will be ordinary people, so, as long as they got good education in the school and could find their places in the society according to their abilities, they were successful, because everyone is different, and the success cannot be the same.

For students, study is surely the most important thing, if they can try their best to study well, get along well with classmates, and respect their parents, they are successful. In her viewpoint, a high score only means success in the exam, and doesn’t mean the student is successful or will be successful in the future, because development is sustainable. It cannot be said that only going to college is successful, for having some certain skills, like the non-material cultural heritage is an inheritance of skill, is also a success, so successful education is not only in knowledge, but also on skills. There’s no big influence on her belief that’s just her finding little by little in the life experience.

She thinks her belief changed, e.g. in the beginning she thought every student should study well to go to senior high school and further college, but after 2-3 years of teaching, she finds the learning ability of everyone is different, it’s impossible to require all students to be the same, or persuade everyone that study is the best way for

him/her. She thinks her belief can basically lead her teaching, for example, she expects good students to study hard for the admission to senior high school, and encourages weak ones to keep hope in their future even though they won't go to senior high school, for they can also be successful if they try their best to study hard to learn some skills in vocational or technical schools.

The real situation at school is that exam scores measure everything, which she believes she can do nothing against, so what she has to focus on is to help her students improve their study performance. Sometimes she can let students study in groups, so that they are able to learn a little bit of communication skill and learn to help each other, but it's difficult to do some activities in such a knowledge-centered educational background. She tries to cultivate students in good personality, but she feels her personal ability is very limited and she can do very little to really influence the students. So, she wishes the evaluation system could be changed, because it's irrational to measure students only with exam scores, and to measure teachers' teaching performance by students' exam scores.

- 3) CRB6M is a male teacher who has been teaching mathematics for 6 years in a rural junior high school, and he has 2 classes with 78 students totally in Grade 7. In his belief, successful education is teaching students in accordance of their aptitudes and having different requirements on their individuals, respecting their personal development and letting them grow up in their own ways to different goals, because students' intelligent abilities are different and not everyone can study well, it's not possible to educate all students into the same.

Successful students she believes are those who have good personality and good abilities, and it would be the best if their study was also very good, but if not, at least they should have developed good characters and learned some practical abilities, social abilities or communication skills. If a student is not smart on study, but he/she can be happy every day and be active in different activities, he/she is also successful. Students good at exams could be successful, but if they only have high scores, and are bad at communication or have bad habits or have no sense of collective honor, they cannot be called successful. So success means having comprehensive capacities.

He thinks his belief was affected by his former teachers and his college education. In his eyes, the college education respects more individual development of students, but secondary education is more occupied by teacher-centered cramming method of teaching. Because of big classes, even though he advocates the idea of teaching students according to their individual aptitudes, in class it's impossible to take care of single student, so he teaches all students the same, and then after class he gives them individual tutoring.

He thinks there's few change in his belief. He doesn't judge students according to their study performance, doesn't look down on weak ones or blame those who make mistakes, but always tries to see their strong points and praises them in class to help in their confidence. Perhaps because he has a slow temper, whenever there's a problem, he always self-reflects firstly to calm himself down, and then talks with students gently and helps them in an amiable way, as a result, they like him and also like listening to what he says, which he thinks is important to conquer their teenage rebellion.

Unfortunately, as he observes, students are not happy, because every day they study too long time from 7:00 till 20:30, during the whole time they stay in the classroom for lessons except one-hour sports. He really dislikes such a situation, however, he can do nothing but try to channel their negative emotions and make them feel a little bit happy by having more communication with them or telling them some jokes. So, for the conflict between his belief and the reality, he has no solution, for he also thinks he must do what the school leadership and the superiors ask him to do. When they don't agree with him in something, he has to give in.

Honestly he has to admit that it's difficult to fulfill his educational belief in such an exam-oriented education background, because there's too much restriction and the 'one exam decides a whole life' system makes examination become all and the final goal in students' school life. Another big problem is parents believe their children will have good future only when they study well and get enrolled in college, and they don't care about children's development on other abilities or have awareness on children's physical and psychological health, so they don't like their children to spend more time on activities. As for him, he thinks small class with around 20 students could make individual teaching possible and benefit students' personal development, and it would be better that the teaching way in the college could be brought to the middle school.

- 4) CRB21F is a female teacher in the subject of chemistry in a rural junior high school, and she has been teaching for 21 years and has one class with 34 students in Grade 9. She believes successful education is that students are educated well to have good willpower, good personality and morality, which are more important for their life than the high scores in study. When children are honest, reliable and creditable; when they can deal well with all kinds of problems, and find solutions on their own or work out with peers; when they are independent in daily life and have healthy body as a good basis for study; when they have good ability of communication with people; when they can follow and obey school's rules and regulations, and do well in the details of daily life, they are successful.

She doesn't think students good at exams are successful, but she believes study has close relationship with students' attitude, willpower and personality. Her belief changed after she became a mother. Before that, she thought, as long as students could be self-disciplined and have good study performance, it's successful for them and also for her teaching. But after she has her own child, she started to consider what else, besides the knowledge, children could need for the future life. Her own child is also studying in this school, who relies too much on parents and cannot be independent in life issues, so she realizes it's very important for children to be independent and autonomous.

Usually her belief directs her teaching, for instance, she believes "you can succeed in a big achievement when you do well in details" (translated), so dealing with details well is her concern, like helping students in a good study habit. In daily teaching, she also pays more attention to students' attitudes than scores, and she often tells students that process is more important than the result, as long as they work hard in the process, even if the result is not good, they will not regret later.

She thinks by doing chemistry experiments students can improve their practical ability, and in group study they can train their autonomous learning and independent ability, and also learn to help or tutor each other. She likes to share her life experience or other people's stories in class meetings, which she thinks is helpful as kind of a reference for students to solve their own problems. She also likes to give students some feedbacks or suggestions in a way easier for them to accept, and encourage every student to set his/her own study goal so as to have self-motivation to go forward.

She doesn't agree that education should be evaluated only by students' study performance, because there're many other things in education much more important than exam scores, however, unfortunately, no matter teachers evaluate students, schools evaluates teachers, superior departments evaluate schools, only students' exam scores matter. For parents, they also judge a school or a teacher according to the teaching quality that's counted by how many percent of students is enrolled into senior high school or college, so, all in all, the score is the most important and all other things have to be put aside. She thinks such a kind of evaluation is unjust and unfair, and can cause harm to the development of students, teachers, and schools.

Therefore, her belief has some conflict with the reality. She realizes that she cannot change the system or the reality, but in her teaching she can try all her best and do what she can do. If the school leadership gives her a high appraisal for her job, she feels happy in heart, but if not, she just lets it go since she does her best. She wishes that Chinese education system would have continuous reforms on long-term evaluation in a more humanized way, because the evaluation is like a 'conductor's baton' for school education and teachers' teaching, everything has to follow it.

- 5) CRB22F is a female teacher with 22-year teaching experience in a rural junior high school and she teaches Chinese for 30 students in one class of Grade 7. The situation in the reality is that students have heavy study loads and usually they think study is a stress or burden, they have to study very hard, but what they learned at school could be only 'dead' knowledge and they don't know how to use it in life. So she believes successful education is that students are happy in the study and enjoy the learning process, they can apply their learned knowledge to the future life and live their life with full of confidence. She doesn't agree that students should be overtired in learning, or feel being forced to study by parents and teachers.

It is a usual case that teachers prefer students who study well, but in her eyes successful students are those who are optimistic, outgoing, neat, upright, and healthy physically and psychologically; who have positive mentality and all-round development; who can keep themselves happy and are brave to speak out their opinions; who are not proud of good study performance or self-abased to low scores, and basically should not be bad at study. She never thinks students good at exams are successful, because scores can only

tell that they may be intelligent, but their other aspects cannot be measured by scores, and sometimes some students with high scores even have behavior problems.

Personally she was very happy when she was a student, and till now she still misses her school time. During over 20 years of her teaching, she has had happy experiences and different gains every year, and she continually makes some progress especially in teaching methods, which makes her feel the sense of achievement and have the joy in her job. Therefore, she also hopes her students to really enjoy their study and be happy at school, not to passively accept everything.

She thinks her belief changed very slowly without an obvious transition. In the beginning, she just thought to do a good job, because the only measurement was students' examination scores, and she had to try her best to improve her teaching performance and pay all attention to students' scores. Year after year, because of richer teaching experience, she can make students study well in class without tough means or punishment, and also can help them feel a little bit happy. She realizes students will have good performance when they can study happily. So now she doesn't think the score is so important, also because she has more understanding on education through studying new educational theory in teacher training every year.

She thinks her belief does play a role in her teaching practice, for example, students must learn the basic knowledge of Chinese and write it repeatedly, which is boring, but she tries to let them learn in a way that they like to do, like make a tabloid by using the new words. She treats all students impartially, and doesn't look down on the students with bad study performance, who she thinks usually feel abandoned and neglected in class, while teachers pay almost all attention to good students, so she often praises and encourages them more to help in their self-confidence, and tells them they can also live a good life by their own hands, not everyone makes a living through good study.

In the reality, students are not happy at school, and they don't have their own free time at all, but are kept in study all the days under the supervision of parents and teachers. So her belief, especially that she wishes students happy and not to stress much on scores, has kind of conflict with school's intense learning environment. But that conflict is not so big in her class, for she can let her students study in a happy mood, and meanwhile their study performance is also relatively good. So in her opinion, if her teaching ability

could be very good, students would get high scores in a happy study, then there would be no conflict.

She thinks that the evaluation system should be changed, because, if the student evaluation is only on scores, nothing in school education will change, and teachers have to pay attention to only scores, for it's the scores deciding which schools students will further go to. As she suggests, the student evaluation should be comprehensive including like moral character and different kinds of abilities, and the scores should not be only one final exam, but all the scores in a diversified process evaluation from the beginning of school days to the graduation of senior high school, then plus the score of college entrance examination.

- 6) CRB25M is a male teacher in the subject of history having one class of 32 students in Grade 7 in a rural junior high school, and he has been teaching for 25 years. In his opinion, the main influence on education is teachers and also the school environment. Therefore, he believes successful education means teachers can make students feel appreciated, and can cultivate students' self-confident character and mentality, the school environment should be harmonious and tolerant, so that students can grow up with good characters.

He believes a student is successful when he/she can be diligent and self-confidently face all he/she has to learn. It's important that students can listen to teachers and trust teachers, because students who trust teachers can trust what teachers say, and then teachers could have the possibility to cultivate students into successful ones. He thinks, in the education of China, students good at exams are surely successful, at least they are intelligent and diligent, otherwise, they cannot get high scores. But whether they will be successful in the future or not also depends on psychological factors. If they also have good and positive mentality, generally they will be successful.

He read a lot of educational articles, and has realized that educational success is to develop students' unique characters and self-confident mentality in a good study environment, and to teach them learning methods, not just knowledge. When he was a student in Grade 5, he had a Chinese teacher who always encouraged and praised students a lot, and believed they had abilities to do things well. He was greatly

influenced by this teacher, and at that moment he made up his mind that he would do nothing but become a teacher when he grew up.

His belief changed after he came to this school from another province, because here students' exam scores are much more important, and what teachers must teach students is how to get high exam scores. In his teaching, he always tries to help them to be self-confident, but the effect is not very positive, because every year he has different students, and only one year for him is too short to see if their characters change. So he doesn't think his belief has much influence on his teaching practice.

In fact, he has to admit that the daily teaching is mainly about passing on knowledge, but he also tries to guide students to systematize the knowledge and teach them learning methods, which he believes can help students get to know how to learn by themselves. In his class of history, he often takes the historical people as good examples to inspire the self-confidence of students, and to make them understand that unceasing diligence is also important and necessary to reach the success. He thinks teacher should care about students, so he always tries to help them within his ability or asks the school for help, when his students have problems or difficulties.

He tries to hold on what he believes, even though his belief isn't implemented well in the reality. The fact is that his salary and professional title are mainly decided by his students' exam scores, he has to follow the rules and adjust to the education system in order to keep his job. He hopes to have a lot of teacher trainings, but not the ones in holidays for they are not effective. The better training in his eyes is that a teacher could go to another better peer school to observe and learn from good teachers there in their classrooms for one or two years. Besides, there should also be resource sharing and information support for teachers.

Teachers' beliefs

1. What are teachers' beliefs

Teachers' beliefs, which are believed as the most valuable psychological constructs, have been experiencing an embarrassing situation that there are no shared or agreed understandings on the term of teachers' beliefs, and beliefs have become one of the most difficult concepts to define and evaluate ever, since the beliefs do not involve themselves much into empirical investigations but tend to be personalized and culturally bound (Chen, 2006; Mansour, 2009). Pajares (1992) has mentioned that "the difficulty in studying teachers' beliefs has been caused by definitional problems, poor conceptualization, and different understandings of belief structures" (cited in Mansour, 2009). But there're still many researchers trying to reach some definitions on teachers' beliefs.

As early as 1933, Dewey had described belief as an assertion about the fact or principle, and the third meaning of the thought, whose value is tested by itself, and he believed in the crucial importance of belief, for belief "covers all the matters of which we have no sure knowledge and yet which we are sufficiently confident of to act upon, ...also the matters that we now accept as certainly true, as knowledge, but which nevertheless may be questioned in the future" (cited in Pajares, 1992).

Later in 1968, Rokeach stated that "all beliefs have a cognitive component representing knowledge, an affective component capable of arousing emotion, and a behavioral component activated when action is required" (Pajares, 1992), and further he claimed that "belief is any simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the phrase 'I believe that. . .'" (cited in Kleine & Smith, 1989). Nisbett and Ross (1980) have defined beliefs as "reasonably explicit propositions about the characteristics of objects and object classes" (cited in Pajares, 1992).

Sigel (1985) tries to explain that beliefs are "mental constructions of experience — often condensed and integrated into schemata or concepts' that are held to be true and that guide behavior" (cited in Pajares, 1992). By developing the objective credibility of beliefs, Harvey (1986) describes belief as "an individual's representation of reality that has enough validity, truth, or credibility to guide thought and behavior" (Pajares, 1992). Similar to Sigel, Eisenhart et al. (1988) highlight the subjective characteristic of beliefs, and state that belief is an attitude which affects "the way in which we perceive the reality, guide both our thoughts and our behaviors" (Farrell & Lim, 2005).

It seems that Kagan and Pajares put a lot of interest and efforts on the understanding about teachers' beliefs, whose articles have become the most-cited and the most popular till now. Kagan (1992) refers to belief as "a particularly provocative form of personal knowledge" (cited in Mansour, 2009), and it is "tacit, often unconsciously held assumptions about students, classrooms, and the academic material" (Kleine & Smith, 1989), and Kagan also believes that "most of a teacher's professional knowledge can be regarded more accurately as belief" (Mansour, 2009).

Pajares' discussion on teachers' beliefs might be the most comprehensive and detailed ever, who puts beliefs "within a constellation of related constructs that includes attitudes, expectations, values, opinions, perceptions, conceptions, and dispositions, among others, all of which exert powerful influences on behavior" (Prime & Miranda, 2006). Furthermore, Pajares (1992) has explained that teachers' beliefs "are the main component of formulating theories, since they are static and can exist beyond individual control or knowledge" (Mansour, 2009), and they "represent eternal truths that remain unchanged in a teacher's mind regardless of the situation" (Pajares, 1992).

Based on the former research, many scholars more recently have also tried to develop their own understandings on teachers' beliefs, for example, Richardson (1996) looks at beliefs "as part of a group of constructs that define and describe the structure and content of mental states believed to drive one's action" (Chen, 2006); Fang (1996) defines teachers' beliefs "as a repertoire of general knowledge of objects, people, events, and their characteristic relationships"; Loucks-Horsley et al. (1998) argue that "beliefs are more than opinions: they may be less than ideal truth, but we are committed to them" (cited in Mansour, 2009); Sahin et al. (2002) refer to teachers' beliefs as "teachers' thinking and interpretations of their work involving their feelings, attitudes, experiences and decisions" (cited in Chen, 2006); Cunningham et al. (2005) stress that "belief is a calm, pleasant state, a habit of mind, available to draw upon whenever we are active in the world".

There are dozens of people who agree that beliefs are the permeable and dynamic structures, whose potent affective, evaluative, and episodic nature makes them act as a kind of filter through which new phenomena are interpreted, new knowledge and experiences are screened for meanings (Pajares, 1992; Thomas et al, 2001; etc.). In

common, those who have studied on beliefs agree on the “unique composition and cognitive affiliation” of teachers’ beliefs (Luft & Roehrig, 2007).

As the broad cognitive psychological construct, usually beliefs mix themselves with emotions and volition, and play the role as the intrinsic certitude on the truth of theory and the correctness of behavior, so they show themselves as a kind of trust, dependence or assurance to people and things, and can be interpreted as individual’s adamant attitude to some thoughts or opinions about the nature and society, and later “these beliefs become their ‘self’ so that individuals come to be identified and understood by the very nature of the beliefs and habits they own” (Mansour, 2009). That’s why beliefs can be far more influential in “determining how individuals organize and define tasks and problems”, and are believed as the best predictors of how teachers might behave in their classrooms (Pajares, 1992).

Besides the signature as easily recognizable or unconsciously held conviction, beliefs are also seen as philosophical principles and assumptions, which can be traced to individuals’ earliest philosophical contemplations (Pajares, 1992). From the philosophical perspective, belief means faith, which people are sufficiently confident of and accept as something certainly true, which belong to some kind of principles and ideals that people believe they should follow in their life, and which are also the core of consciousness and some assertions about the facts, including basically the outlooks about the world, history, life, morality and more (Pajares, 1992).

Because of the beliefs’ complexity, some researchers think that all kinds of beliefs construct a belief system with different intensities and complex connections with one another, and in the center of the belief network there are beliefs which touch on an individual’s identity or self, are more connected to other beliefs in the peripheral strands of the web, are more important for the person and are also more difficult to be changed, besides, it’s also believed that the earlier the beliefs formed as the basic concepts, the more strongly they can resist change, on the contrary, the newly acquired beliefs are the most vulnerable to change (Pajares, 1992; Raths, 2000).

About the belief system, Hermans et al. (2008) conclude, based on the theories of Harvey (1986) and Pajares (1992), that “belief system is a set of conceptual representations which signify to its holder a reality or given state of affairs of sufficient

validity, truth and/or trustworthiness to warrant reliance upon it as a guide to personal thought and action”, and the belief system serves “as a personal guide by helping individuals define and understand the world and themselves”. Since teachers’ beliefs shape the ways that teachers perceive and interpret the interactions happened in the classrooms, and also influence their construction of intentions in response to those interactions, Artzt & Armour-Thomas (1998) suggest that teachers’ beliefs work “as an integrated system of personalized assumptions about the nature of a subject, its teaching and learning” (cited in Thomas et al., 2001).

However, teachers’ beliefs are not genetic or inherent with birth, but are “attitudes, values, expectations, theories, and assumptions about teaching and learning that teachers accumulate over the time” (Chen, 2006). As far as many researchers are concerned, “beliefs are clearly personal constructions, entities that belong to an individual”, and like Nespor (1987) has also described, beliefs are “episodic, highly personalized, and containing affective and evaluative components” (Luft & Roehrig, 2007). So in the fundamental sense, teachers’ beliefs, more generically regarding their views of the world, “appear to be less reducible to behavioral and biological terms”, but tell more about the social cultural contexts, in which teachers have grown up and continue to act (Kleine & Smith, 1989).

From this research based on the teachers’ interviews, it’s proved that teachers’ beliefs at least include the following characteristics:

- 1) Beliefs can be conscious and also unconscious to teachers: e.g. most of the teachers in the interview could clearly speak out their beliefs, but several teachers like GRD21F said she was not aware of it all the time but she thought her belief is there in the background somehow, and CCD19F said that she didn’t think she had some educational belief, for she was not an educational researcher or expert who might have beliefs on education, so she just tried to do a good job every day without thinking of too much.
- 2) Beliefs are the assertions that teachers believe are true, right, and good, which teachers try to hold on and want to realize in their teaching practices: e.g. GGB5F believes that the independent study is the best way for students to learn, that’s why she always tries to give students some support or tips but let them study

independently even though she cannot do it all the time; CRB6M believes in the individual development of students, which, however, doesn't fit the reality of knowledge-centered education, he still tries his best to do the personal communication and individual tutoring after class.

- 3) Ideals and assumptions constitute a large part of beliefs that teachers describe and explain the reality in an ideal way: e.g. GHH38M believes successful education is to do things in a new form every day and find the right topic for each child, because children are different, but in the reality he realizes it doesn't work in that way and no one can do everything new; CHH10M believes that successful education should have no single mode, for education is not a factory and children cannot be the product coming out of the same mode, but actually the education system always tries to pursue one mode and one goal.
- 4) Beliefs are the values, theories and philosophy that teachers form and accumulate year after year: e.g. GGH7M used to focus on the subjects and topics, not to be so occupied in teaching social interaction like now, but later due to the world globalization and European immigration, he learned that different social values became more important in achieving the success of a profession than before; in the beginning years of CCD23F's teaching, she didn't have her own understanding on education but just followed blindly the teaching ways of other teachers, after 8 years, she became a mother and had the maternal love, then she started to realize that education is to love children and be responsible for them, for love is the source of the education, and without love there's no education and no successful education.
- 5) Beliefs are very personalized and have the individual unique historical branding: through reading the stories of teachers involved in the interviews, it is very easy to see that the teachers have different beliefs built on their very different life experiences from the school-days till now, each one is like a personal autobiography filled with historical, episodic, emotional, and specially significant slices of life, and also shows an individual learning and developing process with imitation, trial, reflection, summary, improvement, adaptation, change and struggle between holding on and giving in.

- 6) Beliefs are cultural, contextual, situational, and have connections with education system, school type/level, teaching subjects, student ages and so on: e.g. teachers like GGH7M, GGM10F in the Gymnasium believe successful education is to prepare students for the university, for Gymnasium is the only track leading directly to tertiary education; in Chinese culture, hardworking is a very good character, so the teachers like CHH6F, CHH18F don't think the study in senior high school is too much for students, but believe students can train their hardworking character during the very hard study, for a hardworking student could be successful.

- 7) Beliefs do play an important role in influencing teachers' reactions and decisions in class and guiding teachers' teaching behaviors, even though teachers' behaviors are not always consistent with their beliefs: e.g. CCD5F believes successful education is to make students interested and happy in study, so in her lessons she tries to show students some videos or cartoon fragments involved in some knowledge of physics to make them find funny and interesting, but still it's hard to get their interest in studying physics and she doesn't want her students to be happy but learn nothing, so most of the time she has to do the repeated knowledge exercises without touching their interest.

2. Teachers' beliefs change or not

Most of the researchers who are interested in teachers' beliefs insist that beliefs are static and stable, which represent the eternal truths that remain unchanged in teachers' minds regardless of the situations, and many of the beliefs are deeply rooted and entrenched, therefore, belief alteration is relatively rare during the adulthood, especially those, which are formed early and develop constantly over time into a construct of system or network, are more resistant to change and are more likely to endure challenges and contradictions (Mansour, 2009).

In 1980, Nisbett and Ross have already found that "beliefs persist even when they are no longer accurate representations of reality", and that no literature shows "individuals pursue, even in minor ways, strategies that aid in the alteration or rejection of unreasonable or inaccurate beliefs", that is to say, teachers generally do not change their beliefs even when it is necessary for them to do so (Pajares, 1992). Correa et al. (2008) explain that teachers' beliefs may be difficult to change or exceptionally stable mainly

because the teaching is a cultural activity, and there's a high degree of connectedness among beliefs so that one belief may tend to be consistent with other beliefs and one cannot be changed without affecting others.

Beliefs, sometimes having ideals as the center, are usually formed because of positive attitudes on the reality, independent thinking on knowledge, and strong sense of responsibility on duty. Those beliefs, thoroughly convinced by individuals as correct opinions and rules, stimulate and guide the behaviors and personality trends integrated with awareness, emotion and volition, and become the strong psychological quality with characteristic of integrity, stability and durability, the mental backbones for teachers to understand and change the world, and also the incentive forces to carry out activities or practices. Once beliefs are established, they will have a profound and lasting influence on teachers' minds and behaviors, and decide the directions, speeds and results of teachers' professional growth and development.

As inner judgment criteria and behavior motivation, beliefs are not innate, but acquired. Having steadfast and fully admissible mental status, beliefs dispense with demonstrations and possess intercultural universality. It has been well known that beliefs are gradually built up in social practices going through the identification and selection on different kinds of opinions, principles, values, theories and careers. When teachers confirm some kind of ideas or theories are right and true, they self-consciously stand up for those ideas or theories, and then beliefs come into being and have certainty to stay as they are. So normally the beliefs that teachers are aware of are those inseparable from the authenticity and incontestable persuasion.

It is widely discussed that the earlier a belief is incorporated into the belief system, the more difficult it is to be altered, and the more newly a belief is acquired, the more vulnerable it is to change (Pajares, 1992). According to Pajares' study, the early beliefs are likely to represent the dominant modes of actions, subsequently affect the teachers' perception, strongly influence the processing on new information, and continue to make impacts on what teachers say and do in daily teaching, then the behaviors which are consistent with the prior beliefs reinforce those beliefs again, despite the situation that they might be in conflict with the newly acquired beliefs (Pajares, 1992; Johnson, 1994).

As the arguments run, teachers' beliefs are found to "have their origins in the past" experience, especially during the time when teachers were students at school, and form themselves based on those early 'idiosyncratic' experiences in an intuitive and uncritical way "without adequate access to" the social culture and real practices of teaching, that's why teachers' beliefs sometimes have the characters of 'limited generalisability', 'dubious value' and even conflicts in the classroom contexts (Marland, 1993).

However, with time and use, teachers' early experiences tend to become the more robust central beliefs in the belief structure, as a result, teachers can be found to "hold onto beliefs based on incorrect or incomplete knowledge even after scientifically correct explanations are presented to them", which proves that "the power of beliefs easily can outweigh the clearest and most convincing contrary evidence" (Pajares, 1992).

It's confirmed by the research led by Brousseau & Freeman (1988) that teacher education has very little and even no influence on the educational beliefs of prospective teachers in the university (Marland, 1993), which is called by Pajares (1992) as "the perseverance phenomena of theory maintenance". Kagan (1992) also notes that teachers grow comfortable naturally with the beliefs formed in their early experiences, and those beliefs even become their 'self' or their unique identity (Pajares, 1992; Mansour, 2009).

Hence, basically beliefs are unchanging and unaltered, but have been also found that they do change, which Nespor (1987) explains that the change "is neither the result of argument or reason but rather a conversion or gestalt shift" (Thomas et al., 2001). It is believed that the changes of teachers' beliefs can be successful, when the beliefs are deliberately challenged, or when teachers are clearly aware of their beliefs and are willing to change them from their inside, and sometimes teachers' reflection on their own experiences and behaviors can also lead to the modification of their beliefs (Kyles & Olafson, 2008).

Kagan (1992) has one suggestion to help teachers change their previous beliefs, which is "in order to promote professional growth in novice teachers, it would be necessary first to raise their awareness of their own beliefs and then to challenge those beliefs while providing opportunities to examine and integrate new information into their belief systems" (Mansour, 2009). Some researchers concur that teachers' beliefs "can be

strengthened or modified with more evidence gained by classroom practice” (Levitt, 2001), since teachers’ behaviors in their daily teaching can influence and shape the continual development of their beliefs and their beliefs themselves also tend to be evolving with the time and more experiences (Levitt, 2001; Luft & Roehrig, 2007).

Studies have shown that some teachers do change their beliefs based on the classroom teaching, while the reality of the classroom they face with or the system they are in is different from or conflicting with their beliefs (Mansour, 2009), which is proved by this research too, and it shows usually teachers chose to adjust themselves to the reality to stay in their job position by changing or disabling their beliefs when facing the differences or conflicts. In a general way, classroom events and school environment provide either some constraints or positive opportunities for the development of teachers’ beliefs (Levitt, 2001).

From the interview, among 18 teachers in each country, 6 German teachers and 3 Chinese teachers think their beliefs have not changed; 6 German teachers and 2 Chinese teachers have kept the main parts of their beliefs unchanged, but developed something new during the teaching; 6 German teachers and 13 Chinese teachers admit that their beliefs have changed since they became teachers. From the numbers it looks like that Chinese teachers are more likely to change their beliefs according to the reality of their teaching environment than German teachers, but the single case also shows that it’s a more personalized than generalized issue to change the belief or not.

The result confirms it’s true that teachers’ beliefs can be deeply-rooted and early-formed date back to their own school days and not be easy to change even when teachers are encountered to very difficult situations to fulfill their beliefs. However, the research proves it is also true that beliefs have big possibility to be changed, when teachers find their beliefs don’t fit the real teaching environment or the whole system, or they are willing to update themselves in order to adapt to the reality in a more harmonious and successful way. So it is either they want or they have to, but they have changed their beliefs in some way, which shows the harsh reality about “survival is greater than ideal”, and when the ideal was bigger than survival, the end could be heroic and stirring like the teacher GRK4M quitting the job, otherwise, he would be ‘dead’ when giving up his beliefs.

Teachers' beliefs changed or not:

coding	GG	GR	GH	CH	CC	CR
No	3	2	1	1	1	1
A little	2	2	2	1	1	0
Yes	1	2	3	4	4	5

1) No change

Among 6 German teachers who have declared that they didn't change their beliefs, there are 3 teachers coming from the Gymnasium, 2 from the Realschule and 1 from the Hauptschule, and among 3 Chinese teachers, 1 from top senior high school, 1 from city junior high school, 1 from rural junior high school. So, from that result it can see that school levels and locations are not the main factor to influence the beliefs of Chinese teachers, but in Germany it seems that more teachers in the Gymnasium are likely to keep their beliefs unaltered when working in the real classrooms than teachers in the Hauptschule.

For all of them, the reasons that they could have their beliefs without changes are concluded as following examples:

① They always have the same beliefs in their minds since many years ago, which can be traced back to their schooling time, e.g. CCD5F had very good teachers in the school, who could make their students feel very happy in study and learn a lot more, so till now she firmly believes that successful education is to make students happy in learning, even though actually in her class she is surrounded by students who are not happy in their study;

② They still believe their beliefs are very important and they don't want to change regardless of their situations, e.g. GRE35M believes always in the same thing that is for a society it is important to have good people, who are friendly, can live together and do their jobs, which is his vision and is very important for him till today, so there's no change, and he still believes that education should teach children to be good people for a good society;

③ They have enough freedom and opportunities to practice their beliefs in the reality, which strengthen further their beliefs to stay the same, e.g. GGF7F doesn't have to use the textbooks, but she is quite free to decide what topics she wants to discuss with students, and is free to choose the German literatures, books and materials for her lessons in the subject of German, which supports her belief very much about how teaching should be;

④ Their beliefs are not so far from the reality that they can fulfill their beliefs in the teaching practice, e.g. one part of CRB6M's belief is to make students like him so that they will also like what he says and teaches, for which he doesn't criticize students, but always talks with them in a gentle way, and he doesn't judge students according to their study performance, but accepts them as who they are, as a result, in his class his students like him very much and his belief is fulfilled.

2) A little change

As to the teachers whose beliefs have been a little modified during the teaching experiences, 2 teachers come from the Gymnasium, 2 from Realschule, 2 from Hauptschule, and 1 teacher comes from top senior high school, 1 from city junior high school. From the number of teachers, it looks like there is no much big difference among schools, but about what aspects they have modified their beliefs, it is very different from one teacher to another, for example:

① In GGM10F's belief, the idea about what a good lesson should be has changed over the time because of the in-service teaching training, in the beginning it's important to do group work among students, but at the moment the big thing is individual teaching;

② After GGS5F got to know that in her class some students have very bad social background, she started to realize it's more important for her to teach them how to behave as a good social person than how to speak English;

③ GHO7M thinks it's very important for himself at the end of every year to reflect what he has done and to think about how to make things better in the following year,

so his belief has been modified all the time little by little, and he also understands better what he can expect from his students;

④ With continual learning and professional development, CHH18F can always bring her students up-to-date ideas and know more clearly about what ability she should guide her students to develop, so what she believes is important to pass on students has been changing, but the main part of her belief has never changed, and she is becoming more and more confident in reaching the successful education she believes.

3) Yes change

Among teachers who answered yes that their beliefs had changed after they started the teaching job, 1 is from Gymnasium, 2 from Realschule, 3 Hauptschule, 4 senior high school, 4 city junior high school, and 5 rural junior high school. Just looking at the numbers, remarkably, more than double Chinese teachers changed their beliefs than German teachers, but there's no big difference in the numbers among different levels of Chinese schools. In German 3 tracks of schools, teachers in the Hauptschule are more likely to change their beliefs than those in other types of schools.

In a word, the table above shows very positively that most of Chinese teachers in any level of schools have changed their beliefs in their teaching. It's interesting that all of 3 interviewed teachers from average senior high schools, where students are the left ones who cannot go to the top senior high schools, have changed their beliefs since they became teachers there. To put the Hauptschule and average senior high school together, both of them receive students who are leftovers, the students' motivations and the school cultures are not very up or positive, and teachers there are more likely to change their 'idealized' beliefs, which could mean the school culture, class environment and students' attitude on learning can greatly affect and alter the teachers' beliefs.

Take some examples as follows:

① GHK5F very firmly answered yes that her belief changed, for at the very beginning she wanted to teach students much higher levels and planned to do this and that in class, but very soon she was really quite shocked and disappointed, since she recognized that in her school there are very difficult students who have very difficult social backgrounds and have given themselves up already, so she has to put aside her belief and just tries to teach her students the very basic things because they even can't sit, think or be calm;

② GHH38M told that it's surely yes that his belief changed, because when he started being a teacher, he thought he would have much more possibilities to do a lot of good and new things with students, but later he understood that it's not possible to manage all the things he thought he could, and what he could try was just to teach students some important and reasonable things;

③ GHU32F is another example of belief change for certain. When she started her job, she was convinced that she was teaching very important things, during the first 10 years of her teaching, 60-70% of her students wanted to learn and to have good marks for the success, but years later it's another way round, only 5-10% wanted to be good students at school, which made her give up her ideas to make students successful and start to teach them learning attitudes and basic abilities like how to keep things in order. After she tried hard over and over again and still couldn't see the success she expected from her students, since they were so much disappointed to themselves, she became disappointed too and have given up her belief, for she couldn't handle the failure, and in the end she realizes what she could do is just to accompany her students;

④ CHL35M has changed his beliefs largely mainly because of the reforms in education system, for he believes teachers must follow the national policies and guidelines on education. In the beginning he believed it important to train students to have strong health bodies in lots of sports and activities, for the policy at that moment was to put body at first and then study. However, now the school education is examination-oriented, study becomes the only issue in the school, and only with good exam scores students can be enrolled into colleges. Therefore, now he believes his task is to help students study well and get high scores in the Gaokao;

⑤ When CCD14F started to teach, she didn't think about education too much, but believed she should make her students happy in class and have some fun in study. Due to the experience as class teacher from the third year, she learned that class teacher must be strict and stern to students especially in the class management, then she stopped making fun in class. 5-6 years later she started to have a clear mind on education, and changed her belief largely, now she believes successful education is that students learn to be able to restrain their behaviors well, besides having good study performance;

⑥ CRB22F believes that her belief has changed very slowly without an obvious transition. In the beginning, she just thought she should teach well and pay all attention to students' scores, because score was the only measurement. But later she realized that students were overburdened and very unhappy at study, and with richer teaching experience, she could make students study well in class without harsh methods, then she started to believe score was not so important, and if students could study happily, their performance would surely be good. So now she always tries to make her students feel a little bit happy and funny in her lessons and give them less homework afterwards to reduce a little bit of their heavy burden.

3. What affect teachers' beliefs

Generally speaking, many theorists agree that teachers' beliefs are formed, internalized and spontaneously constructed through a process of cultural transmission and social construction via peer interaction and social learning (Pajares, 1992; Liao, 2007). Van Fleet (1979) believes that this enculturation process involves the 'incidental learning' that teachers go through their lives, and covers their assimilation of "the cultural elements present in their personal world" through their "individual observation, participation, and imitation" (Pajares, 1992). As Stigler & Hiebert (1999) suggest, teaching, as a cultural activity, is "not invented full-blown but rather evolves over long periods of time in ways that are consistent with the stable web of beliefs and assumptions that are part of the culture" (cited in Correa et al., 2008).

Nespor (1987) has explained that teachers' beliefs reside in the episodic memory from the early experiences and cultural sources of knowledge transmission, and "often derive their subjective power, authority, and legitimacy from particular episodes or events",

especially the “crucial experience or some particularly influential teacher produces a richly-detailed episodic memory”, and “then continue to color or frame the comprehension of events later” and serve “as an inspiration and a template” for their own teaching practices (cited in Johnson, 1994).

Furthermore, Pajares (1992) notes that “the importance of critical episodes and images helps explain how teachers develop their educational belief structure as children”. Lortie (1975) has found that “teachers may unintentionally acquire culturally shared beliefs about teaching and learning in childhood” (Correa et al., 2008), when they were students at school and participated in an ‘apprenticeship of observation’ that took place during so many years they spent in the school, and essentially those “thousands of hours teachers spend in the classroom as students far outweigh the effects of teacher education” (Pajares, 1992).

A lot of research shows that prospective teachers have already developed well a set of personal beliefs in the form of narratives about school, classroom, students, teachers, learning and teaching prior to entering the teacher education, and those beliefs formed in the early study experience tend to be largely resistant to change (Holt-Reynolds, 1992; Pajares, 1992; Vartuli, 1999; Chen, 2006; Correa et al., 2008, etc.). Markman (1989) explains that “very young children are able of forming object categories that are so stable, available, habitual, and familiar that they achieve special status” and can resist change (cited in Raths, 2000).

In a general way, “early childhood experiences acclimate children, provide children with the rules of schooling, and serve as the foundation to education” (Vartuli, 1999), which are actually very “powerful in affecting behavior that becomes highly resistant to change in adult life” (Pajares, 1992). It is found by teacher educators that “students who are interested in a teaching career already hold strong conceptions of what good teaching should be like” (Correa et al., 2008). Knowles & Holt-Reynolds (1991) also confirm that prospective teachers “indeed come to their formal studies of teaching with powerful, personal history-based lay theories about good practice” of teaching (Holt-Reynolds, 1992).

It’s said that lay theories are those beliefs built on untutored interpretations of personal experiences and developed naturally from previous learning experiences, and usually

they represent the tacit knowledge that was not consciously gained at an announced and recognized moment, so, lay theories normally remain dormant and latent, but tend to influence the ways in which prospective teachers construct the knowledge during their education and training, and become a major force when they are in their own classrooms (Holt-Reynolds, 1992; Pajares, 1992; Johnson, 1994; Raths, 2000, etc.). These lay beliefs “constitute what have been referred to as folk pedagogies, or personal history-based lay theories”, meaning that they have been constructed on the basis of volumes of personal and cultural experiences, some of which could be unaltered and long-standing regardless of situations (Joram & Gabriele, 1998).

While the beliefs that prospective teachers “bring with them are direct reflections of studenting experiences, they can act as powerful checks on the validity of the research-based principles”, when they are studying the professional knowledge (Holt-Reynolds, 1992). Again, Kennedy (1997) has also argued that prospective teachers have already had the beliefs about how to be a good teacher and how to deal with students according to the recollections of their former teachers’ teaching experiences, therefore, “they have very little to learn” during the teacher education of the university (Raths, 2000).

However, it is also said that the history-based lay beliefs might act as ‘helpful schemata’ that prospective teachers could further develop and expand during their studies at teacher education, but there are times when the lay beliefs “are not quite contextualizing, illuminating, and helpful so much as they are powerful, potentially misleading, and unproductive as resources” for learning the professional knowledge (Holt-Reynolds, 1992). That again highlights that teacher education may have influence on the development of prospective teachers’ beliefs, but not so much as it’s expected, as Nespor (1987) has asserted, “beliefs draw their power from previous episodes or events” (Thomas et al., 2001), and “have strong affective and evaluative components”, which help the beliefs stay unchanged (Prime & Miranda, 2006).

Lortie (1975) believes that “most students who choose education as a career have had a positive identification with teaching, and this leads to continuity of conventional practice and reaffirmation, rather than challenge, of the past” (Pajares, 1992). Then after they become teachers, as their experiences in the classrooms grow, their teaching knowledge “grows richer and more coherent and thus forms a highly personalized pedagogy or belief system that actually controls the teacher’s perception, judgment, and

behavior” (Mansour, 2009). And “these personal beliefs of teachers give rise to the various teaching methods, despite similar teaching context, curriculum, and degree of subject knowledge” (Farrell & Lim, 2005). In that respect, Zeichner (1980) stated “teachers’ teaching at schools had more power in influencing teachers’ beliefs and practices than their formal university experience had done” (Mansour, 2009).

So, it is very clear that teachers’ beliefs can be traced back to the early personal cognition on educational phenomena in the process of individual socialization and later personal understanding on education, and the beliefs “are constructed through their experiences as students first, and later they transmit their beliefs into their own teaching patterns” (Farrell & Lim, 2005). That is to say, teachers develop the strong sets of educational beliefs based on their personal socialization experiences, which is to explain that teachers’ beliefs are highly-personalized and self-constructed, and there’s no “universal, consistent, fixed teacher image has yet to emerge from the teaching literature” (Haritos, 2004).

Within the same culture, it is also true that, when teachers “learn about culturally shared values and beliefs through their experiences in and out of school, both when they were students and as teachers, they may be more likely to integrate new ideas and experiences in ways that are consistent with these common, culturally embedded ideas”, which is called by Bruner (1996) as ‘folk pedagogies’ which mean teachers from the same country or region might have some similar beliefs “shaped both by common experiences as students and by shared cultural assumptions about how children learn” (Correa et al, 2008). It’s also widely known that some teachers could imitate the teaching ways of their former teachers, or “rely on models of teaching with which they were familiar from their own experiences as students” (Beswick, 2003).

Therefore, the cultural and personal experiences contributing to prospective teachers’ beliefs could also “present a problem for teacher educators preparing pre-service teachers for classroom experiences that differ from their own experiences” (Kyles & Olafson, 2008). That could help to explain, while teachers start their jobs in the school, they might show that they are not well prepared for the teaching alone in the real classrooms, and many of them even get the reality shock and transition pains, which also means their gained teaching ideal images could be dashed to the ground in the uncontrollable reality and unexpected classroom life. Then in order to reduce the

pedagogic pains in the problems caused by complex teaching practices and value conflicts, new teachers have to commit themselves to personal 'trial-and-error' to adjust and change their beliefs in place of insisting on some beliefs from former experiences.

With more and more years of teaching, teachers mostly would rather to adapt themselves to their individual school's teaching concepts, values and routines than to follow updated educational theories and knowledge, which witnesses the influence of school culture on teachers' beliefs. For teachers, those teaching strategy or experiences with good effects or successful results in practices can be strengthened and constructed into their belief systems, and then guide their future teaching behaviors, besides, teachers also prefer to copy and follow the effective teaching styles and methods popular in their work fields.

Snider and Roehl (2007) state that the majority of teachers "acquired important teaching skills from on-the-job experience rather than from teacher training or ongoing professional development, ...the practical knowledge teachers traditionally acquire through trial-and-error learning on the job may be insufficient to meet today's teaching challenges". Usually it can be seen that some teachers also have subjective initiative to apply some learned principles of the theories about psychology or pedagogy from in-service training into their daily teaching and reinforce the effects by more practices, which is proved by this research and reveals that teachers' in-service training have some possibility on improving their beliefs and teaching behaviors.

This research does prove that teachers could take their former teachers as good examples or role models to construct the similar beliefs, and the study experience in courses of teacher education more or less assist in the development of teachers' educational beliefs. Some research also finds that teaching internship can individualize teaching cognition and attitude, and then shape teaching beliefs and impact future teaching life. In some cases, teaching internship could even be a turning point for intern teachers and a forceful influencing source in teachers' initial socialization. What's more, it has been widely discussed that personal experience in the family/school life and social/cultural context cannot be neglected in the study of teachers' beliefs.

For instance, Kyles and Olafson (2008) declare that teachers' beliefs are "shaped by particular socio-cultural and historical contexts in which they grew up and can be

closely related to their efficacy in teaching diverse learners,...(their) cultural understanding and responsiveness in teaching are best developed within the context of daily life in classrooms”. Richardson (1996) has also mentioned that “ethnic and socioeconomic background, gender, geographic location, religious upbringing, and life decisions may all affect an individual’s beliefs that, in turn, affect learning to teach and teaching” (cited in Kyles & Olafson, 2008).

In a conclusion, as research has indicated, teachers’ beliefs during the evolution are inevitably exposed to the ideas and values of their parents, peers, teachers, neighbors, various significant people and also the literatures, the media, popular folklores, cultural norms and social values, and teachers’ beliefs are derived from their personal histories and prior experiences, informal observation of classrooms as learners, individual personality and characters, experiences with families and institutions, previous training courses in colleges, teaching experiences, contexts of the classrooms and students, teaching/learning incidents at schools, professional knowledge, personal judgments and perceptions, school culture, educational policy, and so on (Lasley, 1980; Thomas et al., 2001; Farrell & Lim, 2005; Liao, 2007; Nergis, 2011, Al-Amoush et al., 2014, etc.).

Based on what teachers talked about in the interview, the factors that teachers think affect their beliefs can be put in the following table:

coding	GG	GR	GH	CH	CC	CR
Study experience	4	2	2	2	2	2
Teaching experience	2	1	3	2	2	2
Former teachers	2	2	2	0	1	3
Life experience	1	1	1	2	2	0
Special people/events	2	0	2	0	2	0
Family/friends	2	0	1	0	0	1
Teacher training	0	1	0	1	1	0

There are several teachers in both countries, who reported that their beliefs were influenced by more than one factor of the table above, that’s why the number in all is larger than 18.

1) Study experience

From the table above, it is quite obvious that among all factors teachers' study experiences as students do have the biggest effect on their beliefs, most of them, like GGF7F, GGS5F, CCD5F, CHL10F, etc., had a very good time at school so that they chose to be teachers and their own study experiences became the big part in their beliefs. But the teachers, like GRR1F, GHG30F, CRB22F, etc., had not very pleasant school time, which, however, is also a reason to make them decide to be teachers so that they could do things in another way. No matter what reason, it is also proved by this research that the beliefs formed during teachers' early study experiences are very deeply rooted and firmly resistant to change in spite of the difficult situations they have to face, and they really want to fulfill their beliefs as long as it's possible.

2) Teaching experience

Only the second next to the study experience, teachers' teaching experiences are reported to also play a main role in the development or changing of teachers' beliefs. In this research, many of the teachers, like GGM10F, GRB33F, GHK5F, CHH6F, CRB4F, etc., either went through the reality shock in the beginning when they got to know the students in their classes or the school environment they were in, and very soon they found the practices of their beliefs brought them into big failures, or experienced and learned something new and positive in their teaching, which made them realize more important for students or more beneficial to their teaching performance. In order to make themselves fit the reality that they cannot change, they decided to modify their beliefs or just keep the beliefs in mind.

3) Former teachers

6 German teachers and 4 Chinese teachers think that they were affected greatly by their former teachers. For most of them, their former teachers were big reasons for them to become teachers later, and till now they still take their former teachers as their role models for their teaching beliefs and behaviors, like GGF7F, GGD15M, CCD5F, CRB25M, CRB3F, etc., who share the same or similar beliefs as their former teachers. But there are also teachers, like GRR1F, GRK4M, whose former

teachers didn't influence them in a positive way, and who didn't like or agree with what their teachers did in class, therefore, since they became teachers, they always want and try to do something different.

4) Life experience

Some teachers, like GHU32F, GRE35M, CHH18F, CCD14F, CCD23F, CHL17F, etc., learn a lot from their personal life experience which has helped to shape, enrich and change their teaching beliefs. Based on their own life experience, teachers, like GRE35M, CHH18F, CCD14F, etc., believe that successful education should cultivate children into social people who have the ability to live a good life and be good members of the society, which actually more other teachers from the interview also agree on, for they don't see education is only in the school, but more for the lifelong benefit.

5) Special people/events

Some teachers' beliefs have some relationship with special or significant people such as famous educationists like GHW2F, GHU32F, etc., who are very convinced by the theories or ideas of educationists, or some colleagues like GGD15M, CCD23F, etc., who are very impressed by what their colleagues do, for it's what they really want to do, or accidental events like CCD14F, CHH6F, etc., who are very shocked by the cases of school violence which leads them to more deeply rethink about the education and students.

6) Family/friends

There are several teachers, GGH7M, GGD15M, GHH38M, CRB21F, etc., who believe their parents or friends or even their children have had more or less influence on their beliefs about education, especially the influence from parents, no matter they wanted or not, they always get effects from their parents since their childhood. Even though they cannot tell what exactly their parents have influenced them, they believe their parents must be the important persons who have impacted on them.

7) Teacher training

The finding of this research also confirms that teacher training really doesn't make a big contribution on teachers' beliefs, which includes pre-service training and on-service training. In both countries only one German teacher GRD21F mentioned that per-service training had an effect on her belief, and two Chinese teachers CCD6M and CHH18F were positively affected by in-service training. Most of the teachers from the interview confessed that teacher training was not helpful for them, which was more theory-oriented or a little bit ideal, and not practical or pragmatic for their teaching. Some teachers, like GGS5F, GRE35M, CRB25M, etc., believe that teachers should be given more chances to do teacher training in their professional knowledge and skills.

8) Teacher education

Even though teachers in both countries have to pass through the formal teacher education and school internship to become teachers, when they started their jobs, teachers may find themselves not well or enough prepared for their classes, like GGS5F, GRK4M, CCD23F, CHH10M, etc., they didn't think they learned during the teacher education useful knowledge and pragmatic skills to help them handle different kinds of students and the complex real teaching life in the school. From the cases of teachers in this research, it shows teacher education is not an obvious factor influencing teachers' beliefs, at least not from what teachers have told. Maybe teachers are over-equipped with subject knowledge in teacher education, but they are far not enough ready or qualified to be teachers in the schools of secondary education after graduation.

9) Culture

Culture is not an influencing factor reported by teachers in the interview, for it's something that teachers cannot be clearly aware of when they have been all the time immersed in it, but through the cross-cultural comparison the issue of culture can be seen in a clear way. For almost all Chinese teachers, they never have to be encountered with the cultural things, except one teacher CHL10F who has an experience of teaching in the USA and did get a cultural shock there, which made her realize that China has a good cultural tradition on respecting teachers. But for German teachers who usually have students from many different countries, so

cultural gap or difference is a normal topic in their classes, their beliefs are also affected in some way by the cultural issues, like GRE35M, GRD21F, GGH7M, etc., they believe it's important for students to learn respect, tolerance and to be able to get along with very different people.

4. Beliefs direct teaching practices or not

There are a lot of discussions about the relationship between teachers' beliefs and their teaching practices. Many investigations support the assertion that there's "a strong relationship between teachers' educational beliefs and their planning, instructional decisions, and classroom practices" (Pajares, 1992). Teachers' beliefs are believed as predictors of teachers' teaching behaviors and they lie at the very heart of teaching, and teachers' behaviors in the classrooms are shaped or guided or governed by their beliefs, and teachers act on account of what they believe (Wallace & Kang, 2004; Luft & Roehrig, 2007; Hermans et al., 2008, etc.).

It's believed that belief is a 'quasi-logical noun', which is not completely in view of reason of rationality, but also comes from the perceptual and volitional judgment. So teachers' beliefs not only have crucial influence on their teaching behaviors, but have high consistence with the behaviors, through the study of teachers' behaviors teachers' beliefs can be discovered, and then by changing teachers' beliefs, teachers' behaviors can be improved largely, which is considered to have a fundamental significance in the improvement of teaching practices. Moreover, teachers' beliefs offer teachers the power of subjective will to manage and control the teaching in some kind of specific manner.

Beliefs do have the characteristics of being stable and deeply-rooted, and theoretically, teachers' beliefs could guide teachers' behaviors "either deliberately or spontaneously. In a deliberate way beliefs are retrieved or constructed with a lot of effort in a certain context and they are assumed to guide goal setting and behavior" (van der Schaafa et al., 2008). However, as far as the natures of teachers' beliefs are concerned, van der Schaafa et al. (2008) explain that they are hardly enabled to make the accurate assessment, for "teacher beliefs differ in specificity and in strength depending on the context, that they tend to be activated in clusters, and that incompatible beliefs may contend for priority", but in the end, perhaps "only the most salient beliefs will

influence the execution of teaching tasks”, and all other beliefs actually have to be absent in teachers’ behaviors.

There’s a number of research which reports that teachers’ behaviors are not always consistent with their beliefs, and the connection between teachers’ beliefs and their teaching practices is not very strong (Vartuli, 1999; Chen, 2006; Correa et al., 2008; Hermans et al., 2008; Mansour, 2009, etc.). Some researchers are more likely to believe that “the interaction between teachers’ beliefs and practice is complex, and a simple causal relationship should not be assumed” (Correa et al., 2008), and it is more like dialectical rather than unilateral, which means teachers’ behaviors do not always come after beliefs, but they actually are interdependent to each other and develop together (Mansour, 2009).

The main reason to be found is that “complexities of classroom life can constrain teachers’ abilities to attend to their beliefs and provide instruction which aligns with their theoretical beliefs” (Fang, 1996). Based on the former research, Marland (1993) has made a summary on the characteristic of classroom life teachers are encountered with every day that classroom life is characterized by uncertainty, volatility, ambiguity, inconsistency, contradiction and capriciousness, and is actually “a living, experiential, processual, flexible, creative, compilation of insights, memories, information, articulations that go into resourcing teacher decision-making and action, ...far too complex, capricious and dilemma-riddled to be managed by recourse to a few general principles and isolated pieces of knowledge”.

Therefore, as Duffy and Anderson (1984) have found, although teachers are able to articulate their beliefs verbally when they are conscious of what they believe, their actual teaching behaviors are influenced and governed more by the nature of classroom life, since in a real and complicated class environment, as Duffy (1982) has suggested, “it is difficult for teachers to remember that they are supposed to be cognitive information processors who make differential instructional decisions on the basis of rationally developed hypotheses” (Fang, 1996). It is echoed by a German teacher GRR1F who said in the interview, “when you teach, it is very difficult to think about ‘how can I make them (the students) more successful’, because you just work, you go on with your lessons, you use your books, and you do not really think about these questions”.

This research confirms that the complexity of classroom life does overwhelm the teachers' prior beliefs, especially when the beliefs are idealistic, unrealistically optimistic, or even kind of insidious and dysfunctional, or they have "a self-serving bias that account for their believing that the attributes most important for successful teaching are the ones they perceive as their own" (Pajares, 1992). And it proves from the teachers' experiences that the real class and school situations "can have powerful influences on teachers' beliefs and, in effect, affect their classroom practice" (Fang, 1996).

Lederman (1992) declares that "the transposition of teachers' beliefs into classroom practice is mediated by a complex set of situational variables" (Mansour, 2009), which actually act more often as the constraints affecting the enactment of teachers' beliefs, and are responsible for the discordance between teachers' beliefs and their teaching practices. Therefore, Mansour (2009) argues that "a complete understanding of the process of teaching/learning is not possible without a full understanding of the constraints and opportunities that impact upon the teaching/learning process".

But, in order to "understand constraints to meaningful teaching and learning, attention is directed to recurring patterns of contextual constraints," and how these constraints "are collectively and interactively created to produce thinking that incorporates diverse perspectives and students" (Mansour, 2009). It has been found that "there are many elements that cause a mismatch between beliefs and practices" (Mansour, 2009), which can be divided into external and internal constraints that have effects on the consistency of teachers' beliefs and practices, and to a large extent restrict the fulfillment of teachers' beliefs. Below is a summary of what the literatures have mentioned about the constraints to the implementation of teachers' beliefs.

The external constraints include family and peers, classroom events, different grades, work overload, school curriculum requirements, student characteristics and backgrounds, student discipline, time restraints, inappropriate scheduling, large classes, relationships with colleagues, expectations of students/parents/superiors, lack of resources, administrative demands and attitudes, non-teaching tasks, working conditions, educational policy, the system of assessment, examination system, school inspections, school climate/culture, state mandates and the system of education, etc.; the internal constraints include teachers' personal theoretical and practical knowledge, personal

needs, culture, values, personality, life experience, educational experience, etc. (Fang, 1996; Vartuli, 1999; Hermans et al., 2008; Mansour, 2009, etc.).

From the interviews, what all teachers in both countries stress the most in common is “I have no time”, which was also proved by the study of Blasé (1986) on the teachers in the elementary, middle and high schools, who found out that “time was one of the most important constraints and that it could not be understood as independent of the other constraints that were perceived as directly interfering with the instructional time of teachers” (Mansour, 2009). As a result, teachers’ beliefs on creative lessons, interesting topics, individual teaching and independent study for example from this research have to be replaced by counteracting “the time constraints, lecturing and rote memorization ...as the main instructional method” (Mansour, 2009), which happens in both China and Germany.

What’s more, almost all teachers in Germany have mentioned in the interview that “big class” is the top constraint in achieving their educational beliefs, which is consistent with Goelz’s research finding that indicates class size is a factor “as having a negative effect on their non-traditional teaching methods” (Mansour, 2009). Meanwhile, Goelz (2004) also finds that the “end-of-course tests” act as a stressful factor affecting teachers’ beliefs, which “force many teachers to maintain a strict schedule that does not allow for creative teaching methods requiring student-generated learning, reflection, and discussion” (Mansour, 2009), and largely “contribute to decreased willingness to adopt diverse instructional active learning strategies” (Vartuli, 1999), especially in China where the education is exam-oriented.

When talking about focusing on individual student, in the interview many teachers from both countries stressed instead that they must pay more attention to go through the textbooks fast within a very limited time, as Muskin (1990) also declared that, “because teachers have to complete all the material required for the tests, they feel obliged to spend very little time on activities that promote constructivist-styled learning”, and such a pressure from the time and tests especially in China “causes new teachers, who would otherwise like to focus on student-centered learning, to revert to the lecture style that many teachers hesitate to practice but often do” (Mansour, 2009). Therefore, even though teachers may have brilliant beliefs that they want to accomplish, in the context

of real classroom life full of high stress and tension, consistency between their beliefs and practices just simply cannot be expected.

It's said that "a growing body of research argues that teachers' beliefs should be studied within a framework that is aware of the influence of culture" (Mansour, 2009). The reason is simply that teachers' beliefs are convinced to be formed and shaped in the process of enculturation and socialization since the childhood, and "it is within this socially constituted nature of culture that beliefs play an integral role in filtering information and determining what is considered important and to be of value" (Mansour, 2009). Olson (1988) further explains that "what teachers tell us about their practice is, most fundamentally, a reflection of their culture and cannot be properly understood without reference to that culture" (cited in Mansour, 2009).

From the perspective of socio-cultural theory, Wallace and Kang (2004) demonstrate that school culture expresses itself as the realistic construction in which teachers work, and exercises a strong influence on teachers' beliefs. It's found that the socialization in various contexts is so powerful as to result in different teachers' beliefs, and teachers in the same school could be observed to share similar classroom practices (Wallace & Kang, 2004; Mansour, 2009). With the increasing teaching years, the "powerful cultural influences, most especially, the school curriculum document continue to shape belief systems and educational decisions", and in another way, those beliefs developed within the cultural contexts of the classrooms act as well as a social driving factor in teachers' classroom decisions (Wallace & Kang, 2004).

Most of the research focusing on beliefs reveals that teachers' beliefs are situated and contextual, which "cannot be examined out of context, but are always situated in a physical setting in which constraints, opportunities or external influences may derive from sources at various levels" (Mansour, 2009), and those contextual constraints, as it's discussed above, are widely recognized as exerting significant effects on the relationship between teachers' beliefs and teaching practices (Pajares, 1992; Fang, 1996).

Nespor (1987) has explained the important role of the context in forming teachers' beliefs, saying, "the contexts and environments within which teachers work, and many of the problems they encounter, are ill-defined and deeply entangled, ... beliefs are

peculiarly suited for making sense of such contexts” (cited in Mansour, 2009), so teachers “may establish or validate their beliefs in context-specific environments where their instructional experience is successful” (Mansour, 2009). In all, the research on the relevance of contexts to the fulfillment of teachers’ beliefs concludes that “the relative strength with which various beliefs are held is dependent upon the particular context” in the complexities of the classrooms where the constraints on teachers’ teaching are not singular (Beswick, 2003).

This research confirms what Maxion (1996) has argued that “teachers’ beliefs are an integral part of classroom practice. When influencing factors complement teachers’ beliefs, classroom practice and beliefs are compatible, when these factors interfere with teachers’ beliefs, classroom practice and beliefs are disjointed” (Mansour, 2009). Unfortunately, many teachers from this research admit that most of the time they are constrained from implementing their personal beliefs due to lack of time, big classes, an overcrowded syllabus, inadequate facilities, pressure of external examinations, parental and administrative expectations, class management problems, extensive and increasing curricular demands, and students’ problems, etc. (Vartuli, 1999; Mansour, 2009).

Here is the result that teachers answered the question if their beliefs direct their teaching:

coding	GG	GR	GH	CH	CC	CR
Yes, sure	3	3	4	4	3	3
Yes, but not all the time	3	3	2	0	2	2
Nearly no	0	0	0	2	1	1

The result of the question if there’s conflict or difference between beliefs and the reality:

coding	GG	GR	GH	CH	CC	CR
Yes	4	6	6	5	4	4
No	2	0	0	1	2	1
No idea						1

From the results above, it shows that most of the teachers involved in the interview from both China and Germany think that their beliefs direct their teaching in their

classes, and each country has 10 teachers out of 18 are quite positive on it. 8 German teachers and 4 Chinese teachers admit that they cannot do what they believe all the time, but sometimes when it is possible from the reality. There are 4 Chinese teachers who can hardly practice their beliefs in their daily teaching because of too many or too strong constraints.

However, when the teachers were asked if there's some conflict or difference between their beliefs and the reality, almost all teachers answered "Yes" as the table above shows, and many Chinese teachers even state that the gap between their beliefs and the reality is very big, which, on one hand, confirms that some teachers' beliefs can be too ideal to be fulfilled in the daily teaching, on the other hand, proves that teachers have not much possibility to put their beliefs into practices in the reality full of constraints.

Even though only 2 teachers from the Gymnasium don't think there's difference between their beliefs and the reality, the result tells again that teachers in the Gymnasium are more likely to keep and fulfill their beliefs than other 2 types of schools, Realschule and Hauptschule, in Germany. The 4 Chinese teachers, who believe in the consistency between their beliefs and the reality, have actually developed and adjusted their beliefs to the reality during the years of teaching, and their beliefs are more realistic. The following examples are from the summary of constraint factors that teachers have mentioned:

1) German teachers

① Lack of time and space and teachers, and the system is not effective

"It's always the problem that you don't have enough time and space to really reach the objectives as good as you want, especially if you want to concentrate on individual students, that's quite impossible; you could always think about methods and what opportunities at school you could improve all these fields of learning in different ways of teaching and experience for students, but then there's no possibility, because the system has to be more effective; more students are on the normal level of education, and you can't afford doing in the ideal way, for you don't have the people." (GGH7M)

② Student difficult personality and lack of student discipline

“You often don’t have an atmosphere that’s good for learning because of lack of discipline, for there are personalities that are difficult to teach. If you have five or six of those personalities, all the rules on the walls won’t make it much easier, because they will talk and they will run around, and they will hit the others, and there were so many of them who did not want to do anything, their unwillingness to learn squares, and it can destroy the atmosphere in the class where teaching was almost impossible, then you really have a problem in reaching your aims.” (GGM10F)

③ No possibility to reach everyone

“You want your students to have the best education they can get, you want them to be responsible, you want them to be self-confident, but if you don’t even have the chance to actually talk to pupils individually, I can’t reach all of them, I just can’t reach everybody, so you can never fulfill the aims that I just mentioned, ...I can’t help everybody, because if I try to be there for everybody, I would kind of destroy myself”. (GGS5F)

④ Big gap of students’ abilities

“We’ve got a rather big variety of students, we’ve got excellent students who are quicker, but we have to watch all of them, and sometimes it’s not easy in a class when you’re in a so extreme position, very well educated students who do everything with pleasure, and others who just avoid to do what they should, so, that doesn’t make teaching easy”. (GHH38M)

⑤ No study motivation

“For them, there are other things which are more important than school, it should be important for them to really get information, to really concentrate on things, to learn something, to really do something, but for them it's just, “no, it's work, I don't want to”, they are not interested at all, sometimes, they really give themselves up sometimes. This is hard sometimes, and students they are just in there, in their own world sometimes.” (GHK5F)

⑥ Big class

“Individualized is very important, we say to take every learner to vary his stands or her stands, and to make it good motivation for him or her in specific, but I have to say that sometimes it’s quite hard to do that for every single lesson, because the classes are too big and the conditions are not, the political conditions, they are not worked out for such a big aim for a teacher, it’s more an illusion, and that’s really sad, you can do it to build groups and to give them like tasks for their levels, but not for each student, it’s just not possible, if you are the only teacher in the class.” (GHW2F)

⑦ Lack of equipment

“All the classrooms (should) have good equipment with the computers, and TV, and a kind of library, so all the things are within the class, not always change the rooms to go from one room to the next one where there is a TV, so that you can arrange yourself, have a good learning arrangement with the groups in your room.” (GRB33F)

⑧ Lack of money

“Usually the school wants to get enough money to buy new things or new media, or what’s needed for them, even new books are very expensive, the school can’t buy any book, because they have to wait for the money first, this is not good”. (GRR1F)

2) Chinese teachers

① No learning interest

“Students are not very happy in class, I try to make them happy and interested. To be honest, I think none of them like study. Maybe 20% of them like challenge and thinking, and can be initiative to explore the unknown, all the others are very passive in study. Students are interested in physical experiments, but if in some lessons almost all is about my lecture or only my presentation on some classical experiments, it’s hard to get them interested.” (CCD5F, translated)

② Unrealistic teaching theory

“Sometimes it’s not realistic if you only rely on professors’ theories like encouragement, because students in Grade 9 have hard tasks and big pressure from study, and the

encouragement and praise cannot work well to some students. Then you need to talk with parents and tell them their children's performance at school and on study. Sometimes I criticize or punish some students when they don't do their homework or come to school late, but the punishment cannot work on the students who have given up on themselves. If they are really hard to be pushed forward, we will have to give up on them. Some of our beliefs are really good and we should practice, but in the reality we can find, even though we try, there's no obvious effect or improvement on students, then we have to change into other methods." (CCD6M, translated)

③ Unfair teacher evaluation

"Teachers should be given more chances to have access to the evaluation for higher professional titles, otherwise, they have no way to get their salary increased. But the evaluation includes how many honors a teacher got, and the problem is honor conferment is unjust, non-transparent and not available to most of teachers." (CCD19F, translated)

④ Problem of student evaluation

"The evaluation is the problem, and it depends on the economy because we have so many students here, we cannot find better kind of evaluation. So what we have is scores that really matter, how to score your feelings, or emotions or your behaviors? It's quite flexible and uncontrollable. Our country is developing, not developed, so we have to go through this hard time by studying hard without other sources, without other feelings or emotions. We have no spare time for movies, for feelings or for all kinds of emotions. Activities are not allowed in senior high school, for example, going out, watching a movie, etc., students here study the whole day all the time." (CHH6F)

⑤ Education system

"I do want to do according to my belief and my thought, but it's so difficult. I hope the teaching circumstance will become better and better, and the education system could change in some way to encourage students to do more activities, and not to just have one purpose – make them be admitted into the universities. I think good education has no mode, but our education always tries to pursue one mode and one goal, which limits

all the other development. Our lessons need follow some kind of mode or procedure, and teaching methods also have some certain modes, which are because we have the Gaokao that restricts everything you do, and student's future is decided only by the exam score that measures everything.” (CHH10M, translated)

⑥ Adolescent student rebellion

“I think the conflict mainly comes from the resistance of students, because they exclude new things. They are around 17 years old, inwardly they want to be independent, but actually they cannot, so in such a contradiction they are usually more self-centered, and exclude, resist and conflict when our beliefs are different from or opposite to their ideas and development.” (CHH18F, translated)

⑦ Lack of time

“Every minute the conflict just comes out. There are many more aspects for me to have focus on such as the tidiness of classroom, the haircut of the students, and the dormitory, which, every day, the school leaders will check, and I am busy with every feedback every day. I have little time in the school to deal with some teaching or my own things for my own study. I have to do many other things which are not related to students, not so close to students' study or personality, that's a kind of sadness I think. It really makes me upset. I don't have enough time for students to watch movies, because I have to finish my teaching on the knowledge. That's the main conflict, because I want to teach them more besides the text knowledge, and during the movies, they will learn easily.” (CHL10F)

⑧ Social problem

“My belief is to cultivate students to be good people, but some students after graduation still think they are useless, and the society could give them a wrong impression that good deeds have no good return. They could question, ‘teacher told me to be a kind-hearted person, why I am bullied by others, why those who are not kind can achieve much better in the end than me’. Many students could change in the society because of the bad social atmosphere. But when the society becomes better, they will find what I told them is right. I told them everyone is unique and all of them can be useful in the

future, but students may not think so, partly because the society could look at them with colored glasses, and think you are useless if you even cannot be enrolled in a senior high school.” (CRB3F, translated)

⑨ Big class

“Because of the big class, even though I advocate to teach students in accordance of their aptitudes and to respect each child’s individual development, actually in class I can only teach the same content to all students”. (CRB6M, translated)

Therefore, in this research among German teachers, the main factors causing the inconsistency between teachers’ beliefs and behaviors are lack of time, lack of teachers, lack of money, lack of equipment, lack of spaces, lack of student discipline, big class, no study motivation, big gap of students’ abilities, no possibility to reach everyone, student difficult personality, system is not effective, etc.. Among Chinese teachers, the main constraint factors are lack of time, big class, no learning interest, adolescent student rebellion, unrealistic teaching theory, unfair teacher evaluation, education system, problem of student evaluation, social problem, and so on. From the points above, it can be read that commonly teachers in both countries have to be encountered with the problems of time limitation, big class size, education system, student’s motivation/interest, and student’s difficult personality/age, for example.

As we know, German school system has 3 tracks to have more homogeneous students, and Chinese schools put all students together, so in one class Chinese students should be much more heterogeneous than German ones, but from this research it is German teachers who address the big gap of students’ abilities restrains the practice of beliefs. The reason for the Hauptschule teachers to believe so might be that the time of dividing children into 3 tracks of schools is too early in Germany, so that it is not easy to put them at the age of 10 years old in the right track, especially the fact that ‘naughty’ boys are very easy to be misunderstood and underestimated as a lot of research has shown. Another reason could be like several teachers mentioned that family background decides very much on the school track placement and those clever children with immigration background are more likely to be put in the Hauptschule.

Besides, one situation concerned by German teachers in all types of schools is that the education system is lacked of money, so they complain that they have no enough teachers, no enough teaching equipments/media, no enough teaching materials/books, no offices for them to work in the school, too big classes and so on, every of which costs money and they believe there's no money, and all the reforms in the education system are aimed to save money. In some Chinese schools, they are equipped with quite modern teaching equipments and every classroom has TV and projector, but they are only used for school meetings and knowledge teaching, teachers are not allowed to show English movies for example, 2 English teachers believe that they could reach their beliefs when they were allowed to show English movies to students, for it could help a lot in their English study.

As to Chinese teachers, the teacher evaluation is a big problem or topic concerning their teaching performance and teaching career, and teacher evaluation mainly depends on the students' study performance, so most of Chinese teachers in the research concern a lot about the evaluation system of teachers and students, which they believe limits everything in their teaching and makes their beliefs have no room in the reality. What's more, Chinese teachers would more like to connect the education to the problems of the society, and they believe the social problem plays also a big role in the conflicts between their beliefs and practices in their teaching. However, for German teachers, they think more about the problems inside the education system itself, and they believe, for example, if the system was the whole-day school, the children would not go out in the afternoon to do something bad and then bring the problems or trouble to the school in the next day.

Education systems

1. German education system

As it is well known, among the countries in the world, "Germany is thought to have a very rigid form of explicit school tracking", and this tracking structure divides students

into three different tracks of secondary schools after 4th grade of primary school, and each track eventually leads to a very different kind of school-leaving certificate (Becker et al., 2016). German traditional three-tier secondary system can date back to the school structure in the 19th century, which differentiated itself between a lower track leading to practical or vocational training in craftsmanship and manual labor, and a higher track towards academic profession, but only in the 1950s “the ideas and image of the prototypical German three-tier system were refined” (Becker et al., 2016).

But very soon “Picht’s (1964) seminal works in the 1960s and the diagnosis of an educational catastrophe prompted a debate about social distributional justice and permeability of the German school system and called into question the functionality of the three-tier structure” (Becker et al., 2016). That debate led to “the introduction of a *Gesamtschule*, a comprehensive school type comprising all ability levels... with the aim of abandoning the traditional three-tier system”, unfortunately, it did not take the place of the three-tier system as it’s expected, but became ‘a fourth school track’ in the late 1960s and 1970s (Becker et al., 2016).

Germany is a country with a federal system, and the educational and cultural matters are devolved to the state parliaments, so every state of Germany “plays the leading role in the organization, administration and control of schools and other educational institutions”, which’s confirmed by ‘the Basic Law of 1949’ that the school system is under the supervision of each state (Phillips, 1995, p. 47). However, the autonomy the states have doesn’t mean that they can deviate too far from what the education system should deliver, and “there are also federal planning and policy bodies... being the most obvious for the co-ordination of policy for the period of compulsory schooling” (Phillips, 1995, p. 4).

Due to this traditional regional sovereignty in Germany, every state has a large measure of autonomy in organizing its school system and the training of the teachers (Jones, 2000; Becker et al., 2016), and there has never been one German centralized education system or national curriculum in the context of German whole country, curriculum guidelines and teaching plan are also published on a local basis (Phillips, 1995, p. 63). School types are also different from state to state, and “students at the end of primary education are confronted with very different options depending on their state of residence”, since the reform of school structures has never stopped (Becker et al., 2016).

In recent years, another big discussion on school tracking has focused especially on the maintenance of the Hauptschule, “as a result, de-tracking reforms have taken place in several states, ...the low-track Hauptschule remains only in four states and the intermediate Realschule in five states. Additionally, the comprehensive schools that emerged from the structural reforms in the 1970s” continue to exist in eight states, throughout the whole country there are 17 different school types in the 16 states of Germany (Becker et al., 2016). In common, “the majority of the German states have now adopted a ‘two-paths’ model, which mainly consists of the Gymnasium as the academic track, principally providing access to university training, and a second school type that also opens the path to university training but does not primarily serve this purpose” (Becker et al., 2016).

Comparatively, Baden-Wuerttemberg, a ‘conservative governed state’, still adheres to the traditional tripartite school system and the teacher training is also “structured into three distinct pathways, each of which has its own training programme, administration and examination procedures” (Jones, 2000). Therefore, here in Baden-Wuerttemberg it’s possible to find the traditional three separate types of secondary school, a diversification of the school provision based on the “belief that all pupils fall into one of three psychological or mental categories: the academic, the technical and the practical, each category being best served by a distinctive curriculum in an appropriate type of school” (Phillips, 1995, p. 67).

The first type of school is the Gymnasium – Grade 5 to 12/13, the grammar school providing students with an academic curriculum to prepare them for higher education, and the final school-leaving examination (the Abitur) grants students the right to the university study. The second type of school is the Realschule – Grade 5 to 10, an intermediate school delivering essential education with a ‘semi-academic’ vocational curriculum on administrative and commercial areas to prepare students for a range of technical and middle-management careers with the intermediate school-leaving certificate (the Mittlerer Schulabschluss), not aiming specifically at university education. The third type of school is the Hauptschule – Grade 5 to 9, which provides a slow-paced and vocationally oriented curriculum with the lowest school leaving-certificate (Hauptschulabschluss) to qualify students for manual labor apprenticeships (Phillips, 1995, p. 4; Becker et al., 2016).

Children in Germany start school at the age of 6 and have 10 years of compulsory education. After 4-year primary school, children will attend one of three tracks of secondary school “on the basis of grades in the primary school and parental choices” as well (Phillips, 1995, p. 178). In the former time, it were teachers that decided which track of school a student would go, if students wanted or the parents wanted their children to go to another school, they must take a test, and if they couldn’t pass the test, they would not be allowed to get in, but now the “parents retain the right of choice even if all advice is directed against them” (Phillips, 1995, p. 69). That “has led to relatively high participation in academic-track schools and has prompted a dramatic change in the distribution of students: even where the lower track school still exists, it usually only caters to a minority of 5 to 20% of the student body,...the once very exclusive Gymnasium now represents the main school” (Becker et al., 2016).

Even though the school “track assignment in Germany is largely based on (students’) achievement, but beyond achievement, social class and also ethnicity also play a role in these transition processes”, which is not negligible in the angle of the reality (Becker, et al., 2016). The PISA study (Program for International Student Assessment) 2000 and 2003 have also yielded some evidence that, among all countries in PISA, “Germany is the country where the individual background has the largest impact on a child's educational achievement” (Jürges & Schneider, 2007), and “the correlation of a child’s track choice with parental background is comparatively strong in Germany” (Kempkes, 2009).

Generally “the first two years following the primary phase are regarded as an observation period during which there is a continuing assessment of whether students have been placed in a school that is suited to their ability” (Phillips, 1995, p. 178), then there are some students who could have to transfer to another type of school. In theory, changing schools between different tracks is possible and desirable, but actually students’ between-track mobility is low and usually downward, that is to say, usually “they leave the more academically oriented tracks, due to insufficient achievement, and join the more vocationally oriented tracks” (Becker et al., 2016), like from the Gymnasium to the Realschule or from the Realschule to the Hauptschule, and this is believed again that mobility has a socially selective component (Jürges & Schneider, 2007).

Traditionally in Germany the schools are half-day, and in the majority of German schools, lessons end at lunchtime and children leave school around 1 p.m., but now some schools add 2-3 afternoon school per week till 3-4 p.m. to let students do their homework or some activities at school (Freitag & Schlicht, 2009; Frankenberg et al., 2013). Student assessment in German schools uses 6-point scale “with grades 1-4 representing satisfactory attainments”, and students may have “only one average of 5 in their end-of-year report; a 6, or more than two 5s, will in most cases result in their not being able to proceed to the next class”, and a class can only be repeated once, thereafter, those who fail to reach the goals will have to transfer to a lower track of school (Phillips, 1995, p. 5).

Because of the three different tracks of schools leading to very different ends, and also the fact that students rarely move between tracks after being allocated to one of the three secondary school tracks, for German children, “track choice at the age of 10 usually has a strong implication for the entire life course” (Kemptner et al., 2010). In other words, the segregation at the age of ten determines “the whole of a person’s future schooling and career” (Hahn, 1998, p. 115), which has been widely questioned that it is too early to see a child’s competence on learning or to decide a child’s future. It is also true that the different school-leaving certificates still do greatly determine children’s future occupational or professional options and are prerequisites for almost all professions (Phillips, 1995, p. 72; Becker et al., 2016).

On account of the demographic change in a trend of decreasing population of children mainly in rural areas of Germany, the low population density has made the maintenance of the three-tier system unsuitable and less attractive, especially due to “the devaluation of the leaving certificate of Hauptschule in the training market and the preference of parents for other types of schools” (Phillips, 1995, p. 178), the popularity of the Hauptschule among parents has been in sharp decline, which was designed as the main type of secondary school, but now are called as ‘unenviable label of sink school’, or ‘school for the leftovers’ (Phillips, 1995, p. 178; Becker et al., 2016). Therefore, now in Baden-Württemberg many schools of the Hauptschule cannot see enough students and are to be closed or go together with Realschule to become a new kind of school named Gemeinschaftschule (community school).

In Baden-Württemberg, the school system offers students many different ways to get the Abitur in the end for the access to higher education, no matter they start from the Realschule or Hauptschule. There is, for example, Technikgymnasium (technical Gymnasium) or Wirtschaftsgymnasium (economic Gymnasium), which is kind of worker's Abitur that needs 3 years of study in part-time, not 2 intensive years in the general humanistic Gymnasium, and with this Abitur, students can also go to universities to learn what they want except medicine and theology for example. Generally speaking, Abitur is a stepping-stone to the university, like the Chinese Gaokao, the National College Entrance Examination, without Abitur it's impossible for children to go to university for the further study.

Frankly speaking, "the vertical segregation of teacher training in Germany reflects a profound belief in specialisation by differentiation" (Jones, 2000), and there are specially trained teachers for every type of school, for example, according to Jones (2000), "to become a teacher in a Hauptschule, 3-4 years of study at a teacher training college or university are required. A specialist approach to the study of two to three subjects (4-5 and 5-6 years respectively) is required for teaching at the Realschule and Gymnasium". Also, "the content of each training programme is planned and structured in accordance with the different academic and pedagogical qualities and the varying depths of subject knowledge required by teachers in each of the three types of school" (Jones, 2000).

Normally to become a teacher in Germany there are some steps to go in general: after obtaining an Abitur, students can decide "to become a teacher from the beginning of their tertiary education"; after earning a Bachelor's degree, they go on with a Masters' program "which teaches them two school subjects" in a "domain-specific subject-matter education" and also "courses in education, pedagogy, didactics", etc.; "after completing their Masters degree (instead of the former first national exam), graduates enter a compulsory teacher training program" as trainee teacher, "which ranges from 12-18 months, depending on the 16 differing German States' educational requirements"; with completion of this program, it is "finalized by the second German State exam", which "leads to full qualification as a secondary school teacher" having lifetime employment as civil officer (Al-Amoush et al., 2014).

In every state, the Department of Education (Kultusministerium) “is in charge of the curriculum framework for each training route” within the tripartite education system, while the teacher training centers (Lehrerseminare) “are responsible for the delivery of the training program and assessment” (Jones, 2000). “Partnership schools provide the practical experience and support in the training of teachers”, and the local education authority (Oberschulamt) “is the administrative body concerned with entry requirements, conditions of service, employment contract”, while the examination board (Pruefungsamt) takes care of the “examination procedures and administration” (Jones, 2000).

In Germany, “German teachers are protected by the Basic Law in their right freely to express and to disseminate their opinion and to exercise the traditional freedom of teaching”, and “in all states, teachers are seen as independent, autonomous professionals, who are responsible for their instruction” and teaching means (Rust & Rust, 1995, p.29-30). Comparatively, “German teachers also experienced somewhat lower levels of stress and higher levels of job satisfaction” (Rust & Rust, 1995, p. 91), one of the main reasons is the high salary of the German teachers, which has been shown in the comparative data that German teachers are among the highest paid in the world, their salaries “are more than double the industrial worker average” (Rust & Rust, 1995, p. 29).

2. Chinese education system

China has no 3 separated tracks of schools like Germany, Chinese elementary and secondary education is a unified comprehensive system in a sequential phased manner, and it consists of primary school (Grade 1 to 5/6), junior high school (Grade 6/7 to 9) and senior high school (Grade 10 to 12), and all of them are whole-day schools. The education in primary school and junior high school together is called 9-year compulsory education that is guaranteed by “Compulsory Education Law of the People’s Republic of China” since 1986. It’s local government that decides to have 5-year primary school plus 4-year junior high school or 6-year plus 3-year. 5+4 or 6+3 is just the different division of school years, and it doesn’t differentiate much the knowledge in the same school year, or influence the system of knowledge that children must learn during the whole period of compulsory education. All the senior high schools in China are three-year whole-day schools.

In 1985, ‘The Decision of Chinese Communist Party Central Committee on the Reform of the Education System’ was enacted to set up the basic education management system, which is a system of multi-level management and local responsibility in the compulsory education, e.g. the Central Committee is only responsible for the basic education’s laws, policies, guidelines, and overall development planning, etc., and, the local governments have the administrative authority on the formulation and implementation of basic education’s specific policy, system, plan, and also on school management and inspection (Peng & Yao, 2014; Jin & Peng, 2016). However, that decision has transferred the responsibility of the compulsory education fund investment from the budget of the nation to the shoulder of local governments in counties and even villages, which not only increases the financial burden of rural areas, but also results in the lag-behind of education in rural areas and enlarges the gap between the cities and the rural areas (Peng & Yao, 2014).

The unbalanced development of education in China is actually a historical topic. As early as the beginning of the New China, in 1953 the State Council passed a resolution ‘The State Council’s Instructions on the Rectification and Improvement of Primary Education’, and made it clear that the focus of education development should be on the cities, which was confirmed again by the document issued in 1992 by the general office of the State Education Commission, as a result, the national fund investment and outstanding teacher resource mainly went to the cities, and the gap of compulsory education status between cities and the rural areas became larger and larger (Peng & Yao, 2014).

In 2001 the county-based financial system started to be built up, which moved the educational investment burden from towns and villages to the counties, and changed the investment pattern of rural areas’ compulsory education that relied on the poor farmers’ educational fundraising and surcharges for a long time (Fan & Zhu, 2010). However, it didn’t make the situation better, for many counties are also very poor and have no ability to cover the input of basic education on their own, so, throughout the country the per-capita education investment is significantly different from city to countryside and from area to area.

In December 2005, the State Council started to bring the rural area’s compulsory education into the public financial security system with the fund investment from both

central and local governments, and the share proportions of central and local governments are different, e.g. 8:2 in the western region, 6:4 in the central region, and in the east China the local governments still play the main role and the central government only symbolically gives a little incentive support (Fan & Zhu, 2010). At the same time, the State Council also decided that, from 2006 on, the tuition and other fees at the stage of compulsory education in the western region would be eliminated, and in 2007 the middle and east areas of China also started to provide free compulsory education for children, but the public financial investment on education is still below the world average level (Fan & Zhu, 2010).

Chinese children also go to school at the age of 6 years old, and then after the primary school with an unselective examination they can directly go on with the study in junior high school, unless some children really need one year repeat in the primary school. The compulsory education law of 1986 has stated that the local government should ensure that children go to the neighborhood school of their residence (Gai, 2013). Therefore, in principle, Chinese parents are not allowed to breach the law to choose schools where they want to send their children, but they try all the ways to send their children to the top/key junior or senior high schools, because of the reality that schools are different in educational resources, and in those key schools there are the best teaching conditions, equipments and the best teachers.

The “key school” has to be traced back to 1959 when China expressly started to give priority to the development of some top/key primary and secondary schools in the cities, in order to provide the country construction more talents in a faster way with limited resources in all, and also to set up some good examples for other schools to follow, which had been confirmed many times in the various documents issued by the Ministry of Education till 1990s, but the result was most of the national and local educational resources went to those top schools, and the gap on the teaching conditions and teaching quality among schools and areas was further enlarged significantly (Peng & Yao, 2014).

For example, in 1978, the Ministry of Education issued “the trial project on the implementation of a number of key primary and secondary schools” to declare that every level of governments and educational administrative departments should support the key schools in policy, finance and teachers, so that those school can get the

privilege in fund investment, faculty team and student enrollment (Jin & Peng, 2016). However, in 1995, the State Education Commission decided to remove the “top/key” from the school names, and the newly revised law on compulsory education of 2006 further declares that schools should not be named distinctively as key school and average school, but in fact till now they still exist especially at the stage of senior high school (Gai, 2013; Peng & Yao, 2014).

Because of the great imbalance of basic education development among different areas and unequal distribution of educational resources among schools, many rich and powerful parents would like to use their power or relationship to open the ‘back door’, or pay a big amount of school-choosing fee, or pay a lot more money for an apartment in the community of the key school to move their residence registration there, so that their children can go to that ‘good’ school (Gai, 2013). In recent years, the school-choosing phenomenon has become a social problem that cannot be ignored and has aroused extensive concern of the society in China, which has extended from big cities to small ones, and from senior high school to primary school even kindergarten (Gai, 2013).

Frankly speaking, besides the objective factors, the school-choosing problem has also been caused by the demand on the high-quality educational recourse among Chinese parents who believe good primary and secondary education is the only way leading to the higher education, for which they would like to pay any high price in exchange of the chance for their children to have the high-quality education (Gai, 2013). As a result, in the real estate market of some Chinese big cities in particular, there are some super expensive apartments near the top schools, which are called as ‘high-priced school district housing’, but fall short of demand in fact.

The students in junior high school have 2 big examinations, one is called graduation examination (Chinese name is Huikao), which is done in the last second school year, Grade 8, and the other is entrance examination for senior high school, which is also called Zhongkao, the final examination in the last year of junior high school, Grade 9. The Huikao is much easier to pass than Zhongkao, but without passing the Huikao, students cannot go to senior high school even though they could pass Zhongkao. The Zhongkao is competitive, because it decides what kind of school the students can go further, the top/key senior high school, or the average/normal senior high school, or

vocational/technical school, it's said that only a minority of students can continue the study in senior high school to prepare for higher education.

Similar to the junior high school, in senior high school, students also have 2 big examinations, graduation exam (Huikao), and the national college entrance examination (Gaokao). The Gaokao is just not an examination, but plays a so vital role that it has to be underlined here. Officially Gaokao was restored in 1977 just after the end of the 10-year devastating Cultural Revolution, and has been regarded as the most important examination in the whole education system of China. During the past about 40 years, there were more than 30 times of reforms or changes on the Gaokao' system, which, however, haven't changed the situation that the Gaokao score is still the only admission standard of the university, the only one exam decides the whole life of students (Zhang & Huang, 2018).

In the study of Zhang and Huang (2018), they argue that the Gaokao is not only a tool of talent selection, but also a buffer to narrow the social class gap and reduce social conflicts, in some sense, Gaokao does help in the upward mobility of some social lower class, which, however, makes the Gaokao reforms wander all the time between the fairness and scientific nature, and never find a way out, for example, the policy makers and researchers stress the scientific nature of the Gaokao reform, but the social public and media highlight the opportunity equity that's especially supported by the social lower class who believes the score is much more impartial than the quality, and also looks at the Gaokao as the only way to change the fates of their children.

Therefore, for the children from lower class, high Gaokao score means their success in the education competition with a big chance to get themselves a favorable position in the field of education, for which, however, they have to pay a big and inhumane price with the poor educational resources of rural areas to compete with those children surrounded by very rich resources in the cities (Zhang & Huang, 2018). It's believed that Gaokao is a high-stake competition, which is not only related to the student's personal destiny or future, but also closely connected with the performance of teacher, school and local educational administrative department and the matriculate quality of university as well, every party involved wants the maximum of interest and benefits, so that Gaokao is actually a very utilitarian test with highly anticipated concern from the whole society (Yuan, 2018).

Due to the increasingly fierce social competition and a huge population in China, the Gaokao becomes a single log bridge that millions of students want to cross at the same time, which gives students and teachers big pressure and pushes school education into ‘military training’ losing the values school should have (Huang & Wu, 2018). There is a score of Gaokao as a minimum passing score, but considering the big differences on teaching conditions and student quality in different areas, the passing score of Gaokao is also different from province to province, in order to make the exam relatively fair and equal, and then those students in the poor rural areas can also have the opportunity to be admitted to the college (Yuan, 2018).

Normally in China the Normal universities are committed to educating students to be teachers in the future, but the students there can also choose jobs in other fields after graduation. The Normal universities have the same 4-year scholastic year system as other comprehensive universities for example. Most of the Normal universities provide students one-semester educational internship in the last second semester, the 7th semester, in the partnership schools of primary and secondary education, but some universities do it in the 6th semester, so that in the last academic year the students can prepare for the entrance examination of Master’s programs, and have more time to finish the thesis and look for other jobs instead of being teachers.

The university is in charge of contacting with and sending the students to the partnership schools for the internship and arranging supervisors from the university to work with tutoring teacher from the partnership schools to supervise and evaluate the internship. The university has to pay partnership schools for the involvement in the internship, and the schools are provided by the local educational administrative departments who, however, don’t provide financial support. After graduation, the students who want to become teachers must take part in the teacher qualification examination to get the teacher certificate, and then they can decide which cities they want to stay and apply for the cities’ teacher recruitment examination.

The teacher recruitment examination is organized by the province-level educational administrative departments, but the cities can choose to participate or have their own examination. The students, who have Bachelor’s degree or above graduating from other universities, not the Normal universities, can also get the teacher certificate if they pass

the teacher qualification examination, and then with the certificate, they can also apply for the teacher recruitment examination to be teachers.

Of course, the students graduating from the Normal universities have more advantages in the exams, for they are prepared with special courses, skill training and internship in teaching. But as long as students pass the teacher recruitment examination that mainly includes theory test and skill interview, they can become teachers whose salaries are not lower than the average salary of local civil servants, which has been guaranteed by the teachers' law of the People's Republic of China (Fan & Zhu, 2010).

3. Success of education systems

The following table shows what teachers believe are successful in present education systems:

coding	GG	GR	GH	CH	CC	CR
knowledge education				2	1	2
The Gaokao				2	2	
3 tracks of schools	3		1			
Humanistic Gymnasium G9	3					
Realschule		2				
Gemeinschaftschule			2			
Exam ability of students					1	1
Idea of quality-oriented education				1	1	
Student freedom	1					
Equal educational chance	1					
Social training	1					
Preparation for university	1					
Help for students	1					
Mixed students	1					
Independent learning	1					
Compulsory education						1
Many good universities						1
Examination organizing					1	

Teacher evaluation					1	
Respect on teachers				1		
Responsibility of teachers				1		

The order of the coding depends on the counting numbers, and from the results shown in the table above, there's no sharing point on the success of the education systems in two countries, and there's nearly no common opinion among German teachers in 3 types of schools, but there're some agreements among Chinese teachers of different schools. Comparatively, within the same track of German schools, the teachers also share the similar opinions about the success of education system.

Instead of answering the question of what is successful, 4 teachers from the Realschule and 5 from Hauptschule only talked about what is not successful in the system, which means only 2 Realschule teachers and one Hauptschule teacher looked at the system positively and answered the original question, and all Gymnasium teachers gave answers about the success in the system, and some also mentioned or were asked about the unsuccessful aspects, so it can be seen that Gymnasium teachers are more satisfied and positive about the education system.

As to Chinese teachers, normally they are not like German teachers who can say "I don't know what is the success, but I can tell you what is not successful", they just try to find an answer to the question they were asked and not to think of other aspects, so I had to ask them what is not successful in the system in order to get the equal and full views from both countries. That is also an example to prove that the interviewees are a big part of the participation in a research, and they can also create and enrich research questions.

1) Knowledge education

Chinese teachers from all levels of schools agree that Chinese education system is very successful at knowledge education, and it is true that Chinese students have to learn a lot of knowledge from the textbooks, and they are trained to build a solid foundation of basic knowledge, for some teachers also believe it is necessary for children to memorize more knowledge in mind by rote with no need of full

understanding when they are young, and later they will understand better and deeply with age and more experience. In reality the secondary education of China does underline the importance of basic knowledge, and about 80 percent of exam content is about basic knowledge, which leads teachers' teaching to focus only on the knowledge.

On the other hand, it is 'ironic' to say knowledge education is successful, because the Chinese teachers also have a very big worry on students who learn the knowledge only for the examinations and don't know how to use the knowledge, in the end, what the students learn becomes only 'dead knowledge'. Take an example of English subject, the English exams mainly cover reading and writing full of vocabulary and grammar, but a very small part of listening and no test on speaking, as a result, Chinese students have very good knowledge in English vocabulary and grammar, on which they can get very high exam scores, but their English is mute and they can hardly speak or communicate in English, which has given birth to a booming expensive industry of language agency focusing more on the training of English speaking under the teaching of foreign teachers in many Chinese cities.

2) The Gaokao

Some Chinese teachers believe that the Gaokao is a success in the Chinese education system, because, on one hand, the exam impartially provides a platform of a just and fair competition for all students no matter what family background they come from, especially an equal chance for the children from very poor families, who can change their life or fates and even the destiny of their families through very hard study to pass the Gaokao and get into a good university and then start a good job career; on the other hand, the exam does select many intelligent and talented students who really make some outstanding contributions later in different fields of Chinese society, which means the result of the Gaokao is successful, universities can get their wanted students, and the students are admitted to their desired universities, maybe not all, but in general it is a happy end.

However, each time when Chinese education becomes a topic, there're always tons of various voices of criticism, almost all of which fall upon one point that examination-oriented education is a big problem in China, and the Gaokao is the

root of all problems. Many Chinese people including teachers believe everything would be changed completely in the school, when the Gaokao system was changed. Because one score of the Gaokao decides a student's future and whole life, the school education has only one aim that is to teach students how to get high exam scores especially in senior high school, and all resources are put in only one thing that is to train students' exam-taking abilities and skills. But the Gaokao is really the main culprit of education system's problems?

CCD28M has very reasonable comments on it, who doesn't think it is school that doesn't want to have more activities or projects for students, but the burden and pressure from the exam-oriented education is too heavy, and without that burden, the school education could be much more active and lively. However, from another side, it is not wise to discard the system of college entrance examination, because China is a country under the rule of men, not the rule of law, and without the Gaokao, the admission to university would become a game manipulated by the money and power, the children from especially the poor families would never have chances to reach the good universities.

From the perspective of CCD28M, it is true that, as long as the Gaokao exists, the school education will surely focus on the scores, but the question is through which way to seek for high scores and high enrolment rates, if it's through improving the student's comprehensive quality and ability, then the pursuit of the enrolment rate is healthy and benign. Therefore, whether the education is successful or not depends not only on the mechanism of the system, but crucially more on the people who implement the education.

In essence, the Gaokao is a mechanism, when it exists, it can drive the education more strongly to the exam orientation, and if it didn't exist, the exam orientation could be much weaker, but no one can boast that education will be successful on every student if there's no Gaokao. Pragmatically speaking, education is mainly about how teachers think and do, and whether they can offer children something else except the teaching on textbooks' knowledge.

Prof. Lu from Tsinghua University has talked about Chinese education system in a quite forthright and incisive way, he doesn't agree that the Gaokao can be replaced

by American SAT for example, because in his understanding the Gaokao is not the real problem, the problem is that China is a society with a very low degree of integrity and honesty, often the end justifies the means, which means people could try all kinds of ways, even by some dishonest or cheating means, to misuse all the evaluation standards to reach their goals, for example, the personal statement can be written by some agent, recommendation letters cover all good words but nothing real about the recommended persons, and the social experience or activities can be simply made up from nothing.

From his opinion, the essential problem of education in China is the utilitarian culture, because China has not gone through the Renaissance, or Enlightenment Movement, or the industrial revolution, but during the long history till now what China has strengthened is the strong connection between study and future career to persuade young people to study hard for a good future, if they studied well, they could become officials or get very good jobs, which has caused and consolidated a deep utilitarianism that only becomes stronger and stronger in the educational field because of the harsh competition in the society. So it has become a hard and insolvable topic for educational researchers to find something more impartial and operable than the Gaokao.

3) 3 tracks of schools

Some teachers from the Gymnasium defend quite the 3 tracks of schooling system, which they believe has a big advantage that a “homogenous student performance level can be reached within schools” (Jacob & Tieben, 2007), and makes the teachers feel it’s a privilege to teach in the Gymnasium the cleverest and the most motivated students. GGM10F thinks the system is good, also because, even though a student starts in the Hauptschule, he/she can go on and change to another school to do the Abitur in the end of the school career if he/she is good enough and his/her motivation is there.

Some research shows that grouping students into different school types follows the theory that “optimal instruction is facilitated when the ability level of students is more homogenous, ...tracking may provide an opportunity for better instruction and avoid the risks of demanding too much or too little from the students” (Becker et al.,

2016). It's also believed that homogeneous classrooms can provide students "a learning environment that is better adapted to" their abilities individual (Jürges & Schneider, 2007).

Due to that advantage of homogeneous class, except 3 teachers in the Gymnasium, one teacher GHW2F from the Hauptschule also think this 3-track system is quite good, which she believes can guarantee teachers in each different type of school to do the best for the students, more easily to prepare appropriate teaching materials and methods for students in their respective ways, and help students reach their optimal performance.

What's more, the 3 tracks of the school system can "allow all the abilities of children to be awakened and also to be tested out through more demanding tasks at the appropriate level in each case" (Hearnden, 1976, p.62). Therefore, theoretically tracking can benefit both weak and good students in their individual levels, and produce better aggregate educational performance, because the "ability differences between the high- and low-achieving students in a class are smaller than in comprehensive school systems and allow more focused instruction without leaving the weakest pupils behind or have better students be under-challenged by the curriculum" (Jürges & Schneider, 2007).

4) Humanistic Gymnasium

Several Gymnasium teachers think that the humanistic Gymnasium with the Humbolt's ideas of education is successful, because it concerns the whole person and teaches children the whole character to help them become persons with fulfilled life (GGF7F), especially the 9-year Gymnasium, which is quite good at preparing students for the university, and also offers students more free afternoons to develop their own skills and interests beyond the school (GGH7M, GGD15M). It is said that the humanistic Gymnasium, as the most prestigious type of secondary school, has held its own with a long and distinguished history by the virtue of its inner strength (Phillips, 1995, p.67).

Wilhelm von Humboldt (1767-1835), the founder of the Gymnasium and also one of the major contributors to the concept of the modern German university, "relied

on the methodology of Pestalozzi who, though more pragmatic, shared his belief in general education as the interdependent development of head, heart and hand”, e.g. the development of a whole person (Hahn, 1998, p.17). All the time in the Gymnasium “there is a healthy tradition of parental interest in academic progress at school” (Hearnden, 1976, p.17), where the main population of students comes from more educated family background, which could be a big reason as some teachers believe that among students in the Gymnasium the positive attitude to school is much more prevalent than other tracks of schools.

5) Realschule

Among the teachers in the Realschule, only 2 teachers answered positively the question about what is successful in the education system, and both of them think that the Realschule is successful, because the Realschule has always kept the aim of combining text knowledge and practical ability together, not just for the brain as the Gymnasium or with much more practical things in the Hauptschule, in all, the education in the Realschule is perfect for children who can decide to go further to the university to do a job more about academy later, or go into a special kind of profession where they can learn something for more practical jobs when they are ready to leave school (GRD21F, GRE35M). Besides, the teachers also believe the Realschule is the most successful at making students social members, and the school doesn't have so many problems like the Hauptschule and teachers there either don't have the trouble like the Hauptschule teachers with too many difficult students.

The Realschule, defined as the ‘semi-academic intermediate school’, “has a long and distinguished history in Germany”, and it was founded and developed mainly “in the nineteenth century with the increasing awareness of the need to develop a more modern and realistic approach to the education and training of young people than that offered in the traditional grammar schools” (Phillips, 1995, p.71). It has turned out that the Realschule with “high-quality non-academic education and training” has become “a strong backbone to the tripartite nature of the German secondary school system”, and contributed significantly to German powerful industrial growth by equipping young people with good basic knowledge and

practical training for the further disciplines in modern trade and professional life (Phillips, 1995, p.254).

6) Gemeinschaftschule

As to teachers in the Hauptschule, it seems that they don't think there is something successful in the education system, except one teacher GHW2F who mentioned in the interview that the 3-track school system is good, because the class is more homogeneous in each type of school, but then she denied it by herself, saying, when there are 27 students in one class, it's not possible to have a homogenous group of students. So she and also another teacher GHK5F would like to have a new school type, Gemeinschaftschule, which they think could be a good thing, for it makes students come together in one class as one society, not be divided into three different school tracks, so that the good students can help the weak ones, they can do the social learning in heterogeneous groups, and everybody has the same possibility.

The teachers also hope it can help to wipe away all the negative stereo types about the Hauptschule, the so-called bad and the most problematic type of school, at least help to reduce and minimize the bad pictures describing the children in the Hauptschule. But actually they admit that they have no idea how the school should work and what it will be, and they are also very confused why there's still Gymnasium when having the Gemeinschaftschule, not all 3 tracks in one, even so, they put their hope on it and wish it could change their unpleasant situation. In the end, they show their worry that the Gemeinschaftschule is more like an experiment, for there is no concept for it, and every school does its own style of Gemeinschaftschule, from the view of reality it is also true that it's more difficult to teach a class with very good students and very weak students together.

7) Exam ability of students

Another success that Chinese teachers agree with is that Chinese students have good abilities in handling and passing examinations, which also means Chinese teachers are successful at improving students' study performance and training them to get high exam scores. Two teachers from junior high school also confirm the high

exam-taking skills of Chinese students who have been trained into kind of exam machines day by day, year after year since the primary school, and the only goal of their study is to get high or higher exam scores, which is also the only aim that teachers fight for in the teaching, because the evaluation says that students' exam scores show the teachers' teaching ability and performance.

The fact is it is the exam score that decides what kind of senior high school or university the students can go further, so the daily training at school is all for the Zhongkao or Gaokao, which is also the reason, no matter how reforms have tried to change the face of the school education, that till now China, undeniably, still has the solid exam-oriented education. In the other words, if Chinese students want to survive in the school system and reach bigger goals for a better future, they have to study very hard and have strong exam ability, which is the only way to go through this system successfully, and all other abilities are not that important. That's why in China the success of students, teachers and schools is mainly measured by the exam scores. When teachers say the success is the good exam ability of students, it is a quite bitter success, for in their hearts they don't really agree on it.

8) Idea of quality-oriented education

About the disadvantages of the exam-oriented education, everyone can tell. In China it's been widely debated that it's not right to focus only on knowledge teaching and exam scores, but ignore the development of every child as a lively whole person. Then the quality-oriented education, with the aim of having students in all-round development, got rising voice as a right one to replace the exam-oriented education, which actually has been written in the policy for a long time so far in China, but only becomes a slogan without action in the reality, also because the pressure of Zhongkao and Gaokao makes it find no room to exist in the system. Maybe in some primary schools they start to have the awareness or willingness to try the quality-oriented education little by little.

Even though the quality-oriented education has not really been put into practice in Chinese schools, teachers believe its concept is very good and is exactly the idea of successful education to develop children in the morality, intelligence, physical condition, aesthetics, manual skill, and every aspect of body and mind. Perhaps it is

a little bit unrealistic to fulfill the quality-oriented education at this moment, but some teachers hope to find at least a balance between quality-oriented education and exam-oriented education, unfortunately, in the end they have to admit that there is no balance due to the high pressure of exam-oriented education. Even so, the idea of quality-oriented education can still be called a success in the opinions of some teachers.

9) Others

Each of the following aspects is only supported by one teacher, and will only be discussed here in brief.

① In Germany, what teachers think is also successful in the education system include the followings:

Student freedom: German students have freedom to decide what they want to do and have opportunities to choose their own future, they have possibilities to try different ways to reach their goals;

Equal educational chance: everyone gets the chance to go to school and learn at school;

Help for students: everyone is able to get financial help to go to school, and at school there are social workers who work with families to help children in trouble or with problems, and help teachers to deal with the troublemakers;

Mixed students: in German schools a lot of classes have mixed students from different countries or cultures or races and also have different kinds of levels in learning ability, which help students to learn how to get along with different people, and learn respect and tolerance to each other;

Social training: the schools have some social projects or social internship for students to do, so that they get to know the whole application process for a job and learn the rules that they have to respect when they enter the normal work environment in the future, and get quite good training in the social interaction;

Preparation for university: teachers in the Gymnasium think they prepare the students very well for the university especially in the old Gymnasium with 9 years;

Independent learning: one Gymnasium teacher believes it is a very good thing and makes students more successful in a long term, now it has become a topic written in the teaching plan and the whole school system starts to pay more attention to it, and she believes it's successful that independent learning is becoming more and more important.

② The followings are what Chinese teachers think is also successful in the education system:

Many good universities: a teacher believes it is a big success in China that many Chinese universities have greatly developed in both 'hardware' and 'software' especially in recent years;

Compulsory education: a teacher in a junior high school believes it is the most successful in the education system, for it gathers children to come to the school for learning and developing in a good way, which is the best influence children can get, so that they do not run around outside to do something bad;

Examination organizing: educational departments and schools with the participation of the whole society are very successful at organizing the scheme, preparation and implementation of the national examinations like the Gaokao;

Respect on teachers: China has a long tradition of respecting teachers, which is a kind of good education that children are taught to show respect for teachers, and which is also a success in the education system;

Responsibility of teachers: it's believed that Chinese teachers are very responsible and devoted to the education of students, who always correct students when they make mistakes, and who are very tolerant under the big pressure of exams, teacher evaluation and the expectation of parents and the society, and also tolerant to the long-day intensive work with heavy workload especially in senior high school. The responsibility of teachers is an indispensable basis for the success of education.

4. Disadvantages of education systems

This part is mostly traced to the last question about what is successful in the education system, and some teachers, including 4 teachers from Realschule, 5 from Hauptschule and 2 Chinese teachers in rural junior high school, said in the interview that they didn't know what's successful in the education system, or right now it's hard to say something is successful, then they only told what is not successful. Maybe it could mean that teachers in the Realschule and Hauptschule have more concern on something not successful in the system, or they are more unsatisfied with the current situation, and Chinese teachers in rural areas seemingly have more to complain. Some research confirms that teachers who consistently teach the students with difficulties or low abilities in learning can become more disappointed, frustrated or demoralized, which especially can be seen from teachers in the Hauptschule (Hallam & Ireson, 2003).

At first I did interview with German teachers, after half of German teachers only talked about "not successful", later during the interview in China, I had to add the question about what is not successful in the education system, for it is an interesting topic to see the systems in different ways and is also helpful to further think about the possibility of educational reforms. Here I don't want to label with the word 'failure' to discuss the unsuccessful points that teachers mentioned, I prefer the word 'disadvantage', which looks not so sharp or unpleasant, to describe those not very successful or satisfying aspects in teachers' eyes.

The disadvantages of two education systems in teachers' opinions:

coding	GG	GR	GH	CH	CC	CR
Problems of education system	1	4	1	1		2
Not enough teachers	2	3	2			
Hauptschule	3	1	2			
Knowledge-centered education				2	2	2
Big classes		3		1		1
Student evaluation					1	4
Teacher evaluation					2	2
Teaching materials		2	2			
Not enough rooms	1	2				

Not enough money	1	2				
Teacher training	1	1	1			
8-year Gymnasium	2					
Social background matters	1	1				
Parents' decision on schools	1		1			
Comprehensive school	1		1			
The Gaokao				2		
Early school selection			1			
Student mobility			1			
School reform			1			
Special school					1	

1) Problems of education system

It is rare for teachers from two countries to have common opinions on something, but compared with other coding, a quite high number of teachers think the education system itself has problems. As to some German teachers, they think the education system is still the old system like 100 years ago, the society is changing, but the education system has not changed, at school it's still the same didactic teaching that teachers stand in front of the classroom, and children just sit to listen to teachers and do what teachers want, no one is interested to know what children want, or ask them what's going on in their minds, so school is very boring for children who don't want to go to school.

Even though it's more than 20 or 30 years ago, Phillips (1987, 1992) did stress at that moment that German teachers "stuck to the old-fashioned teacher-dominated approach to the classroom" (Phillips, 1995, p. 256), and "still in general teach their lessons in a markedly formal style: the emphasis is on didactic teaching, and children are expected to learn the lesson and will be asked to demonstrate, orally, that they have done so" (Phillips, 1995, p.66). It is also discussed that German education system, "as it developed, was unable to produce genuine socialization, allowed for little social transparency and neglected the establishment of democratic structures," in particular, the Abitur has largely reinforced the role of didactic teaching among German teachers especially in the Gymnasium (Hahn, 1998, p.18).

The teacher GRK4M from a Realschule mentioned in the interview that German teachers were trained to just follow the rules of good lessons and follow the system, and if they can follow, then they are good teachers, but they are not the teachers with open minds to help students become satisfied in their life, for they teach just because of the political thing, they get 30 children at the front and they have to give everyone a mark as an answer to find a job later, there's nothing else.

Rust & Rust (1995) have some similar opinions, saying that German teachers "are in the occupation largely because it pays so well, rather than intrinsic means of self-expression or because they feel a duty to give society something" (p.91), and they "show surprisingly little concern for the pedagogical aspects of teaching, rather they feel obliged to satisfy contractual agreements and do not worry about dealing with unique problems, satisfying individual needs, helping all children to succeed" (p.92) and so on.

The German teachers think a lot of things are difficult in the system at this moment, which don't help to make progress in the school education. A teacher GGB5F from a Gymnasium also doubts the system of three-track schools, she doesn't think it is good for the system to sort children out at the age of 10, and the students at the Hauptschule don't have a chance to get a well-paid job or have a success after school. PISA 2000 and 2003 prove that German school system is not so successful as many people think, for the system fails to create equal opportunity for all children, and those "children from disadvantaged backgrounds are particularly vulnerable of being left behind by the education system" (Jürges & Schneider, 2007).

Hanushek & Wößmann (2006) have found that the tracking after primary school is more likely to increase 'educational inequality' in German society and reduce 'aggregate performance' of children (Jürges & Schneider, 2007). The opponents of tracking have also argued that "it might not only create inequalities in opportunity and a bias against disadvantaged students but that it might also be inefficient in the sense that creating a learning environment for weaker children with peers of similar ability will harm them more than increasing the learning speed will improve the achievement of the more gifted children" (Jürges & Schneider, 2007).

Another problem from the perspective of German teachers is the system doesn't give the time to wait for the slow students, or enough support to students who need help in study especially in learning language, which is also confirmed by Frankenberg et al. (2013), who have concluded in their research that the 'large-scale educational studies' show the German education system doesn't provide the necessary supports for children especially with immigration background to help them succeed at school. When children are not successful in primary school, they will be very likely to end in the track of Hauptschule, then they just get more disappointed to themselves and only have bad experience with the school.

Even though Chinese classes are also dominated by the didactic teaching, most of the Chinese teachers don't think it's a problem, for they concern more on other topics. Still many Chinese teachers don't think the education in China is successful, one big problem is the education is very utilitarian, and the whole system pursues only the short-term effect of teaching, doesn't take students as individuals but as a whole group, and doesn't care about the personal development of children but only the quantifiable outcomes or statistical data to meet the administrative measurement and requirement, students are just kind of the carriers to show some results that can be counted by numbers.

As the teacher CRB25M has explained, school education is directed and controlled by the administration of the superior departments who give orders to school, saying, in one class there must be 60 percent of students admitted to senior high school, for example, which is like in a factory how many standard products must be produced, then the school and the teachers must try all the best to reach that target, if a school or a teacher reach that number or even more, the school or teacher will be honored and commended publically among all schools or teachers, which strengthens the utilitarianism in turn in school education.

As a result, in the eyes of some teachers, the school is like a smelting furnace or flow line of the production, teaching all students the same level of knowledge, using the same teaching methods, and pursuing one goal as educational results, even the answer to one question in the exam must be only one, otherwise, it's a wrong answer, therefore, when children start the school, everyone is different, but when they finish the school, almost all are the same and they have no their own mind or

individuality, which is the biggest disadvantage of education in China (CHH10M, CHL35M, CRB22F).

2) Not enough teachers

The problem collecting the largest number of German teachers from the interview is that there're not enough teachers in school system. In one class there're always very good students and very slow ones, the German teachers think all students should be supported in the way that they need individually, and some students really need more support, so, for the big class size at present it would be great to have 2 teachers in one class, so that the other teacher can look after the slow or difficult ones. However, actually in some school for example, because of lack of teachers, a mathematics teacher who doesn't know how to play a musical instrument has to teach music.

On the other hand, teachers don't think it can be realized to have more teachers at school, because more teachers cost more money, and the government right now only wants to save money and doesn't recruit new teachers, for the population of students is becoming smaller. As far as teachers are concerned, they firmly believe that more teachers are necessary, so that every teacher has fewer lessons to do every week, and has more time for the individual student.

When teachers find out among students there are more problems needed to be solved than teaching the students English or mathematics, or there are too many students who need to be taken care of, in the end it's always the problem of lack of the time because, without enough teachers, one single teacher has a lot to do, and it's very hard for teachers to help the students. They also believe that, without enough teachers, it's quite impossible for them to concentrate on the students personally, do individual teaching, or offer students the education in an ideal way.

Take an example, the teacher GGH7M in a Gymnasium has 9 classes in Grade 6/9/10/11/12, and teaches 205 students totally in the subjects of Politics, Spanish, Religion, which is quite a lot especially when concerning to preparing lessons in different subjects for students at different ages. Besides the big amount of teaching lessons, teachers also have to correct the tests and homework, do some

administration and management, or other school issues, there is very little time for them to deal with difficult students, but to make the situation worse is there're either not enough social workers who can talk with students and help them, in many cases, several schools share one single social worker.

In a Hauptschule where GHU32F works there're 600 students and one social worker and no psychologist, but they have at least 20% really psychologically ill children with trauma experience, who have been abused in childhood for example, or have very bad experiences in their past, and quite a lot of children there have divorced parents, but the school doesn't have a psychologist or professional one to help them in a better way, and the families don't want to send their children to the therapist. Therefore, besides more teachers, the German teachers also wish to have more social workers and psychologists in the school to work together on students.

3) Hauptschule

A quite number of German teachers from the interview, like GGF7F, GGS5F, GHW2F, GHO7M, etc., think the Hauptschule is problematic and not successful in the school system, and it shows it's a very very bad school especially in recent years. 30 years ago, Phillips (1987) already found that the Hauptschule designed as the main secondary school in the beginning had already been undergoing some kind of identity crisis, and it lost its main role and had no longer served the most population of the students (Phillips, 1995, p.72). At this moment, the Hauptschule does lose its attraction among parents, and most of the parents are not willing to send their children to the Hauptschule, as a result, the Hauptschule doesn't have enough students and is facing to be shut down.

One big reason is that the Hauptschule "has become the school of last resort" for students who are not competent academically, "who are the most difficult to handle", and who have many more problems than the ones in other types of schools (Rust & Rust, 1995, p.41). Some investigations also reveal that most if not all of students in the Hauptschule come from disadvantaged social backgrounds and have very difficult surrounding, e.g. they have a lot of problems at home, their parents are divorced, or both of the parents must work, who come from foreign countries and don't speak German at home, thus, the Hauptschule has turned itself into "a

reservoir of social and ethnic minorities that restricts transition to other school types” (Freitag & Schlicht, 2009).

Teachers in this research describe that students in the Hauptschule are slow in learning and need longer time to learn something, normally they have to start from very basic and little things, they give up themselves and don't work hard, they don't do their homework, they talk during the lessons, they don't behave well, and it's very difficult for them to keep the rules and learn how to stay at school. Some research proves that students “in lower ability classes tend to have more negative attitudes towards school and often exhibit poor behavior in the classroom which makes them more difficult to teach” (Hallam & Ireson, 2003). This research also confirms what Hallam and Ireson (2003) have found that there's a “strong agreement from teachers across all types of school that there were more discipline problems in the lower ability classes”.

In the viewpoints of the teachers, from the first day on when children arrive at the Hauptschule, the society tells them that they are not worth anything, they can't do or reach anything, and as to the children themselves, after they fail to go to the Gymnasium or Realschule, they don't have any self-confidence, they are depressed and have no motivation in learning, they don't know how to read or write, they don't learn enough for the jobs afterwards, so they “often end up in a series of active labor market measures without a chance to enter an apprenticeship or stable, non-precarious employment”, which means they cannot find well-paid jobs, they won't be really good workers, they won't meet the expectation of the society, and they cannot be successful in their life (Jacob et al, 2009).

In the experience of GHW2F, she doesn't feel good about so many stereotypes on the students of the Hauptschule, which she thinks is unfair, because they are just normal kids, who sometimes have problems, who might have some difficulty at learning, and who sometimes are a little bit rougher in using language, but they are really beloved children. Forman and McCormick (1995) think that the situation can also be caused by big miscommunications or “misunderstandings between teachers and students” when they don't have the same or “similar cultural or linguistic background”, and the “misunderstandings can result in students being inappropriately taught or even misdiagnosed”.

It's undeniable that children who don't speak the German language can also be smart, which are mostly seen on the children with immigration background, but the problem is, because of "communication difficulties or emotional reactions to acculturation", they "may be misdiagnosed as exhibiting language impairments, learning disabilities, or behavior problems", which teachers usually respond to by reducing the academic demands of teaching, then the children just become more bored in study and alienated from the school (Forman & McCormick, 1995). However, it cannot be only one or two factors causing the present situation of the Hauptschule, which can either not happen in one night.

4) Knowledge-centered education

Some Chinese teachers don't think it's successful or correct to pay too much attention to the knowledge teaching, however, in the education system of China the Gaokao is the final goal of all the efforts, which is an exam only about the text knowledge measured by the scores. Therefore, due to its importance, the school is led into knowledge-centered education having no concern on the development of children individual as a whole person, and students' school life is only about learning knowledge.

The fact turns out, as the Chinese teachers have in their classes, that there are quite a few students who can get high exam scores but have poor abilities necessary and important for life, who lack the abilities of imagination, curiosity, creativity and critical thinking in particular, and not many of them have their own opinions or thoughts. In the opinion of the teacher CRB6M, the phenomenon of 'high score and low ability' exactly describes the students in present situation of education in China.

Due to the more and more fierce competition among students, many teachers have confessed in the interview that they have to do the intensified exam-oriented training on the knowledge covered in the exam according to the instruction of examination outline, but as to the knowledge that will not or seldom appear in the exam, it is not important for students to learn and can be put aside, which don't make some teachers feel well.

The teacher CHL35M call upon a new national policy that could have the orientation and consideration on the all-round development of children, and he believes that it's good for students to learn more basic knowledge, but paying attention to the knowledge shouldn't mean that students study only the text knowledge in the textbooks and have no chance to take part in activities for the development of other abilities.

5) Big classes

3 German teachers and 2 Chinese teachers think big class size is a big problem in the education system, e.g. in one class of a senior high school there're usually 70-80 students, which might be a big reason that individual teaching/learning is not a topic in the minds of Chinese teachers, and teaching in China is teacher-centered. German teachers strongly appeal for smaller classes, because they want to do individual teaching, but one class with more than 20 students now is too big for them and they cannot reach every student, for them 20 students are enough for one class, and 15 will be very lovely.

It is true that in a big class a teacher cannot pay attention to each student, but whether the class size crucially influences or decides the student performance on study or not has been a topic intensively discussed in recent years by many researchers, according to Kempkes (2009), like Hanushek (1986, 1999, 2003), Card and Krueger (1992, 1996), Weiß (1997), Hoxby (2000), Krueger (2003), Rivkin, Hanushek and Kain (2005), Wößmann (2005), Wößmann and West (2006), etc., who, however, have not reached "a generally accepted common conclusion, but the prevailing opinion appears to be that smaller class size does not per se lead to higher student performance" (Kempkes, 2009).

6) Student evaluation

Quite a number of Chinese teachers believe student evaluation is a big problem in the education system of China, because the evaluation only depends on the exam scores, which is not reasonable or successful to evaluate students, for many aspects of a person cannot be measured by scores, and it is not fair for students who work very hard, but cannot get good scores in some subjects which they are perhaps not

talented at. Moreover, they think another disadvantage is that children are sorted out clearly into different levels through one examination after another, and it is unfair for those who are weeded out of the school system just by the exam scores.

The reality is it is indeed the evaluation that decides what kind of school or college students will further go to, and defines the reputation of teachers and schools, so the schools put a lot of pressure on teachers and the teachers have to pay almost all the attention to only scores, for students also want higher scores to go to better schools or colleges, so as to have better jobs and life later. Teachers believe that the evaluation decides what they teach, and if the student evaluation could include other aspects except the scores on text knowledge, they would certainly also cultivate children in those aspects, however, when still only the score matters in the evaluation, nothing in the school can be really changed.

The teacher CRB3F from a junior high school doesn't think the student evaluation in the period of compulsory education is good enough, because there's kind of no requirement on students who can graduate no matter how they have done at school, which is not successful. So from her opinion, graduation should have some certain requirements for students to reach like some credits and abilities, and only when students meet all the requirements, they can be qualified to leave school and enter into the society, otherwise, they should not be allowed to graduate from school then.

7) Teacher evaluation

4 teachers from different junior high schools agree that the teacher evaluation is not successful in the education system of China, because a successful teacher is mostly defined by the teaching performance and the teaching performance is measured by the students' study performance or their exam scores simply. If a teacher's students have good study performance or have the highest average exam score among students of all classes in the same Grade, then that teacher can be awarded as excellent teacher and could have the biggest chance to get the promotion with higher professional title that means also higher salary. CCD14F is an example who gets that benefit, but CHL10F is not that lucky and still have the lowest title compared to those with the same years of teaching.

Some teachers mentioned in the interview, if a teacher paid a lot of attention to his/her students' development on their personality, morality or social ability, etc., but the students' study performance was not very outstanding or many of them even could not pass the exams, then parents, school leadership and the society would not be satisfied with his/her teaching, and from the teacher evaluation he/she was not a good or qualified teacher. What makes the teachers feel more stressful is the comparative evaluation with other teachers teaching the same subject in different schools, which is a nightmare for the teacher CRB21F, because in another school there's one teacher who has much higher average exam score of his students than her, which is too high for her to reach and has frustrated her self-confidence very much.

Besides the teaching performance, teacher evaluation has also other requirements on teachers, which some teachers think are too difficult for teachers to do, for example, the evaluation says teachers should do some professional research, publish some articles and write teaching diary, which are quite unrealistic in their eyes, because, on one hand, they have no time to sit down for that due to the big pressure from exams and time limitation, on the other hand, what they do every day are actually very trivial things and they cannot write records right away when they tutor students in/after class or correct their homework/test paper. But beyond all the necessary work, they also have to spend a lot of time to make counterfeit files for the inspection and assessment on the school from the superior departments.

8) Teaching materials

As the result of the interviews shows, German teachers especially from the Realschule and Hauptschule have problems with teaching materials, they don't have enough books, teaching equipments, or materials to do experiments in biology and physics for example, and sometimes they have to make the teaching materials by themselves. Some teachers think that teachers nowadays have to be updated with modern teaching media, and the media have to be in every classroom, not just in one room, because in the real life the children are surrounded by all kinds of media and technology, the teachers' teaching has to connect to their real life so that it can be more interesting and attractive to the students.

What bothers the teacher GHH38M very much is the big change in students' subjects in recent years, e.g. some subjects like home economics is abolished, and many subjects are put together into one, such as biology, chemistry and physics are together, and history, geography and social affairs are in one book as one subject, the idea is that students are supposed to learn to think in a way of combination or in other contexts. But he doesn't think that's a right way, instead, he believes it is important to put everything into the right context, let history be history, geography be geography. Honestly he is quite not content with that change, not only he but also GRE35M admit that they are not able to teach the new subjects, because they didn't learn all the included subjects for becoming a teacher and they don't either have any chance to do on-service training related to the new subjects in the university. So they don't think the situation is OK.

9) Not enough rooms

From the opinions of some German teachers, there're not enough rooms in German schools for teachers and students. Almost in every public school, there's a big teacher room for all teachers, where, however, there're no enough private places for teachers to sit at the desk and work on their own or with the computers to prepare the lessons for the next day. Teachers think they also need a room where they can relax and talk with students personally in a successful way without disturbance, and it's also necessary to have more rooms where students can make tea, relax or read books in the corner.

10) Not enough money

Several German teachers believe that the education system of Germany doesn't have much money, and the schools don't have enough money either and they have to wait for money to buy the books for teachers and students, what's more, there's either no money to have more teachers, smaller classes, more rooms, more teaching materials or media. Teachers said in the interview that they were told that they should know one thing that any change in the system should not cost more money, but in their opinions, without money, their beliefs and wishes won't be realized, and many things in the education will not be possible.

11) Teacher training

Several German teachers from different tracks of schools told that from their experiences the teacher training in Germany was not successful. As to the teacher GRK4M from the Realschule, the teacher training before being a teacher in a school is the most disappointed time for him, because the prospective teachers are taught just to follow the 10 rules about how good lessons have to be structured, e.g. have a good time organization, make different forms of lessons, keep contacts with students' eyes, and use teaching equipment like beamer, etc., then they are good teachers, and will have success in the career.

The teachers involved also state that they did not have the education they need for the real situations in class, but only some study on their subjects and some seminars that had to do with philosophy and a little bit psychology, and a little educational training at university but not in the school, which was not practical or pragmatic, not something that they could actually use later in their own classrooms. Moreover, the social skills and some methods of dealing with children were not taught that well in the university as well, in their eyes, whatever they have learned is not a concept.

Lasley (1980) confirms in the research that the courses of teacher education do very little on preparing prospective teachers for the real class, and in Lasley's opinion, "teachers, particularly new teachers, seem to believe that some things simply cannot be taught by college professors...and some skills are learned only through experiencing the real classroom". But from the other side, it's also true that in the university "students and professors take for granted that their study is not oriented to the practice of teaching itself but focused on scientific inquiry. Every university offers pedagogical studies, but students who take these courses also confront a strong scientific orientation rather than one designed to prepare them for teaching" (Rust & Rust, 1995, p.53).

Then when the teachers start to have their own classes being alone there, they just find they are not prepared to deal with the cases in a real teaching circumstance, they didn't learn how to handle all kinds of the situations, and they have to struggle and try different ways until they find their own ways. Like the teacher GGH7M has said in the interview, teachers usually choose the values they care more about or

more important for them individually, choose educational ways and rules differently, even in the same subjects, they have different topics and examples that are more impressive for them personally, so everybody does just what he/she likes.

12) 8-year Gymnasium

The Gymnasium used to be 9-year long, but in recent years, it was changed into 8 years with one-year cut, which 2 Gymnasium teachers in the interview have expressed their big disagreements upon and believe is not a wise decision, at least not a decision for the preparation for the university. The result is, because students lose one year of school time, they are seen to be less prepared for the university than before. The teachers in Gymnasium think it is a big problem of the system, because the school education on the final exam is losing the quality and level, universities complain about the capabilities of students, and they get every year students less able to begin their studies in the university, which means the Gymnasium passes some of the work to the university.

In the viewpoint of GGH7M, that's not really the way to be, then it might need an additional way that the students have one preparation year between the Gymnasium and university, which will go beyond the public school system and the students themselves have to pay for, but that new sector of private education is against the policy of the free public education in Germany, which is essentially like penalizing families with children again, because the parents have to pay for it, then future parents will think even more about having children or not, in the end, nothing is economized.

Since the G8 started, students have to stay at school in 3 or 4 afternoons per week, 2 more afternoons than before, so the problem now is that they have the lack of free time for themselves, for their own development, and it's very difficult for them to practice sports and music instruments. As far as GGD15M is concerned, it is important that the students should not only live for the school life and for their learning, but also live in the society as members of sports groups or church groups, so they need the free time to develop in their own ways, and he thinks the student's personal inner development like getting responsible for example is much more important than learning Latin vocabulary in his class.

Even though GGD15M doesn't agree with this G8, he also thinks that perhaps the idea of the G8 is to keep children longer together at school, for it's very important for many parents, who work the whole day long, to let their children stay at school, so that they know where their children are, and they don't need to worry that their children stay alone at home doing something that no one knows, or stay too long time with a television set or computer games.

As a matter of fact, in the Gymnasium, there are also some students with different cultural backgrounds or with divorces in their families, who come often to school without their homework, so for them it's good to stay longer at school, where they can get some help at their homework in extra courses, and have possibilities to do some sports or something else. But GGH7M doesn't think it's a good idea to just keep students longer at school for doing the homework, and the teachers wouldn't like to stay longer at school for that.

13) Social background matters

Some teachers believe that the success in Germany is not because of the education system, but because of where the students come from or what kind of family they come from. If some children have the immigration background, or have immigrated into Germany from foreign countries, they are more likely to end up in the Hauptschule than in the Gymnasium, for in Germany the home situation and the social background decide so much on the school career of a child, which is not good or successful in the perspective of the teacher GGM10F for example.

A lot of investigations have discovered that the student body of the Hauptschule is dominated by children from disadvantaged social backgrounds and the foreign born, and the children of migrants, guest workers and asylum seekers are much less likely to receive a Gymnasium recommendation, but have largely been channeled into the Hauptschule, as a result, the Hauptschule has become a reservoir of social and ethnic minorities who have to face also salient disadvantages and restrictions in the school transition (Rust & Rust, 1995, p.42; Jürges & Schneider, 2007; Frankenberg et al., 2013).

Furthermore, Alba et al. (1994) also reveal that the children, whose parents are occupied in the simple manual, service or agricultural professions, have markedly fewer chances to go to a Realschule or Gymnasium, but have remained over-represented in the Hauptschule, and their research also declares “unambiguously that some of the largest non-German groups in Germany are disadvantaged in its school system: their children are more likely to be placed in the lowest track of that system”, and leave the school with a Hauptschule leaving certificate without a chance of getting an apprenticeship.

There are actually more studies showing that in Germany “the correlation of parent’s education or income with their children’s track choices is very strong” (Kempkes, 2009), and especially the father’s occupation has a significant influence on the children’s secondary school decisions, for instance, “children whose parents have finished university have a 4.3 times higher” probabilities of attending a high-ability track than the “children whose parents have at most a Hauptschule leaving certificate” (Jürges & Schneider, 2007), and statistically “only 11 per cent of working-class children attend the Gymnasium, while the percentage of children of civil servants” and self-employed professions “remains at 50 per cent” (Hahn, 1998, p.173).

German teachers find in their teaching experiences that, if children are supported by their families, most of them are successful in the school, but when children come from families who have many problems, are not rich, or both of the parents have to work the whole day long, or are immigrants with language problems, the children have no supports from their families and cannot learn German language well, then they won’t be successful at school, also because the education system in Germany doesn’t help them and the school doesn’t help them, in the end people from lower classes won’t be successful in Germany.

Take an example of the Turkish people in Germany, like the teachers have noticed, very often the parents only speak Turkish at home, they don’t know what is going on in the school, and don’t know how to support their children, then most of the time the children are not successful in the elementary school partly because of the language problem, and they don’t learn how to read or write, and their problems just

go on and on, the more unsuccessful they are in the end of elementary school, the more possibly they go to the Hauptschule instead of the Realschule or Gymnasium.

14) Parents' decision on schools

A teacher from the Gymnasium and a teacher from the Hauptschule don't think it is good to give parents the freedom and rights at the final decisions on the school placement of their children. In Germany it used to be the teachers who gave the final recommendations and decided which tracks of schools children would further go after primary school, and if the parents didn't agree with teachers' recommendations but wanted to send their children to another school, the children had to take a test, and if they didn't pass the test, they would not be allowed to go to that school.

But now parents can choose freely and decide which school their children will go, which makes the situation very different from before, because from the teachers' experiences almost no parents want to send their children to the Hauptschule, and especially in Tuebingen many parents are academic, who also want their children to go to the academic track, Gymnasium, as a result, there are fewer and fewer children coming to the Hauptschule, and some Hauptschulen are closing down. Right now in the Gymnasium there're very different levels of students there because of the free decisions of parents, and it's not like before that all the good ones went to the Gymnasium, so for teachers in the Gymnasium they feel it is very difficult to teach the students all together.

Jacob and Tieben (2007) explain the parents' school decisions from a 'perspective of social stratification' by using the theory of "relative risk aversion", which shows educational attainment determines the "social status to a large extent", and they think parents usually "encourage their children to strive for at least the same educational level as their own to avoid intergenerational status demotion", and at the same time, those "children from lower educated parents" are prevented to "strive for higher education than necessary to maintain their family's status". From all the states in Germany, the parents, who are "civil servants, the self-employed and white-collar workers", have "a three times higher probability of sending their children to a Gymnasium compared to blue-collar workers" (Kempkes, 2009).

In the opinion of the teacher GGM10F, when the parents send their children to the wrong schools, it is the worst thing the parents could do to their children. As to the students themselves, teachers have mentioned in the interview, they really struggle and are unhappy in the Gymnasium, because they are just not very good students, they can't follow the lessons, and they get bad marks, then they have to transfer to the Realschule, and later in Grade 6 or 7 they go to the Hauptschule, which give the children only bad experiences with the school, and finally in the Hauptschule they just sit there and think that they couldn't stay in the Gymnasium and couldn't do anything good, then children won't have a successful development in the school.

From the early research of Prais and Wagner (1986), they have realized that parents do want "the best type of school" for the children, but they should also consider that the school should not be too difficult, otherwise, the children might more likely "be obliged to repeat classes" or transfer to a lower track of school, if they can't "reach the requisite standard at the end" of the academic year (Phillips, 1995, p.97). The teacher GGF7F said she would not force her son to go to the Gymnasium if he was not interested in thinking, reading, learning languages and everything, but would have decided to let him go to another school where he could learn more practical things, for the school type is not better or worse, it's just different.

15) Comprehensive school

As the former research shows, in Germany most of the parents, teachers, school leaders are not "in favor of a unified comprehensive school system", especially the parents who are "opposed to unifying all school types and students into one comprehensive school" (Becker et al., 2016). The teacher GGF7F also mentioned in the interview that the parents would go to the street to protest if the Gymnasium was replaced by the comprehensive school. GGM10F has heard that the political thing at the moment is that they want to teach children with different abilities together, and to put the Hauptschule, Realschule and Gymnasium together, which she is strongly opposed to.

From GGM10F's teaching experience, in the Gymnasium she has got a wide gap between the best students and the weakest ones, and she doesn't think it's good to put all students together in one class even with much weaker students than now, and

it would not work well especially when the class is big with 30 students and one teacher, because those who are unmotivated tend to destroy the atmosphere in class, and the weak or the destructive ones more likely pull down the whole class.

Hearnden (1985) has already proved that the result of investigations from North-Rhine Westphalia in 1979 shows that the students in comprehensive school “have fallen markedly behind their counterparts in the selective system” in the main subjects like “German, Mathematics, English, Physics”, and the like (Phillips, 1995, p.41). In the opinion of GGM10F, if it must be together with all levels of students, then the whole system must be changed and every class has to have two teachers, one works with weaker ones, the other works with the faster ones, or one makes the lessons and the other takes care of the troublemakers.

But the problem is the new comprehensive school – Gemeinschaftschule is being established while the Gymnasium stays, so it is not a real comprehensive school when containing only the Realschule and Hauptschule, but many teachers from this research show their big worries, and they are afraid that it will become a new rest school. To make the situation worse is teachers don't hear any concept about it and nobody really knows how it should work, therefore, in the reality it's like an experiment and every school does its own style of Gemeinschaftschule, which makes teachers hardly believe it can work well.

16) The Gaokao

2 Chinese teachers of senior high school don't think the Gaokao (national college entrance examination) is successful, and in their opinions, the big shortcoming is that one exam score decides the whole life of a student, which should be changed, because a person is much more than what an exam score can measure, and it is not fair or reasonable especially for the students who have special talents on some fields but are weak on other subjects, and in the end they cannot win the Gaokao to get a chance to further develop their special talents in the university or special college.

It is also unfair for some students who usually have good performance daily but, because they are very nervous during the Gaokao and don't get good scores as usual, but the only one score of Gaokao decides which level of university they can go, in

the end, those students cannot go to their expected universities and cannot study the majors they wanted, which could leave them a big regret and actually lead to the big differences in their future life.

The fact is good personality, morality and social skills are not counted in the Gaokao's scores, which might be a reason that many people don't pay much attention to students being good persons, for a high score of Gaokao means someone can be successful with a bright future which, however, might not belong to a good person who fails the Gaokao. Therefore, in some sense, a good score of the Gaokao has become the final goal of all the efforts and hardship of students in the senior high school, who have to clench their teeth to hold on throughout all the school years until the end of the Gaokao, so the end of Gaokao is kind of the end of hard work, and it can be seen that some students don't want to work hard again after getting into the university.

17) Others

① Early school selection

The teacher GHG30F doesn't think it's a good idea to make children get separated after 4-year elementary school, for it's too short time for teachers and parents to really find out the children's abilities, their advantages and disadvantages and to put them into the right tracks. Actually "the early selection of students into different secondary school tracks" has become "one of the most debated" topics about the school system of Germany for a long time, and research also shows "the decision made at the end of primary school effectively limits the educational opportunities of children" (Jürges & Schneider, 2007).

Freitag and Schlicht (2009) argue that the German children are "placed in one of three separate, hierarchically ordered educational programs" in a very young age when the uncertainty of their educational capabilities is so high that the "decisions for school types will thus depend primarily on parents' educational expectations and less on the children's educational goals or abilities". Then it's not surprised to see the strong relationship between children's school career and their parents' professions, and to know some children are placed in the wrong tracks.

In the opinion of the teacher GHG30F, the children should stay together from the kindergarten and go up until their tenth or twelfth Grade. It's heard that there're some ideas to suggest all the children to stay together till the sixth year, and after that they get separated, which, however, is also discussed by some research, which reveals that "separating children later might be beneficial for children from disadvantaged backgrounds", but "tracking after 6th grade is still too early" (Jürges & Schneider, 2007).

② Student mobility

In theory, German students are allowed to transfer freely among 3 tracks of schools when they are not in the right ones, but actually it's really difficult for them to change the schools. According to the experience of GHO7M, when the students are in their line of the Hauptschule, normally they don't change to the Realschule or Gymnasium, because during the year of Grade 5 the differences among students in different tracks become so big that at the end of Grade 5 it's impossible to go from the Hauptschule to Realschule or Gymnasium. GGF7F in the Gymnasium also confirms that sometimes children also change to Gymnasium if they are good enough, but it's a very rare case, usually they go down to the Realschule and Hauptschule.

③ School reform

In GHW2F's opinion, a big problem in German education system is that there are too many reforms in a short time and schools are too slow in changing, sometimes maybe teachers are ready for the change, but the schools don't manage to keep up with the change. When schools start to change, there normally is the next reform coming, so schools are always on the way, always on the run behind the reforms. That's a really bad situation in the eyes of GHW2F, she thinks the government should set a limit for schools to make things done until then, which, of course, means a big pressure, especially for teachers who have a lot of work to do, but it's very important to make something really done.

④ Special school

In the teaching of CCD5F, she feels it's very pity that some children with special talents or very excellent in some subjects cannot have a special school to further develop their talents and realize their values for the society, instead, they are sorted out of the education system by the exams, and cannot go on with the study in senior high school and college. So she thinks there must be some special schools founded for such talented children.

Successful education

In a narrow sense, the main roles of the education include teacher, student and school environment. About what is the education, there're too many descriptions, for example, in Longman education is a process to gain the knowledge and skills, and to develop the mind in learning at school; Harry Chester's schools (1860) explain that "education is the development and training of the human being in all his capacities, spiritual, intellectual and physical"; Ashton et al. (1975) define education as "the means used by society to ensure that new generations will maintain it both practically and ideologically" (cited in Xue, 2005). So everyone has his/her own different understanding on education, so does each teacher. This part is aimed to find out what is successful education in teachers' beliefs and what differences or similarities among teachers' beliefs in China and Germany.

Based on the theory of qualitative content analysis, the categories of coding arise from a couple of times of reading, selecting and summarizing the transcripts of teachers' interviews, involving several related questions about successful education and successful students in teachers' beliefs. All of the coding categories and subcategories are data-driven, and in particular, the coding names of the subcategories almost directly come from the data, but the coding names of categories are at a little bit higher level of abstraction than those of the subcategories. Undoubtedly, the subcategories still cannot cover all the points that teachers talked about, mainly because QCA can only describe some certain respects and doesn't explain the full meaning from every side. However, fortunately, the hermeneutics makes it possible to put every coding in a full context and get the understanding within some particular background, so that every story makes sense by itself.

In the interview, among all 18 German teachers, 11 teachers talked about the successful education from both sides of teachers and students, 5 only talked about teachers and 2 only about students. Among 18 Chinese teachers, only 6 teachers talked from both sides, 5 only talked about teachers, and 7 only about students. It seems that more German teachers than Chinese teachers think of education in two sides, and more Chinese teachers believe the focus of successful education is on students, which means, when students are successful in some ways, the education is successful. One reason could also be that the success of Chinese teachers are largely measured by the study performance of their students and they are more likely to think their students' success is also their success, in some way teachers and students share the same interest, but that's not the case for German teachers, so they are more independent to their students and they see each other as individuals.

Therefore, the first level of coding structure starts from the main categories: students and teachers, the main roles of the education. Only 3 German teachers and 1 Chinese teacher talked about school or class environment, so it's not divided as another main category, but placed in the bottom of the teacher's table. In order to have a better view, the coding sub-categories of students and teachers are in separated tables, and also German students and Chinese students are not in the same table because of the big contents, but all tables are still following the same order in the school codes, like GG (Gymnasium), GR (Realschule), GH (Hauptschule) for German schools, and CH (senior high school), CC (city junior high school), CR (rural junior high school) for Chinese schools.

German students:

Category	GG	GR	GH
Knowledge acquisition	1.more knowledge 2.learning methods 3.get knowledge	1.basic knowledge 2.learning methods	1.basic knowledge 2.learning methods 3.use knowledge 4.study performance
Learning attitude	1.motivated 2.enjoyable	1.motivated 2.enjoyable	1.motivated 2.interested
Learning ability	1.problem-solving 2.organized 3.independent 4.intelligent 5.creative 6.critical thinking	1.problem-solving 2.organized 3.independent 4.concentrated 5.intelligent 6.anti-stress	1.organized 2.independent 3.concentrated
Character development	1.open-minded 2.independent 3.diligent	1.open-minded 2.independent 3.self-confident	1.open-minded 2.independent 3.diligent

	4.obedient 5.responsible	4.optimistic	4.obedient 5.self-confident 6.kind 7.resilient
Social skill	1.social communication 2.teamwork 3.respect and tolerance 4.follow rules	1.social communication 2.teamwork 3.respect and tolerance 4.follow rules	1.social communication 2.teamwork 3.respect and tolerance 4.follow rules
Family support	yes	yes	yes

Chinese students:

Category	CH	CC	CR
Knowledge acquisition	1.more knowledge 2.learning methods 3.get knowledge 4.study performance	1.basic knowledge 2.learning methods 3.use knowledge 4.get knowledge 5.study performance	1.basic knowledge 2.learning methods 3.use knowledge 4.study performance
Learning attitude	motivated	1.motivated 2.interested	1.motivated 2.enjoyable
Learning ability	1.problem-solving 2.self-improvement 3.efficient 4.intelligent 5.exam-taking	1.problem-solving 2.self-improvement 3.organized 4.healthy in body and mind	1.problem-solving 2.healthy in body and mind
Character development	1.independent 2.optimistic 3.kind 4.resilient 5.thankful 6.self-restraint 7.diligent 8.honest	1.independent 2.optimistic 3.kind 4.resilient 5.thankful 6.self-restraint 7.self-confident	1.independent 2.optimistic 3.kind 4.resilient 5.thankful 6.self-confident 7.diligent 8.honest 9.obedient
Social skill	1.social communication 2.teamwork 3.respect and tolerance	1.social communication 2.teamwork 3.respect and tolerance 4.follow rules	1.social communication 2.teamwork 3.respect and tolerance 4.follow rules

Teachers:

Category	GG	GR	GH	CH	CC	CR
Teach knowledge	yes	yes	yes	yes	yes	yes
Cultivate personality	yes	yes	yes	yes	yes	yes

Have good relationship with students	yes	yes	yes	yes	yes	yes
Encourage students	yes	yes	yes	yes	yes	yes
Discipline students	yes	yes	yes	yes	yes	yes
Be a role model	yes	yes	yes	yes	yes	yes
Invest a lot at work	yes	yes	yes	yes	yes	yes
Create learning atmosphere	yes	yes	yes		yes	yes
Do individual teaching	yes	yes	yes			yes

1. Successful students

1.1 Knowledge acquisition

Undoubtedly, in any country, a big reason for students' presence at school is knowledge acquisition, which is also to accomplish the inheritance of human civilization from generation to generation. During the knowledge learning, the students are expected to get the development on their abilities and skills to explore, to know and to manage this world. So, knowledge acquisition is named as the first coding category, since it's also a big topic for every teacher.

1.1.1 Basic knowledge

Teachers in all schools of two countries stress the importance of students' learning knowledge, because teachers believe that knowledge is very important for all professions, it's also the main part of their teaching every day, for which they have to do a lot to help students really learn or grasp some certain knowledge that is the basis for students to do anything later. Teachers in GR, GH, CC and CR think that it's successful when students learn the basic knowledge, and teachers in GG and CH believe, except the very basic knowledge in the textbooks, the students should learn more knowledge for the next step of study in the university, for after GG and CH the students go directly to the university.

In the opinion of GGF7F, except the knowledge of general things, the students in the Gymnasium really have to study a lot and learn everything, they have to read more texts and literatures, and discuss a lot to find their own arguments on some opinions. They have to "learn different values, and learn common knowledge of the society and culture, and also intercultural knowledge that is very important nowadays" (GGH7M). For GGF7F, success doesn't belong only to the best students,

she believes that some students are also successful when they have an increase of knowledge, even though they don't get the highest marks because they don't have that ability, however, they try hard and get the highest they can, for that they are actually much better than those who get higher marks but are very lazy and don't do the best they can.

In the Hauptschule, the teacher GH07M has mentioned that 65% or 70% of their students are immigrants or have immigrant background, they can't speak or understand German well, so the knowledge learning is really difficult for the students there, and they can't get good exam marks, which is a big problem in his school. Another problem among the students is that "they can't concentrate...they just sit and then they start talking, they don't fight for the exercise", nobody does the homework, nobody learns and "they give themselves up and they don't do as much as they can" (GHK5F).

For teachers there it's a very frustrating situation, but many teachers don't give up on students, they try to teach the students very basic things from very easy start slowly with small steps, but 'slow' is better than nothing, for they know the students are not fast, and the students need longer time to learn something (GHK5F, GH07M, GHU32F). As the teacher GHH38M has said, they are "in a type of school that has to wait for those slower ones". Sometimes people talk about the students in the Hauptschule, saying "they are Hauptschüler (Hauptschule students), no value, nothing in brain, nothing", which makes the teachers there believe that their students "should have a basic of good knowledge" (GHG30F).

The Realschule is not so academic as the Gymnasium, or so practical as the Hauptschule, "the main aim of Realschule was and still is to combine text knowledge and practical ability. That's for me and children is perfect, not just brain as Gymnasium, but have the two sides" (GRD21F). Therefore, in the teaching of the Realschule, text knowledge and practical ability are both important, but teachers also believe that at first students have to be able to read and understand texts, and learn the basic knowledge, because "when they do practical things, they need it...it's also very important when they have some jobs after school", and it's also true that the more children learn in the subjects, the better they can experience and understand the world (GRE35M).

Therefore, teachers in the Realschule believe it's a perfect system of the Realschule, and their students have basic knowledge for both sides, when they are ready to leave school, they can decide either to get the Abitur for the further study in the university or to learn something for more practical jobs in a special kind of profession. Still a problem bothering some teachers like GRE35M is that there are "a lot of students, they can read, but if you ask them 'what have you read', they can't say it. They forget it or they are not interested in the knowledge of the texts... they are not concentrated, they have problems to understand what they read", or sometimes they have not learned enough text knowledge since their first class, and their better place should be the Hauptschule.

The knowledge that Chinese students learn in junior high school is the basic of the study in senior high school, so teachers in junior high school believe it's successful when the students reach the basic requirements on the knowledge and abilities mentioned in the curriculum outline (CCD5F), and "when their study performance is good enough to go on with a higher level of study in senior high school, it will be perfect" (CCD14F, translated). This period of school time belong to the compulsory education and the graduation examination, Huikao, is not very hard for most of the students to pass, so normally almost all students can get the graduation certificate, but only a small part of them can be admitted to the senior high school. But the teacher CRB3F thinks, for many students who are not very good at study, it's also a success when they can graduate from junior high school.

As far as the students are concerned, the study in senior high school has a very clear goal that is to pass the Gaokao to be enrolled into their wished universities or the universities their parents and teachers expect. But because of the heavy pressure caused by the harsh competition from the Gaokao, it is far from enough for students just to learn the basic knowledge or the knowledge in textbooks. In a top senior high school where CHH10M works, the students have lessons from around 6:00 till 21:35 every day, and during the whole day, they have to sit in the classroom studying without other activities except around one-hour physical exercise in the playground, and the students in Grade 12, the last school year, also have to study at school in weekends and holidays like normal days.

The teachers CHL17F and CHL35M believe it necessary and beneficial in a long run for students to learn more knowledge at school when they are young, the way of rote memorization is also good to bear something in mind even when they don't really understand it at the time, because when they grow up, they can understand better and deeply little by little with more experiences in their life, but at school they are successful when they study well so that they could have more chances to be also successful in the future. CRB21F always tells her students that learning knowledge can help them judge what the others say is right or wrong and not be fooled, and with enough knowledge they can adjust to the future social life easily.

1.1.2 Learning methods

Teachers in all schools also believe that education is successful when students learn some learning methods and know how to learn. And the teachers in German 3 types of schools even use the same words, saying that students should know and learn how to learn. For example, like the teacher GRR1F stresses, the school should not teach the students only knowledge, the students of today need methods about how to learn really, which should be one of the school's main goals.

As GHU32F believes, it's not important for the students to know the facts or to be able to do the calculation, "the important thing is to know how to learn, because you can't know at momentary students what they will need to know when they are grown-up, the world is changing so rapidly, so fast". So it is successful education when students can use their intelligence to deal with subjects, use the strengths of their personality, use the things teachers teach them and use the methods to do good learning (GRB33F).

As a Physics teacher, CCD5F also thinks that the more important than learning knowledge is to learn the methods of research and problem solving, for the knowledge in physical textbooks is about 100 years ago, it's necessary and useful to learn it, but no one is really interested in the things 100 years ago, so for nowadays' students, it's more useful to get some learning methods and know how to apply what they learn in their life. Teachers also believe that students are different in learning abilities, so it is successful when they develop their own learning methods from the daily study (CCD6M), because with good and effective methods, they can

get twice of the results with half of the effort, and they can make a good foundation for the lifelong learning in the future (CRB21F).

1.1.3 Get/use knowledge

Some teachers in GG and CH pay more attention to the student's ability in getting knowledge, however, teachers from GH and CR care more about the ability of using knowledge, and teachers in CC believe in both. That is a result directly coming from the interviews of this research, which might not be generalized to all teachers in those schools, but is a good example to show how personalized the beliefs can be.

In the experience of teaching, GGB5F got an impression that students did learn something but they could forget it two days later after a test, so she started to think about what is really important for students to learn at school, and what came to her mind is that the important thing is not the things she teaches them, or the things on the paper or in books, for what students learn at school "is always something some people think or thought is important... maybe another person believes that different things are important, so, the important thing is how to get the things I want to know, and not some special things some person thinks are important".

As to the teacher GGM10F, she thinks students should not only know how to acquire the knowledge, but also know where to look for it, and it's very important that they learn how to deal with the internet and they know they cannot use every page on the internet as a reliable source. GGH7M believes that it is successful when students have the capability to learn new things and orient themselves in the subjects very quickly to reach some certain knowledge, and to project and structure the information.

CHL17F also makes her belief clear that successful education is that students are able to gain knowledge and know the methods of gaining knowledge. It makes sense that teachers especially in GG and CH stress the importance of the ability in getting knowledge, because their students not only have to pass the exams like the Abitur or Gaokao, but also must prepare well for the further study in the university, which makes the ability of acquiring knowledge absolutely indispensable and important for the students in GG and CH to learn.

From many years of teaching experience, CRB22F has realized that what children have learned at school could be dead knowledge in the end, and they don't know how to use the knowledge, so she believes the most ideal education is that students can apply the learned knowledge to their future life. In the belief of GHU32F, it is more important to let students use the knowledge than learn it by heart, since the knowledge can be found everywhere when they want, and for students in the Hauptschule, practical ability is more important, so in her teaching she rarely stands at front of the blackboard to explain things, but prepares materials for students to work a lot by themselves or in small groups to find solutions together.

1.1.4 Study performance

Among German schools, only several teachers in GH stress that good exam marks are very important for students. But some Chinese teachers from both senior and junior high schools believe that students should have good study performance, and good exam results of students are part of successful education.

For instance, GHO7M thinks that it is really important for his students to have good exam marks, because “all firms or factories they are looking at the notes” especially on mathematics, German and English, but to his sadness, “50 percent of my students work not hard, they can work hard, I know, but they won't, it is not important for them”, and they just learn 7 days before the exams. In his opinion, a big reason that students have no study motivation is that they “know that after class 9 or class 10 not all but many can't get a real job, in class 9 all the pupils are down and depressed ... then without motivation they go to the next school, hope to get the higher degree, and then after two years they are in the real world” (GHO7M).

In the interview, teachers in the Gymnasium didn't stress the importance of exam results, it doesn't mean the exam like the Abitur is not important, actually it's very important for students, and without the Abitur students cannot go to university, but teachers are not worried about the students' exam results, because whether passing the Abitur or not only concerns the students individually, and has nothing to do with teachers' career or teaching performance assessment or school reputation. In the eyes of GGF7F, the Abitur is not difficult for Gymnasium students, and every year perhaps only 4-5 students of all cannot pass the Abitur.

As the teacher GGM10F has said in the interview, in her state the school system is a bit more flexible than some other states, Gymnasium students and also those in the Realschule can find different ways to get the Abitur if they want. Essentially it's the students' personal responsibility for their study and their future, so German teachers are quite relaxed no matter what results their students get, like the teacher GGD15M, he said in the interview, "for me, it is enough if they are not on the top, sometimes those on the top are a bit strange persons, ...the best students can be very stupid persons with no ideas, no ethic attitude" (GGD15M).

In China, since the rapid development of the economy has been in need of higher-level of qualified personnel, many secondary vocational or technical schools, which provide the further study for the children who leave junior high school and don't go to senior high school, have been shut down or upgraded from 3-year to at least 5-year vocational higher schools. The rest secondary vocational or technical schools are not popular any longer, however, meanwhile, there have been the massive expansion of colleges and universities across the country. So getting a high score in the entrance examination (which is also called Zhongkao) of senior high school has become more important for students to go on with study in the senior high school for an "entrance ticket" of the university in the end.

Hence, as to Chinese parents and teachers, their best wish for children in junior high school is that they can study well to be admitted to the top senior high school, which is a big guarantee for them to be enrolled into a good university in the future, for it's believed that top senior high schools have better teaching/learning environment and better teachers who are very experienced in training students to successfully pass the Gaokao with good results. However, it is also true that the top senior high schools have more intense study rhythm, longer time of being-at-school and much more training through tons of exercises on the knowledge and skills for the Gaokao.

GGD15M has an impression that some parents who are very eager to their children's study and want to push them are not from Germany, but from Russia and China as well, for whom it is very important that their children are successful at school, get the best marks, and always stay on the top, however, German parents, most of them, are more or less relaxed, it is OK for them if their children have to repeat a year, and it is sufficient if the children stay at least in an average level at

school, so they might try to push their children in a way, but not too hard, and they want their children to find their own ways of development.

In China, it is the fact that parents and teachers always push the children to study hard to get high scores in exams, and they assertively make very full study plans for the children every day. In general, Chinese parents eagerly expect their sons and daughters to become ‘dragon’ and ‘phoenix’ - ‘king of the beasts’ and ‘queen of the birds’ in the ancient Chinese legend, which means to be the best of all students or better than others. But the teacher CHL17F thinks that nowadays the parents are changing, and some parents have no high requirements on their children’s study performance as long as the children are healthy and happy at school and do their best, which, however, is actually the case in her type of senior high school where most of the students cannot pass the Gaokao or go to the university, so the parents there don’t expect too much on their children’s study.

From the self-interest of Chinese teachers, they push their students because their teaching performance is largely measured by the study performance of their students, if their students study well and the average exam results are ranked on the top among all students in the same Grade, the teachers can be awarded as ‘excellent teacher’ and have more possibilities to get higher professional title with higher salary (CRB4F). Furthermore, from the social evaluation criteria, education is successful when students have good study performance and can be admitted to top senior high schools or top universities, which some Chinese teachers like CCD19F believe is also the success of their teaching. However, “if a teacher pays more attention to the students’ development on other aspects, but their study performance is not very good, then in the eyes of the school leadership or from the standard of evaluation, he/she is not a good teacher” (CRB21F, translated).

Therefore, Chinese teachers bear a lot of pressure because of the evaluation system and they don’t want to lose their face before colleagues or families because of no chance to be promoted to higher titles. Take the example of CHL10F, usually a teacher like her who has been teaching for 10 years should have 2-level higher title than what she has now, but she didn’t get a chance to be promoted, as a result, she still has the lowest level and low salary that is even lower than the retired teachers’, which makes her very unhappy and depressed. By contrast, for the teachers like

CCD14F who got the highest title faster and earlier among teachers with the same teaching years, she is quite kind of relaxed now.

1.2 Learning attitude

It is said that PISA (Programme for International Student Assessment) reports gave German people a big ‘Pisa shock’, which shows “a large share of students seemingly failed to reach a minimum achievement level by the end of their compulsory education” (Becker et al., 2016). But German teachers like GGM10F and GGD15M don’t think that teaching in Germany is that bad, it is the attitude of German students towards the school that is completely different, and the attitude is it is not good to be the best student, there are some children who want to be very good at school, but many children don’t think it is important to be good at school, because it is not cool to be a good student, perhaps in a way they want good results, but they don’t want to work for it, and it’s fine not to work too much, for they want to have time to play with friends, watch TV, and so on, some students just don’t want to do anything about learning, so it is students’ learning motivation that is very different.

That the learning attitude is put forward to be one of the coding categories is because so many teachers have emphasized the importance of learning attitude, like to be motivated, interested and happy, all of which, in my understanding, belong to the psychological tendency mixed with feelings or emotions. When children have the positive attitude in learning, they are seen as being interested and motivated, and having the willingness and joy to learn and make progress on study. Here it’s found to be necessary and important to highlight it separately, also because teachers in the interview talked quite a lot about that topic, and it’s a big problem having different manifestation modes in two countries.

Attitude is defined as a feeling or emotion toward a fact, or a body posture appropriate to or expressive of an action, which was originally used as a technical term in arts for the posture of a figure in a statue or painting, and later was generalized to a posture of the body supposed to imply some mental state in 1725, and was first recorded in 1837 as a sense of settled behavior reflecting the feeling or opinion. Motivation, as a desire to perform an action, “is a pervasive and important determinant of behavior”, and is also “the energization and direction of behavior”, or is what causes a person to want to

repeat a behavior, and it can be divided into extrinsic and intrinsic motivation (Elliot & Covington, 2001).

Compared with extrinsic motivation coming from external pressures or rewards, intrinsic motivation is more important and more expectant for students to have, which is “the inherent tendency to seek out novelty and challenges, to extend and exercise one’s capacities, to explore, and to learn” (Ryan & Deci, 2000). Research shows that students “who are intrinsically motivated to learn become deeply involved in their activity and devote much time and energy to it, ...also seek to improve their skills and build on what they know, thereby increasing their capabilities” (Wigfield et al., 2004).

As it’s known, the intrinsic motivation can often be driven by the interest or enjoyment in the task itself, and it arises or comes from inside rather than relies on external pressures or rewards. So being intrinsically motivated is closely related to being interested and enjoyable or excited, which is “the natural inclination toward assimilation, mastery, spontaneous interest, and exploration that is so essential to cognitive and social development and that represents a principal source of enjoyment and vitality” (Ryan & Deci, 2000).

1.2.1 Motivated

Based on the interview data, teachers of all schools in both countries believe that it’s successful when students are motivated in study, they feel inside that learning is something important and interesting to do, and they really want to learn the new things and to improve their personal development, so self-motivation is the main thing to reach the successful education (GGD15M). But the reality is another story, teachers in both countries complain a lot that their students have no motivation on study, so this belief that teachers hold is more about an ideal or a wish, because self-motivation among students in secondary school is very rare indeed.

Students in the Gymnasium are the best ones selected by the school system, but in the teaching experiences of teachers GGD15M and GGM10F, they have found many German students don’t care of getting bad marks and they never admit that they have learned at home, they don’t want to be good students because it is not cool to be the best ones in the class, and they just want to be cool and not to work a

lot. GGM10F believes that the students are just not motivated, and the motivation that is within the students is just not there throughout their time at school, the problem is, when in one class there are so many of them who do not want to learn and each of them tries to be cooler than the other, their unwillingness to learn doesn't double but squares, it can really destroy the learning atmosphere of the whole class, then it is very hard to teach and to reach any teaching aim.

Teachers GRR1F and GRE35M from the Realschule think the students at the age of 16 years old or so don't want school, they have their heads full of boys and girls or some other topics, which are much more important for them than their study, and in class for some students it is more important to see what's happening outside the window of classroom, not what the teacher is talking or teaching. Therefore, like the teacher GRF10F also experienced, it is a very difficult time of teaching when students are not willing to learn, especially the ones of 13 or 14 years old, they are becoming adults and are crazy in their minds, they have to go to school but school is not what they want at all.

According to GHU32F's teaching experience, in the past 30 years there was a big change among students in the Hauptschule, which changed her teaching belief a lot, for example, in the first ten years "there were at least 60-70% of the students who wanted to learn, who wanted to have good marks, who wanted to be successful, to have a good job,... in my class at that moment, it is perhaps 5-10% of the students who have concrete aims and who want to be good too", therefore, at the beginning she did perhaps 80% of her work on the teaching subjects and 20% on educating students, but now it is the other way round, 20% on teaching and 80% on educating them right attitudes and bringing up their motivation (GHU32F).

In the eyes of some teachers like GHU32F in the Hauptschule, students there are very much disappointed about themselves, for they are not able to go to the Realschule or Gymnasium. They don't think they can do something, but think everything is too difficult for them, "they give themselves up and they don't do as much as they can,... they just sit and then they start talking, they don't fight for the exercise" (GHK5F). The teacher GHO7M finds that, in Grade 9 all the students are very down and depressed, because they know after Grade 9 or 10, not all but many

of them can't get a real job, they have no motivation on study, and then without motivation they go to the next school hoping to get the higher graduate certificate.

On the surface, it looks that Chinese students work very hard and they can really sit down and study in the classroom through the whole day, but some teachers from the interview have found that most if not all of the students don't like study, they just have to do, for parents and teachers motivate and push them to study by all means (CCD23F). According to the teachers' opinions, most of the cases are it's the parents that hope their children to be enrolled in the senior high school or university, and the children themselves have no plans or goals on study. Another reason is the harsh competition among students in the last year of junior high school, and at least half of the students cannot go on to senior high school, but end in some technical schools or no school (CCD6M).

However, the teacher CRB4F has found that the students themselves don't realize their life will change largely after graduation, and many of them even don't know why they should study, they think they study for their parents and teachers, not for their own, so they have no self-motivation on study. And most of them are forced to study under the pressure from teachers, parents and the final examination, for example, CCD6M would like to improve the sense of competition in a goal-directed way among students to give them more pressure psychologically. But teachers have to admit that all other motivation is not so strong as the self-motivation from inside of students, because when they have self-motivation, they can truly experience the happiness in learning, those push and pressure from different sides don't make them happy (CCD23F).

Therefore, self-motivation is a common topic in any kind or level of schools in both Germany and China, but it's also a big concern from teachers who really agree on the key role of self-motivation in student's learning process, which they believe is the 'engine' of study behavior, and an inner power to push students to want to know things, self-motivation can help students be much more successful than just being told that they have to reach some good results - an outward motivation. So motivation has to be from the inside, otherwise, the study can only be a passive acceptance and a bitter suffering with no joy. Here it's good to enumerate what teachers believe on that point.

GGB5F believes the best way of learning is the students want to find something out by themselves;

GG55F hopes that the students want to do what they have to do, and they really try even they don't succeed in the end;

GGM10F believes it's a success when a student manages to improve himself/herself according to his/her ability and gets a better mark;

GRR1F believes that, after a student gives up on study, but with the help of parents and teachers, he/she starts to learn again and tries his/her best, that is also a success;

GRB33F wishes that students are very self-motivated so that they can go forward to want to know and learn new things;

GRE35M says it is very important that students have the willingness to learn;

GHW2F believes successful students are the ones who understand that learning is important for their later life, who are active participants in class and try to take part in lessons;

GHK5F expects deeply that her students can really try to do what they can and to find out how to get information even though it is hard in the beginning;

GHO7M hopes his students can be motivated on study;

CCD5F believes it is successful when students have the willingness to think about and explore the unknown things;

CCD6M hopes the students can work hard on study with more motivation;

CCD28M wishes the students have ideals and are active to finish the tasks that they should do;

CRB3F believes the successful education is students have the belief that they should study as well as they can to make contributions to the country in the future;

CRB4F hopes the students to try their best to study well;

CHH10M believes, when a student is able to make progress and become better than before, he/she is successful;

CHH18F thinks it is successful when students can achieve self-transcendence and have spiritual growth.

From the personal experience of GGD15M, he was very much persuaded that the motivation should be from the inside of the students, for he witnessed many friends of his were very “bad” students at school, but when they really wanted to do the subjects in the university, they really wanted to learn the knowledge and felt inside it’s important and interesting to learn, then they developed in an incredible way and became the best ones. Self-motivation is very important in the viewpoint of GRB33F too, because in her teaching she has found, even if a student is very intelligent and organized, when he/she is not motivated on study, it is difficult for him/her to use this intelligence successfully.

1.2.2 Enjoyable

Teachers in GG, GR, and CR connect the successful education with students’ being enjoyable in learning and having a good time at school, they believe education is successful when students like to go to school (GRR1F), which seems really a simple wish, but actually a big goal for school education. For many teachers, the most ideal education is that children are happy in learning and can enjoy the study process, they don’t regret what they have to do at school, but feel proud of the education they had, and teachers believe, if the school time is the most beautiful memory of students, they are successful students and the education is successful too (GRR1F, CRB3F, CRB22F).

Teachers personally had either a good time at school or a bad time when they were students, but they all hope their students could have a good time at school, as GGS5F also mentioned, students should remember not only the facts or things they were told, but also their time at school. In China, the situation is too clear to ask students if they like school, even some Chinese teachers like CRB22F and CRB25M admit that the education in China is not joyful and their students have very heavy burden on study. For students, sometimes the study is connected with fear and pain, and usually the harsher a teacher is, the harder the students work on his/her teaching subject in order to avoid the punishment. So some teachers like CRB25M also realize, “when students see them, it is like a mice seeing a cat, they immediately walk away and try to hide themselves” (CRB25M, translated).

If the heavy study burden is the reason to make Chinese students so unhappy at school, then as an outsider to see the schools in Germany, the first thing coming to my mind is that German schools are the paradise of children and German students must be very happy at school, they finish school at 13 o'clock, they have no much homework and no harsh push from teachers. However, the teacher GGM10F has told in the interview that the students don't like school, and some students think education is worth nothing for them, they don't see why they should be at school, or why they should do any work, or for what they need to learn, when they get really bad marks, they say it's cool, and it is cool to say 'I didn't do anything for the test', they just don't care and they never admit that they learn at home.

Before university, students in both countries have to study at school for about 12 years, and during the 12 years, most of their time is spent at school, so they should have at least more than half of the time that they could enjoy (GGS5F), and they should "have a good mood no matter what subjects they study, otherwise, their school life must be very suffering if they are not happy" (CCD5F, translated). So when students like what they do at school and they can study happily, have a good relationship with what they learned, and have a good memory about the school time, then education is successful and their study performance will surely be good too (GGS5F, CRB22F).

Teacher GGH7M shares an opinion that maybe students don't say they like going to school, but afterward perhaps they could say their school time was a good time, they had happy school life and good experiences as a whole at school. For some teachers, it is important that the students have fun at school, have fun with learning, and have fun with other students in class, and they also believe, when someone tells a joke in class and makes everybody laugh, everybody feels good and happy, then with this positive feeling and atmosphere they can learn a lot better and easier (GGB5F, GRD21F). Teachers in the Hauptschule didn't stress that their students should be happy at school, except GHW2F has mentioned that in her teaching she tries to help her students to feel good and have good mood at study.

In the viewpoints of CCD5F, being happy is good and important for student's healthy development in body and mind. But CCD5F believes that to make the students too relaxed and happy in class can also be ineffective in teaching and

learning, because Chinese students, in her understanding, have been constrained and repressed by parents and teachers since their childhood, once they were in a relaxed class, the classroom would be in a big chaos and they would learn nothing, so it is not realistic to make students happy every day with the result that they learn nothing and get very bad exam scores.

1.2.3 Interested

Teachers in GH and CC believe more in students' being interested at learning, as CCD5F and CCD28M have mentioned, when the students like the teacher's teaching and find it interesting, they are willing to study, and when they really learn and grasp something during the study, they will have more learning interest, which, therefore, can be a benign circle to motivate themselves to explore and learn more.

Learning interest is really important in the eyes of GH07M, and he believes it is his job to make some things interesting or bring the students interesting things, which can help them get interested in learning. In the teaching of GHH38M, he always looks for learning interest, and he realizes that, when he finds a point where he can connect with the students' interest, he can catch them by arousing their interest and bring them into some learning, so he believes that, if students are curious and wants to know everything, they are successful, for to be curious means to be interested in life and things. Therefore, for some teachers, students' learning interest is strongly connected to teachers' teaching, "normally learning interest surely works if you're excited about your subject, you teach it well and you make it interesting, you can awake some learning interest in the end" (GGH7M).

As far as the topic of learning interest is concerned, some Chinese teachers like CHH10M and CHH18F have also talked about that they hope their students to have learning interest, for without learning interest, they could feel the study very difficult and bitter, and they have no sense of achievement on study, and without the sense of achievement, they cannot enjoy the pleasure in learning, and without that pleasure, their study is just rote learning which will not reach big success. Even though it's a popular saying among Chinese teachers that interest is the "best teacher" in learning, some Chinese teachers still believe that in the reality it is not

enough only to depend on the ‘interested’, some pressure and push from outside is also very necessary for students (CCD6M).

CR teachers didn’t put ‘interested’ as a role in the successful education, perhaps it’s like what CRB4F believes that the interest is inborn and the subject has nothing to do with the ‘interested’, because the students must learn and recite the knowledge any way, and personally she doesn’t know how to make her students study with interest or to inspire their learning interest. Some other Chinese teachers including who believe in the importance of learning interest also think it is very hard to inspire the learning interest of students, and in one class at least 80 percent of students is very passive on study, who are not interested in study or initiative to explore the unknown things (CCD14F, CCD5F, CHL10F).

The teacher CCD14F has made it clear that she has at least 5 lessons per day, 30 per week, she has no time to search for interesting things or organize an activity for students to learn with interest, so even though she knows learning interest is very important, it’s hard to do it in class. CCD5F has tried very hard to show some funny videos to make students feel interested to the knowledge of physics, but she just finds it very hard to do it often and none of her students like study, so most of the time she has to force or push the students to study.

Teachers in CH didn’t mention ‘enjoyable’ or ‘interested’ on the topic of successful education. On one hand, perhaps it could be not a topic for students in senior high school, for, as teacher CHH10M believes, the students are old enough to have the sense of reason and understand the harsh competition of the Gaokao, they have to make a rational decision to study hard no matter if they are interested or not and happy or not, which is a situation that students have to face and accept, but, of course if they have interest in learning, it’s the most ideal, and if not, most of them can understand that they must study hard.

CHH6F explains that it is a social problem that China is still a developing country with a big population, and Chinese students have to go through this hard time by studying hard without other sources and without good feelings or emotions, partly because the emotions or other abilities are difficult to be measured by scores, in the end only the exam score really matters. In the opinion of CHL17F, she thinks, even

though students have no interest on study, when they are able to finish some tasks and get the sense of achievement, it can be kind of self-motivation to make them more interested in learning.

On the other hand, from the teaching experiences of CHL10F and CHH6F, they both tried to make some fun in class in the beginning after they became the English teachers, they used to show their students some English movies or tell them some English jokes, but unfortunately the average exam results of their students in the end of semester were the worst among all classes in the same Grade of the schools. So, they got big pressure from the situation, from school leadership and the comparison with other English teachers, they gave up their ideal teaching ways and started to teach like other teachers without any fun in class, because, in order to avoid to be the last one in the comparison among teachers, they have to totally focus on the students' knowledge study, and make sure the students grasp the vocabulary and grammars, besides, they must finish the books some weeks in advance before the final exam.

Furthermore, in the reality, like CHH6F has mentioned, parents especially in rural areas of China “don't pay much attention to the happiness of their kids, they even know their kids are not happy about their life and study”, but they think that hard study is normal and is the only way leading to a good future, they often persuade their children to be tolerant and work even harder, saying like “it's so competitive in today's life, and if you cannot study well, you cannot go to a good college; if you cannot go to a good college, you cannot get a good job; if you cannot get a good job, you cannot get a good boyfriend or girlfriend, you will ruin your life, so you will have a bad life. Parents will push or force the kids to study, they have to accept the fact.” (CHH6F).

1.3 Learning ability

According to the theory of general psychology, the word of ability means “a kind of psychological characteristic, and a psychological condition to accomplish some activity successfully” (Peng, 2004. p.404 translated). As to Peng (2004), ability doesn't mean the present achievement, but the individual potential and possibility. In some sense,

ability, as either natural aptitude or acquired proficiency, is the stable individual quality or state of being able, a physical or mental power to do something.

Peng (2004) also declares in his book, which is used as the principal textbook for the university students in the major of Psychology, that “knowledge is not equal to ability, knowledge and skill are the foundation of ability, and only the knowledge and skill, which are widely used and applied, can turn into ability” (p.405 translated). Therefore, ability is closely related to knowledge and skill, which forms and develops in the process of acquiring knowledge and skill, and is also the internal condition and possibility for acquiring knowledge and skill.

There are many kinds of abilities and ability classification, a primary classification is to divide ability into general ability and special ability. Peng (2004) explains that general ability is the basic ability for all kinds of activities, like observation, memory, imagination, concentration, and abstract thinking, etc., which is also called intelligence; special ability means the ability needed in special areas, like music, painting, mathematic, and the like (p.406). Based on the interview, learning ability is also a key word that teachers concern a lot. In this part, it’s supposed to figure out what kinds of learning abilities are the concerns of teachers in their teaching beliefs, or are that teachers hope their students to gain and develop during the process of study at school.

1.3.1 Problem-solving

Some teachers in GG, GR, CH, CC and CR believe that successful education means students should learn the problem-solving methods, so that they are able to deal well with all kinds of problems that they have to face, and know how to find solutions on their own or work out with others, such an ability of solving problems is necessary for the future study where they are able to do the research by themselves, and is also more important for the daily life than only being able to get high exam scores on paper, for it can really help them to deal with the social life easily and flexibly in the society where the bigger problems cannot beat them down, when they have the problem-solving ability (GGH7M, GRF10F, CCD5F, CHL17F, CRB21F).

Teachers agree that, when students leave school, they could forget almost all the knowledge they have learned in class, what’s left with them could be the problem-solving ability that can be taught and trained at school. German children might have

much more chances given by parents and teachers to deal with the situations by themselves, and at school they also have to do a lot of projects which help them develop the problem-solving ability, but according to the teacher CCD5F, Chinese students have not been educated to solve problems by themselves since their childhood, instead, parents or teachers help them do a lot and they just have to recite the knowledge for exams.

From the personal experience of CCD14F, she realizes many Chinese children are lacked of the ability to face and solve problems, they even think it is normal that they are not able to solve problems, on the study they don't try to do the exercises on their own, but just copy the answers from books or other classmates. So, due to the lack of the problem-solving ability among students, in every kind of Chinese schools, there are teachers who believe in the importance of problem-solving ability, and also try to help students develop it as long as it's possible.

1.3.2 Organized

Organizing ability is important for some teachers in GG, GR, GH and CC, but for German teachers, it means self-organized, that is, the students have to know how to organize themselves and they are self-organized at learning alone and also in groups, they can do homework regularly, are organized with exercise books and have a good management, and they know what they have to do, understand they must learn on a certain time every day, they have self-discipline and don't spend too much time at front of the computer playing games, and the point is, when students are organized, they don't really need teachers, and can be successful in their exams (GGH7M, GGM10F, GGD15M, GRR1F, GRF10F, GRB33F, GHK5F).

In the belief of GGM10F, the ideal or successful student is the one who has the sense of duty that school and homework are his/her duty, and doesn't need the mom to say, 'what is the homework? Let's see and do this task', and the one who can sit down and learn vocabulary, which is not fun but he/she knows he/she must do. As far as GGM10F is concerned, if students only do what they like to do at the moment, they won't learn what they should do and how to work, so it is very important that they can learn to organize themselves on study that they know it is not a pleasure, but they need do it and they really do it.

For teachers in China, the organizing ability is more about being able to organize activities in the class, at school or in big events (CCD6M). Self-organized ability seems not a topic for Chinese teachers, partly because Chinese parents and teachers organize and arrange everything for children. From the childhood the Chinese students have learned to listen to what parents say and learned to be obedient and follow, so that they can be ‘good boy’ and ‘good girl’, which also belongs to a virtue in Chinese traditional culture, and before school age children have already been taught by parents that they must listen to and be obedient to teachers at school to be ‘good student’.

Compared with German peers who are expected to be self-organized to deal with their own issues, it is rare that Chinese children are asked for their own opinions, or have freedom to organize their own stuff, or arrange their free time, instead, parents take care of them in every aspect of their daily life at home, and fill their free time with different specialty training classes like playing piano, or language schools for improving English or else. Chinese parents and teachers believe that it is their duty and responsibility to arrange everything well for children. As a result, like the teachers CHL10F and CHH6F have found, when their students in senior high school are asked to discuss and express their own opinions, they have no words to talk and most if not all of them don’t know how to discuss on a topic for they have gotten used to listen to teachers.

1.3.3 Independent

Teachers in German schools believe that in successful education students learn to be independent from the teacher, because the teacher cannot prepare everything for them, and they have to learn to work on their own, do their homework well on their own, have their own opinions, come to their own solutions, and find their own ways right for them after school (GGB5F, GGF7F, GGM10F, GRR1F, GRB33F, GH07M, GHU32F). That opinion is believed to be very much closely related to the culture in the Germany, and it impressed a lot of Chinese visitors that German children are very independent.

It reminds me of two vivid real pictures. The picture in German part is parents are easy to loosen their hands and let the baby learn to walk by itself, for them it’s ok

when the baby falls down and cries, they just watch and wait for the baby to stand on its own, however, in Chinese part the picture is parents hold the baby's hands to help them walk and won't loosen their hands until the baby can walk alone very well, they will be easily upset or anxious and immediately run to the crying baby when the baby falls down on the ground, or in many cases that grandparents help to look after the baby, they can even run faster to the crying baby than the young parents.

On the study issue, the German teachers believe it is very necessary that students learn things on their own with a little help, or they can actively seek for help when working on the difficult tasks, no matter by using dictionary, books, internet or asking teachers. In their beliefs the better way or more effective way of teaching, as teachers GGB5F, GHO7M and others have mentioned, is to give the students some tips or examples, and let them find things out on their own or in groups with other students, not just to write things on the board and let them copy and learn by heart, or tell them that they have to learn this and do that, so, what a teacher should do is to be there for children, to support and help them if they need some help, but let them do on their own when they are able to.

According to GGB5F, now 'independent' has become an important quality which is written in the teaching plan for German schools, and the whole school system tries to teach students to be independent on study more and more, which GGB5F believes is very good and can make students more successful in the long term. In GGF7F's classes, the students can always say what they think and even say something against her opinions, she always likes to have good discussions with students by reading literature, and her students not only have to learn facts and read a lot, but have to have the ability to combine the facts and to think about them, and make their own arguments out of the facts or find arguments in some opinions, so that they learn to feel free to argue, to speak out their opinions and to be independent on study.

From the interview, it can be seen that most of German teachers think being independent is the basic ability for students and is one of their concerns in the teaching, and GGH7M have told that they do independent study every day. However, still about 1/3 German teachers involved in the interview don't think

independence is so important or necessary to improve or highlight at school, because, especially as GHG30F, GGD15M and GHU32F have stressed, they think we human beings are social people, depend on each other, and it is important to be part of the community or the society, not important to ‘do my own things’, since the cost of independence is that students cannot work with the class as a group, and if everyone is independent in the class, it is very difficult to teach, for no one thinks they have to listen to what others say or what the teacher tells, therefore, independence sometimes is an obstacle to learning.

Half of Chinese teachers from the interview have made it clear that they don’t pay much attention on student’s independence in their daily teaching, for they believe more in the paternalistic teaching, and they think they must always be there to manage and supervise students to learn. A chemistry teacher CRB4F in junior high school believes that her students cannot be independent now, because they are too young, and a mathematics teacher CRB6M thinks that teachers have to plan everything well for students, because the lesson time is very limited and the teaching task is heavy, which do not allow teachers to cultivate the student’s independence.

What’s more, some Chinese teachers like CCD14F and CRB6M think that independence is usually learned at home, but in China because of one-child policy, many children do nothing at home and are spoiled like a king or queen, parents are willing to do everything for children and like to decide and arrange for children what to do on weekends and in holidays, children have no need to worry about or decide anything, and when they are at school, what they should learn and what goals they should reach are already planned by teachers, they have nothing to do except study, so there is no need for them to be independent, and it is also hard to do something to train their independence.

1.3.4 Concentrated

Some teachers in GR and GH believe it very important that students can concentrate during the study, and know when to pay attention while teachers are teaching (GRF10F, GRE35M, GHU32F), because they find their students are difficult to be concentrated in class, and they don’t know when to concentrate. According to

GHO7M, in his school of Hauptschule there are quite a lot of students who have hyperactive syndrome and have problems in concentration. For some students in the Realschule, they also have difficulties in learning, and teachers GRD21F and GRE35M think their better place should be the Hauptschule, for they need much slower speed of study, and they cannot follow or concentrate on teachers' teaching.

From the interview with the Gymnasium teachers, most of them are quite satisfied with their students and they think their students are the most intelligent and the most motivated, they can concentrate, work hard and do their homework. In this issue it can be seen that the tracking system does help to sort out the problematic students into the lower track. In class GGF7F allows her students especially in the higher Grade to drink or have gum, and during GHK5F's teaching, her students look around, talk with each other, and simply stand up to get some workbook or dictionary from the shelf without asking her.

So, from another side, it shows that German students are very relaxed and free in class, they are not asked to be concentrated when they are doing something else. However, Chinese students don't have such a freedom in class, they have to fasten their eyes on the teacher who never hesitates to remind them to focus, and for students they do what the teacher say and always ask for the teacher's permission, so the concentration of students is not a topic bothering Chinese teachers.

1.3.5 Intelligent

Some teachers in GG, GR, and CH think, for students to be successful at school, they have to have good intelligent ability and some talents in learning subjects, it's not only that they can study well and are brilliant on papers or tests, but also that they are intelligent in playing with thoughts, otherwise, they cannot get really good marks in exams (GGM10F, GGF7F, GRB33F, CHL17F). From GGF7F's teaching experience, normally the girls always do what the teachers tell them and they learn everything, make everything very nice, but they are not always very intelligent, in the end, still the intelligence counts. Maybe intelligent ability cannot be improved much by teachers, but it's believed as the basic ability for students to be successful at school, so this point is more about teachers' wish on more intelligent students.

Every teacher can realize that students do have different talents and intelligent abilities on study. GGM10F has an impression that those students who have talents on languages get the understanding on what she teaches at the very moment, but for the others who have difficulties in learning languages, she did several tests and explained after every test, they still did wrong after the third same test. Therefore, some teachers believe that one precondition to get high exam scores is that the students must be intelligent, and can use their intelligence to deal with subjects, which is indispensable to be successful students (CHL17F, GRB33F). Of course, if a student who is intelligent does not see the point that he/she needs to do some work, he/she won't be successful at school (GGM10F).

1.3.6 Self-improvement

Some Chinese teachers in CC and CH believe that self-improvement is an important ability of learning, in their eyes successful students are the ones who have the ability to explore their potentials, improve themselves constantly to make some progress and become better than before, and who can achieve the self-transcendence and have spiritual growth (CCD6M, CHH10M, CHH18F, CHL35M).

In the opinion of CCD6M, successful education is to guide children to develop their potentials into full, and teach them how to continually improve their self-cultivation so that they can develop and grow up according to their individual conditions and abilities, and promote their own quality onto a higher level, which is also the aim of the school education, but sadly in the school, the quality education is not there, which makes some teachers think Chinese education is not successful. However, the success of the education does not mean that all students must become the same or reach the same level, because every child is different, so, as long as the children improve themselves, make some progress, and grow up better than before, it is success (CHH10M).

1.3.7 Healthy in body and mind

Perhaps it is hard to say the 'healthy in body and mind' is a kind of learning ability, but it does have very close relationship with learning, and without the health learning is nearly impossible, so, among teachers in both countries health is

believed as the basic condition of learning, and plays an important role in learning behavior, for example, 6 German teachers and 4 Chinese teachers believe that the physical and psychological health is the most important for students to have and to improve at school.

Some teachers agree that with the health the students can learn better and have a good life more easily, but without the health, it is very difficult for them to develop their personality, learning interest, self-motivation, or other learning abilities, especially when they are not psychologically healthy, it is not possible for them to learn properly at school or behave well in the society, and sometimes it is even not possible to do anything else or reach life goals, not only the children themselves but also their families could suffer a lot (GGB5F, GGD15M, GGF7F, GGH7M, GRB33F, GRE35M, GRF10F, CHL10F, CHH18F).

There are also other opinions, for example, GGF7F and GHU32F think physical health can be important and also unimportant, for they have students who are sitting in the wheelchairs and still can be brilliant students in the class. GHW2F also share the similar opinion that health is not the most important thing on learning, because in her class there are 5 handicapped or disabled students who have physical or psychological defects and are not intelligent as normal children, but they are still able to learn.

According to the explanation of GHW2F, it is a new idea of the state to have inclusion education to cover the disabled students or students with special needs in one normal class to make the class as heterogeneous as possible, so that the teacher has to work with the individual student and every student also sees himself/herself in a very heterogeneous group developing their different competences, personality and knowledge on their respective levels. But actually those handicapped students most of the time don't sit together with other students in one classroom, but are supervised to study by another teacher in another smaller room, and the class teacher GHW2F are responsible for their study plans, only sometimes all the students of GHW2F play games together so that the normal students can know more about those handicapped ones or help them a little bit.

In China, there's no that kind of inclusion education in one school and the handicapped children have special schools for them, because, as CHH18F has stated, when the children are not healthy physically, they cannot adapt to the great intension and big burden of the study in the normal school, and when they are not healthy psychologically, they have problems to blend themselves in the social life of school and society. As a mother, CHH18F thinks that it is OK that her son would not go to the college, but he must be healthy, then he can still live a good life in the society, when a child is not healthy, not only cannot the child develop himself/herself well, but the whole family will be in the big sorrow and hopelessness.

As a matter of fact, the teacher CRB6M has realized that there are many Chinese parents who pay too much attention to their children's study performance, and they believe their children will surely have a good future if they study well enough to be enrolled in colleges, however, the parents don't concern the other abilities' development of their children and have no awareness to care about their children's physical and psychological health, unless the children really have big serious problems.

In the cities of China, normally both of the parents work and they are very busy with their jobs and have no time to spend with or care about their children who are looked after by grandparents in most of the cases, and in the poor rural areas, many couples go to the bigger cities for work and leave their children at home alone, who are now becoming a new emerging special group, so-called 'left-behind children', who don't see their parents for months or years, and if there're no grandparents, the older ones have to take care of the smaller siblings, therefore, many Chinese children have the feeling of being neglected and abandoned, and their psychological conditions are not very optimistic.

Another big fact is that, the divorce rate of Chinese couples now is increasingly high, which has become an obvious social problem and has dramatically been changing the children's life, in the classes of CCD14F, many children from the divorced families are not wanted by the father or mother and have to live with grandparents, they all have more or less psychological problems. But in Chinese secondary schools there are no teachers like social workers or psychologists in

German schools to help difficult students or those who need some professional support in psychological health. Due to the lack of knowledge in psychological health, many Chinese parents especially in smaller cities and rural areas don't want to send their children to psychologists, for in their eyes those visiting psychologists are kind of psychopaths who will be laughed at and looked down on by others.

According to what teachers have mentioned in the interviews, from the side of school, even though the Ministry of Education has declared that the sleeping time of students in secondary schools shouldn't be less than 8 hours, the school seemingly doesn't pay much attention to that, but puts too much pressure on students with many lessons and a lot of homework, so that students can only sleep 4-6 hours every day, which makes the students have no enough sleep for a long time, and results in their physical decline and decreased eyesight.

In a conversation with a mother, she told me that her daughter was in junior high school and couldn't finish her homework until midnight every day. In CHH10M's classes of a top senior high school, almost every student is shortsighted, partly because they really study the whole day from very early morning to the late night. CHL17F finds that her students are very sleepy in the daytime and always try to take a nap during the class break time, so, students' having enough sleep has become her biggest wish. However, making the situation worse is the students have no enough sports or activities in the school.

1.3.8 Others

Besides the points above, some GG teachers also believe in the abilities like critical thinking and creative. Creative ability is very important for GGB5F, and in her opinion there are different ways to be successful, it is not only the smart ones or someone working hard, but the creative ones sometimes in the end can be successful. Based on the personal study experience, GGF7F believes that the successful education is to develop students in critical thinking, who can think for themselves and believe not everything people tell, and then they could live a better and fulfilled life, which she thinks is the most important for human beings. That is why she always likes to make her students have good discussions to find their own

arguments, and lead them to think about their own life and how to do something sound with their life when reading literature.

The teacher GRF10F in the Realschule thinks it's very important for students to learn how to handle the stress when they have it or when someone puts pressure on them, in her opinion, some students in the Gymnasium might have psychological problems caused by too much pressure, and they have to learn, learn and learn, it is too much for them. However, GGB5F doesn't agree with that, and it is true that the students in the Gymnasium do have to work a lot more, but they don't get problems because of that, their problems are mostly from somewhere out of school and they bring them into the school.

Some teachers in Chinese senior high school like CHH18F and CHH6F believe that education is successful when students are efficient in learning and have good exam-taking ability, which means they are able to complete tasks correctly within a short time, and they have the ability to cope well with the Gaokao to give the society and everyone who concerns a satisfied answer, which is an ability they must have. CHH18F explains that the Gaokao is just one exam, but in life there are many more 'examinations', if students can treat the Gaokao reasonably, calmly and also positively and self-confidently, they always work hard, their exam results will not be too bad, so the ability of exam-taking is about the process of preparing for and handling the exam, which is what CHH18F believes that a process education is much better than a result education.

1.4 Character development

With 28-year teaching experience, the teacher CCD28M right now is also a headmaster in a city junior high school, besides the role of a mathematics teacher, and he likes to update himself the development of his former students after school, and he has realized that those intelligent ones with good exam scores and also good characters are very successful now in the society, and those with bad scores but good characters are also successful, which makes him believe that their success is not benefited from the knowledge of textbooks at school, but their good characters.

GRR1F thinks it is very normal that students forget the knowledge teachers taught them in class after they left school, what's left with them is that they have good developed personality or character. Some teachers realize that the knowledge acquisition is important and necessary for children, but school is not the only place to get the knowledge, and in CHL10F's opinion, for students, most of their time to form and develop their characters is at school, so, the school education should focus more on their character development that has also been mentioned by all other teachers in the interview. Therefore, character development must be a coding category to see what kind of characters are included in the beliefs of teachers concerning to the successful students.

In the knowledge of psychology character is one of the most important and prominent psychological features, and it is believed as a steady attitude to the objective reality and a stable psychological tendency shown in behavioral pattern (Zhong & Yang, 2008). A person's character is mainly formed and developed in the environment of the social life, besides the influence of individual biological factors (Peng, 2004, p.442). In terms of the Cihai online, a large-scale dictionary and encyclopedia of standard mandarin Chinese, character stays as the core part of personality and has a complex structure including attitude characteristic, rational characteristic, emotional characteristic and volitional characteristic.

Attitude characteristic means the tendency of individual attitude to the reality and all kinds of relationships in the society, e.g. attitude to the society, others, study, work and self, etc.; rational characteristic means individual differences in the process of cognitive activities, e.g. active observation, independent thinking, imaginative, etc.; emotional characteristic means the influence of emotions on the actions and the degree or ability of controlling emotions, e.g. emotionally stable, optimistic, etc.; volitional characteristic means individual consciously controlling his/her own behaviors and the effort degree of behaviors, e.g. self-control, independent, tolerant, tenacious, firm, etc.. Here the exact names of characters will be the data-based coding categories based on the interview to explain what kinds of characters are covered in the beliefs of teachers.

1.4.1 Independent

In this research, teachers from all kinds of schools of both countries believe that independent is a very important character for students, and it is successful when students are independent or start to be independent, not only on study, but in daily life that they can handle their own life and arrange their life well, and in teachers' beliefs being independent also means the students have their own minds, get along well with themselves, they know themselves very well and know what they want, they make their own experiences, are able to decide what is right and wrong by themselves and find their own ways (GGB5F, GGF7F, GGM10F, GRR1F, GRK4M, GRF10F, GRE35M, GHK5F, GHO7M, GHU32F, CCD14F, CRB21F, CHH6F, CHH18F, CHL17F).

As to German teachers, they believe it is very important for students to become independent in their thoughts, they don't see or wait others to do for them, but they know they have to do things on their own. The teacher GGH7M thinks it is necessary for teachers to tell students that, when they become more independent, they are able to gain a lot more freedom, then they can open themselves more opportunities and make their life easier.

From German politics to the culture, freedom and democracy are very important, which are also embedded in the education of family and school. Different from the dictatorship of Chinese parents and teachers, as GGH7M has mentioned, German parents and teachers reach a very high level of liberty to let the children choose their own ways of life or their wanted professional life. They would more like to say to the children, "you must find your own way and decide which way you want to go", instead of "you must do this and learn that, or this is the only right way, you have to do this way", so, German children have a good environment to learn to be independent and they are independent (GRE35M).

As far as Chinese teacher CRB21F is concerned, she believes that independence is a high requirement for the good quality of life, children will leave their parents one day, so it is very important for them to learn to be independent, because, from her own experience, her son is studying in the junior high school where she is working, and she has a big convenience to look after him every day even though it is a boarding school, and she realizes that he relies too much on her and cannot be independent in life, and now she has started to have a big worry about how he could

deal with all the stuff in daily life in the future when he went to the senior high school and university, which are far away from home.

In the classes of CHH6F, she often feels boring when there should be a discussion on some topics among students but they are very quiet, because they don't know how to debate and they are afraid to speak out their opinions. She thinks the deeper reason is that they have been educated to listen to teachers since the primary school, and teachers always tell them 'this is the facts, recite it or you will be punished', so they have never had chances to make their own thoughts or express their own opinions (CHH6F). Therefore, CHH6F believes successful education is that students learn to consider things in more aspects and develop sophisticated mind, they are encouraged to have their own voices and present their different opinions, not just to listen to and repeat what teachers said.

German teachers think that independence means students really do their things alone, but Chinese teachers believe independence can be trained better in the group study where everyone must think and talk about his/her own idea together, or one student tutors another or other group members, which can be more efficient than teacher's teaching to all students as a whole (CHL35, CRB21F). Based on the culture, it looks true that Germany advocates more on individualism, and China has a strong 'group culture' or 'tribal philosophy' against individual heroism, and indisputably, school education interprets perfectly the two philosophies respectively and becomes the 'spokesman'. For example, in Chinese education, individuality is not a key word and the difference is not appreciated, instead, commonness is very much regarded, and like CHH18F stresses, individual development should not be self-centered but should be based on the teamwork, so there is no surprise that most of Chinese teachers don't pay much attention to the independence.

1.4.2 Self-confident

Except teachers in GG and CH, some teachers in other schools believe that education should cultivate student's self-confident character, so that students have confidence on themselves and believe in themselves, they can stand and speak in front of the class, freely speak out their own opinions in public, they are not afraid of difficulties, but are able to self-confidently face problems and to be the leaders of

their own progress and development, and they can live their life with full of confidence (GRF10F, GRD21F, GHK5F, GHG30F, GHU32F, CCD5F, CCD6M, CRB3F, CRB22F, CRB25M).

It is believed that self-confident children are happy and positive, they appreciate themselves and believe in themselves no matter what trouble they have, and they can have the courage to insist on what they think and to challenge themselves with a heart free from worries to make progress, and self-confidence can also help them adapt to the society faster and better (CCD23F, CRB6M).

GHU32F believes that self-confidence is very important for students to go on with their study, because in her type of school, Hauptschule, the students are very much disappointed about themselves, the problem is that they started to learn in Grade one also eagerly and “they wanted to know everything, they wanted to write, to read, to understand, and very soon they realized that they didn’t quite fit this system, perhaps they need some more time, or their fantasy, their creativity was not important for the school as for themselves, ...and very quickly they started getting disappointed, and the more disappointed the student is by the end of Grade 4, the smaller the success is in secondary school” (GHU32F).

Then in the end, as the teacher GHK5F sees in her classes, when the children end up in the Hauptschule, they just sit there and think they can do nothing. But GHH38M has different opinions and he doesn’t think the Hauptschule students have big problems on confidence, what he has found is that students between 12 and 16 or 17 sometimes have a little bit too much self-confidence, so, confidence is not the most important to improve at school, except someone with lack of it.

Some Chinese teachers like CCD14F and CRB6M think that Chinese students are very lacked of self-confidence, because, in their opinions, China has exam-oriented education, and the exams are so difficult that each exam basically is a blow for children and they have hardly the experience of success, the sadder is that the children have to do a lot of tests to be trained to get high scores since the primary school, as a result, not only are their curiosity and interest on knowledge learning already gone with too much experience of frustration and failures, but also their

self-confidence was stricken down in one exam after another, and it is very hard then for teachers later to have their self-confidence to be built up again.

CRB22F confirms that children in Chinese rural areas are especially believed to be much more timid and shy than those living in big cities, and they have no much experience of going out to see the world, and they are afraid to speak before other people, so teachers try to give them more chances to stand before the whole class and read some texts loudly for example, hopefully it helps that in the future they could have the courage and confidence to express themselves in public, and have the desire and ability to speak out their opinions. CRB25M believes successful education on confidence's development should be appreciation education, which can make the students feel that they are accepted by teachers and are appreciated for what they do, little by little they can have more self-confidence that is an indispensable precondition of success.

However, many teachers think self-confidence is a part of character, which cannot be taught, some students have self-confidence inside without teachers' cultivation, but children might get and develop their sense of confidence from the experience of success or some encouragement, for example, when teachers give them some good or positive personal feedback every time after a test, or help them find the solutions of some tasks (GGS5F, GGH7M, GRB33F, CRB21F), or encourage them often so that they can keep the mind of 'I can' and believe in themselves that they can do something well (CRB6M), or the students can work out difficult questions or tasks on their own (CCD5F). CHL35M and CCD5F find many students are afraid to answer questions in class, so they try to encourage them, give them some easier questions to answer and hope their confidence can be developed.

Teachers in GG and CH haven't emphasized the importance of self-confidence in the interview, seemingly it's not a problem or topic concerned by the teachers in the Gymnasium and senior high school. For instance, GGM10F doesn't think self-confidence is important for students to improve at school, because from her personal study experience she was not self-confident at all when she was a student, but she was still an excellent student and had good marks. CHH18F believes self-confidence is the nature outcome of hard work, and only through hard work, students can reach the success and then become self-confident by themselves.

1.4.3 Diligent

Except teachers in GR and CC, teachers in all other schools believe diligence is a very important and indispensable character for the success, which should be a concern in the education. In their beliefs successful students are diligent and work very hard on study, they understand that learning is important for their later life, they are active to take part in lessons, prepare for tests well, do their homework every day and make it well done, not fast, fast and everything is wrong or just copy others, and they can also study alone at home, not just five minutes before the lesson starts (GGM10F, GGD15M, GHW2F, CRB25M, CHH6F, CHH18F, CHL35M). It's sure that, if an intelligent student is just being lazy and doesn't see the point that he/she need do some work, he/she won't be successful in the school (GGD15M, GGM10F).

It is not easy to explain why teachers in GR and CC didn't mention the diligence, maybe for them other characters are more important. But it's very clear that no teacher likes a lazy student, teachers in Germany and China have a common wish that is the students could work hard to reach the best they can and have the best personal development like the teacher GGD15M has highlighted. It's true that not everyone can be the top one in a class, but CRB21F believes that, as long as the children work hard every day, even though the results of the tests were not good, they would not regret for their efforts, but if they didn't do their best, then they would regret later.

The school life in senior high school is really hard and bitter, but CHH6F believes a big advantage of the hard life is that during these 3 years in senior high school students can learn to overcome their laziness and develop the 'hardworking' character because of the harsh competition, and in the end after their graduation, the knowledge they have learned maybe cannot be used in the daily life, but that diligent character really matters a lot. Every year there is one or two students who cannot survive the 3 years and drop out of school, which in the CHH6F's opinion means they fail and cannot endure the hardship.

However, from the other side, no one sees the hardship in senior high school is bad or too much for the physical and psychological health of children, instead, everyone

believes in an old Chinese proverb “a young idler, an old beggar”, and in Chinese culture ‘hardworking’ is a highly respected and appreciated ‘good character’. Therefore, it’s believed that students especially in the last year of senior high school must work as hard as they can to fight for the success of the Gaokao, and ‘diligent’ is regarded as one of the most important characters for students to be successful in the beliefs of CH teachers.

To make the situation harsher is, as CHL35M has found, that in recent years, graduation from the college cannot get a as good job as before, since the companies in China have been expecting people with higher qualification, which pushes down the Bachelor’s degree as the basic for a normal job in a low position if not the lowest, some students, who want to find better jobs, have to work even harder to further study in the Master’s programs, as a result, the pressure from study is becoming bigger and bigger. As an ancient Chinese proverb says, “there’s no end in learning, hard work is the boat through the ocean of knowledge and diligence is the path in the mountain of books”.

1.4.4 Obedient

Some teachers in GG, GH, and CR believe that education can be successful when students are obedient and can get everything that teachers said, and the students who do what teachers want them to do are always successful, also because, only when students could listen to teachers and follow their guidance, the teachers could have the possibilities and chances to cultivate them into the successful ones (GGM10F, GGD15M, GHW2F, GHG30F, CRB25M).

However, teachers find it is very hard to enter into the hearts of the students especially when they are teenagers, some are very quiet and are kind of self-enclosed, they don’t open their hearts to talk with teachers about their thoughts, and the others are more or less kind of rebellious in their minds, it looks like that they listen to teachers sometimes, but actually they insist on their own ways and don’t do what teachers tell them (CCD6M, GHH38M). Besides the reasons of students, it is believed that whether students are obedient to teachers or not depends also on the teachers’ personalities and their relationships with students, taking examples of

teachers GRE35M and GHG30F, they're very strong and always straightly make things very clear to students, so their students can understand and listen to them.

But from the teaching experience of GGM10F, she realizes that, when a teacher has no authority among students, he/she says many times of 'please be quiet', the students won't listen, but just go on with their talking and don't be quiet, in the end the teacher won't reach any of the teaching aims he/she planned, and the students won't learn much either in such a class. Therefore, GGM10F believes it's very important that students learn how to obey, and get to know their boundaries, understand what they can do or not do, and they know when to shut up, be quiet and listen in class.

In China, before school time children have been told many times by parents that they must listen to teachers and do what teachers ask them to do, for what teachers say are all correct and good, they shouldn't argue or talk back, but be obedient so that teachers will like them. CHL35M and CRB25M admit that Chinese teachers do like obedient students very much, and in their eyes, it doesn't matter whether the students are naughty or quiet, but if they don't listen to teachers at all, no teachers want or like them. However, CHH6F and CHL10F show their complaints that students are afraid to talk in class, they have no their own opinions and don't know how to discuss or argue, but only wait to listen to teachers and recite what teachers tell them.

In Germany, it seems that children are given a lot of freedom to speak starting from the family, so that the situation at school could be like what GGM10F has experienced that they keep talking when teachers ask them to be quiet, or they keep asking why and then start to argue when teachers tell them they have to do an extra task, and in GGM10F's opinions, the parents should teach their children there is a point where they should be quiet, obey, and don't argue any more, since it is very exhausting to have many students like that. However, some teachers like GHH38M and CHL35M think differently, in their beliefs, those, who always follow what teachers say and do everything that teachers expect to do, might be not successful after school, so, it is good for students to be able to listen to teachers most of the time, but they shouldn't be fully obedient to teachers.

During the interview with teachers, there was a part that I asked teachers to put the words on small cards into an order from the most important they thought for students to improve at school to the less important, the interesting thing was most Chinese teachers immediately stopped talking and quietly ordered the cards, only 4 teachers (CHH6F, CHH10M, CHH18F, CCD19F) among 18 Chinese teachers tried to explain a little why they put in that way when they were ordering the cards. But as to 18 German teachers, only 3 teachers (GRK4M, GRR1F, GHK5F) kept quiet with the cards, and the others talked a lot and even explained each word one by one. Here an old adage 'son is like father' can be actually changed into 'student is like teacher'.

Therefore, when German teachers feel so natural and free to talk about their opinions and the reasons for what they do when I didn't ask why, there's no question that German students like to speak out their opinions no matter for or against teachers', for they do imitate and learn from teachers' manners from speech to behaviors no matter whether teachers expect or not. It is the same with Chinese teachers, most of them just did what I said 'to put an order', without giving me any clue about their thoughts, so, there is also no doubt that Chinese students can do what they heard quietly without arguments.

What's more, I did say the order must be from the most important to the less important, and then most of the Chinese teachers (14/18) just put the cards one after another and then finished. But 13 out of 18 German teachers explained to me that there're several words which they thought were the same important or belonged to each other, so they had to put them on the same level of importance, and only 5 German teachers put the cards one after another like most of the Chinese teachers. Among Chinese teachers, only 4 didn't limit their thoughts that it must be one after another from the most to the less. That confirms again the point discussed just above.

From such small details in the interview, it is very convincing to show how much the students can be like their teachers, and proves that the teaching of teachers is not only the verbal instruction, but also the behavioral arts, they offer themselves as rather influential personal lively models for their students to imitate intentionally and unintentionally. That's why some teachers, like CHH18F, CHH10M, and so on,

believe that most often the education is silent but profound, which is like a picture described by a great Chinese poet 'Fu Du' in Tang Dynasty about the gentle spring rain that comes quietly with the wind in the night and moistens all things on the earth softly and silently. When education really happens, it might often be like that gentle spring rain moistening all the hearts and souls of children quietly and without noticing but producing lifelong influence in the life of children.

1.4.5 Optimistic

Some teachers in GR, CH, CC, and CR believe it's important that students can develop their characters at school to be optimistic, outgoing and cheerful, full of positive energy, they have no anti-social or dark thinking but have a good and positive attitude to the life, e.g. they can love life and love the society, and optimistically handle what happens in their life, and the teachers also believe that, no matter children are good at study or not, if they have positive mentality, keep themselves happy every day and be active in different activities, they are also successful, simply because it is better to be happy and positive with average study performance than to have good performance but being unhappy every day (GRK4M, CCD6M, CCD14F, CCD23F, CCD28M, CRB6M, CRB22F, CHH10M, CHL17F).

From the viewpoint of CCD14F, it is good enough if a student does nothing harmful to the society or doesn't break the law, for she notices there are more negative reports about school violence, or tragic cases like some students killed or poisoned their classmates, which she believes is a failure and tragedy of the education. CRB6M believes that the negative moods can more easily spread among all children, therefore, teachers should be sensitive and lead the students in a positive way, which the teachers CCD23F, CRB3F and CRB22F also agree with, and they underline that they are very cautious to speak and behave before students for fear to give some bad or negative effects on them, and they always choose the exercises with topics full of positive energy and good humanistic feelings.

As CRB3F has noticed, in China, due to the monotonous mode of assessment, those studying well and getting high exam scores are called good students, and people believe only the good students have good future, but those, who cannot pass the exams to be enrolled in senior high school or the university, in the 'colored glasses'

of the society, are useless to the society and are often discarded by the society, even some parents say to their children who are not good at study that they are useless since they cannot study well.

As a consequence, some of the 'so-called bad students' are very sad and normally very quiet at school with few friends, and the others become troublemakers and often make troubles to catch the attention of teachers and classmates, in class they become a special group of marginal students and get little concern from teachers. From CCD6M's teaching experience, the marginal students in his classes usually account for about 10% percent and they do have negative images on themselves since everyone tells them they are bad students, and they are not interested in study, have weak abilities of listening and learning, and they cannot be pushed forward even with the means of punishment, so sometimes he has to give up on them.

The teacher CCD19F also honestly confirms that some Chinese teachers including herself become somewhat utilitarian in teaching, only like and care about 'good students', because the evaluation of their teaching performance mainly depends on their students' exam scores, and they want to get higher professional titles and better salary, and also because everyone's energy is limited, they cannot pay attention to everyone in a class with 60 or 70 children, then they have to give up the 'bad students', and put their energy on those children who can improve the study performance. But CCD19F also realizes that those 'bad students' are really in need of teachers' help, so she has to try to help them as she can.

About how to treat the 'bad students', GGM10F, CCD19F and CHL17F believe that the reproach with a stiff face unfortunately doesn't make children behave better, and what a teacher should never do is to shame or humiliate a child in front of the class, for nobody likes to be shamed before their peers in particular, which inspires only fear and hatred in the hearts of children. For teachers, it is very important to keep in mind that there is nothing bad enough to lose the temper before students, and tell them they are stupid when they make mistakes, or say they are so dull when they cannot understand at the first time, because everyone can make mistakes and mistakes actually enable the process of education to start and give teachers possibilities to teach students.

What CCD19F said is good that “it’s very unnecessary to rebuke or insult children or blame even their family education, sometimes children just don’t really know how to do, and if some teacher thinks students are wrong, it could be because he/she only thinks from his/her own side, and actually students are not intentional” (CCD19F, translated). On the whole, as CCD28M has mentioned, the behavior of insulting students’ personality and hurting their feelings, even when they really do something wrong, is very unsuccessful education which only results in the distorted characters.

Therefore, when there is school violence or some tragedy like students committed suicide after teachers’ criticism or punishment, there are really some questions to think over: are the students the only ones to be blamed? What made them become violent or desperate? What kind of education is behind the tragedy? When the children, before they grow up to adults, have been beaten down psychologically again and again by the language violence of some teachers plus perhaps kind of physical punishment, not only might it destroy the optimistic nature of their characters, but also could create their negative and resentful feelings on others. So, it cannot be denied that the root of successful education at first should be teachers’ good conscience and love on students.

As teachers CHL17F, CRB3F and CCD28M have summarized, it’s very important for teachers to be able to control the emotions, set right their own hearts, bring children no negative emotions and keep spreading the positive energy for their optimistic character’s development, for they have noticed that students can feel and receive it when the teachers are positive, encouraging, and passionate in class. From the bully cases of her students, GGM10F finds that it is also important for teachers not to ignore but to be able to tell the children, ‘don’t do that, you don’t want that either’, and to stop negative talking and behaviors as early as possible, encourage good behaviors, and tell them what is good and right to be expected at school.

1.4.6 Open-minded

Some teachers from 3 tracks of German schools believe open-minded students are successful, and successful education is to make students more open-minded to change a little bit their ways to be fit for life (GGF7F, GRK4M, GRD21F, GHK5F),

but it is not a keyword in the teaching of Chinese teachers. Usually an open-minded person is more receptive to new or different ideas, and is willing to listen to and consider other people's opinions and suggestions. For some children, they have difficulties to learn things by heart and have bad marks in tests, but during the lessons they are open-minded, they listen and talk, which is important and good enough for GHK5F to give them much better marks into their reports.

Maybe German teachers are more open-minded than Chinese teachers who didn't mention that children need to be open-minded, or maybe Chinese teachers themselves are not that much open-minded either partly due to the sort of conservatism in Chinese culture. As CHL35M has also mentioned, Chinese education doesn't encourage open-mindedness and divergent thinking, instead, it emphasizes the importance of memorization and repetition, even the answer to one question in the examination or daily exercise is fixed and can only be one, if a student has a different answer or other opinions, he/she is wrong and cannot get a score from that question, which CHL35M thinks must be changed.

So, in some sense, it can be said that Chinese education is not open-minded either, instead, under the teacher-centered cramming method of teaching, the school education tries to put all children into the same 'mould', and produces a lot of 'products' with a unidirectional thinking way and lack of creative and critical-thinking abilities. As a result, like the teacher CRB22F has also addressed in the interview, when the children started the school, they were very different, but when they finish the school, all are the same.

In the belief of CHH10M, he believes that successful education must have no mode, for the education is not a factory where there must be the exactly same mode for the products, but to his sadness, the school education in China always tries to pursue one mode and one goal, the lessons need follow a set of procedures, and the teaching methods also have some certain modes, which in the understanding of CHH10M could be mainly because of the Gaokao that restricts and shapes everything teachers do in class and limits the school activities.

To be honest, from several German teachers' lessons I was invited to sit in, it's hard to say how 'open-minded' the classes of German teachers are, they have also

didactic teaching, and are not very much different from the lessons in China, for some German teachers like GGD15M, GGB5F and GHK5F believe it's important and necessary to have a very structured lesson where the teacher stands in front of the class, and all the students are concentrated on the teacher and listen to the teacher. They have admitted that they often have no time to let students explore what they are interested in by themselves, and due to the limited teaching time, it is very fast to write something on the board and ask students to write down and learn by heart.

But there're really some German teachers especially GRR1F and GRK4M who don't like that didactic teaching way, because when they were students, they had to sit there and listen to the teachers, write down something from the overhead, and learn things the teachers told them, now they have become teachers, they want to change that and teach their students in another way, to be creative in their lessons and do something special. But later, GRR1F admitted in the interview that she could not be creative in every lesson, most of the time she was just a normal teacher with normal lessons. As to GRK4M, he has been fighting very hard against the system to hold on his teaching philosophy, but in the end he has decided to quit the job for he couldn't hold on any more.

Like Chinese teachers, German teachers also have the teaching plan for every lesson about what should be taught, but different from Chinese teachers, German teachers have a lot of liberty to do what's really important for them or what they want to pass onto students, and it's not a problem for them to put the textbooks aside and choose their own materials, they can also feel free to decide what topics to teach, and develop some new teaching concepts to make their lessons creative and interesting, or share some literature to have a good discussion with students about the life (GGH7M, GRR1F, GGF7F, GRK4M).

However, in China the school education, as teachers CRB22F, CCD23F, CHL10F and CHL17F have mentioned, doesn't concern the children's development as a whole person, only study matters and everything to be done in class must follow and serve the examination plan, and the knowledge included not in the examination plan is not important for teachers to teach, and even the reading is not a free reading to let children enjoy the beautiful sentences or think about the different ideas from it,

but is just a means or medium to train students' reading skills for the exams, like how to find the right answers from the texts quickly without reading through the whole texts.

Till now the Gymnasium is still the most popular school among parents and enjoys an unshakable position in the school system, it's said, according to GGF7F's explanation, that Gymnasium still keeps the Humbolt's humanistic education on a whole person and teaches the characters of children. In GRK4M's belief, he is "working with human beings, not working with machines", "everybody has got their own ideas of exploring the world", and all children should get opportunities to develop themselves, so successful education means to "work with human beings, just talk with them about their beliefs", motivate them to fight for what they love, "find out what they can be proud of themselves", and figure out what kind of people they want to become in the future (GRK4M).

Therefore, for some German teachers, being open-minded is very important, they believe that teaching students doesn't mean just to open the textbooks and go on with the pages, which in the opinion of GRK4M has nothing to do with learning, and there is no learning. But GRR1F thinks that teachers have to do what parents want, otherwise, parents would talk bad of teachers at home or at school, so when the parents want her to finish the textbooks instead of doing more projects, she has to do so. For the students in the Gymnasium, GGF7F confirms that they really have to learn everything, otherwise, they can't pass the Abitur.

So, the teacher GRK4M might be right that, in essence, the German school system is still the same as 100 years ago that "teachers stand in front of classroom, and children just listen and do things what teachers want, not what the children want, and no one knows what they want, no one listening and asking what's going on in their mind", and teachers are there only "because of the political thing, you have 30 pupils at front of you and everybody can have a mark as an answer, and then they can find a job, nothing else, ... you are not the teacher with open mind to help pupils become satisfied in their lives" (GRK4M).

It might be true that the real situation in German schools is not like what's written in the paper, or not so 'open-minded' as the outsiders think, but one thing is sure that

German teachers do have possibilities and freedom to do something special when they are open-minded, they don't have the fear to face the exam results of their students, and German students have no need to be like Chinese peers bearing very much pressure to work so hard and so long time every day including weekends and holidays just for good scores in the exams, for German children study is their own things, but in China children's study is a family thing and also decides the teaching career of teachers and the reputation of schools, so 'open-minded' is not a necessity.

1.4.7 Kind

Some teachers in GH, CH, CC and CR believe successful education is to cultivate children into kind people, and it is important for children not to be mean, but have a gentle mentality and the heart of love on human beings and the nature, to be kind-hearted and virtuous, be friendly and fair to other people, and it is a big part of personality education which is a concern for many more Chinese teachers than German teachers (GHK5F, GHO7M, CCD14F, CCD23F, CHH6F, CHL10F, CHL17F, CHL35M, CRB3F, CRB4F, CRB6M). Both CRB4F and CCD5F think that it is also successful that children can be just ordinary people and not be put in the prison, it is OK to pursuit self-interest, but it shouldn't build on the harms to others or the society, which is the basic morality for a person.

CRB3F pays a lot of attention to teach her students to be kind-hearted and do good deeds even they're small things, and her big wish is that students can be good persons with kind hearts, but she realizes sometimes the society could give them a wrong impression that a kind heart has no good return, and some students question her why the good people get no respect but even are bullied by others, and those who are not kind can achieve much more success in the end, later some students after graduation might change in the bad social atmosphere and don't want to be kind people to do good deeds.

But CRB3F still believes it is important for teachers to do the emotional and moral education in daily teaching, so as to help children build the beliefs of being good people, as a Chinese saying goes, 'do something good even though it may be small and don't do something wicked even though it may be tiny', so when the beliefs become part of the minds of students through small practices day after day, e.g. to

pick up classmate's book lying on the ground, it will be much more powerful in guiding behaviors than just expounding students some knowledge mechanically.

In the opinion of GGH7M, it's important to have good personality, not to be mean, aggressive or greedy, for bad personality is not a really healthy way for living a life, but could bring great difficulties to be happy in life, or to find people who want to be with, with bad personality the relationship in social life will not be very successful. But he doesn't agree that teachers should force any student to be some special kind of person, but he thinks it's necessary to make children consciously aware of how they are seen in others' eyes and how they are recognized what they want to be, for which teachers can give good and bad examples, show them what kind of reactions they provoke, and discuss how they should act or react, still there're many opportunities for teachers to help children shape their mind a little bit to become better persons.

However, some teachers like GGF7F, GGM10F and CCD23F don't think that good personality count too much at school, for there're some students who have very good personality and are very nice and kind people, but have a lot of problems to learn and only get bad marks because they are not intelligent, and in the end they cannot pass the Abitur, or be admitted to senior high school or college, then they are not successful in their study, at least not successful in this period of school life. Therefore, students with kind hearts sometimes can be really unsuccessful at school, but it doesn't mean they will not be successful in the future when they enter into the society (CCD23F).

For many teachers especially GGF7F and GGM10F, they admit that they still like the children with good hearts and good personality, with whom they prefer to drink coffee together, and if they could choose, they would rather to have children with good personality, than to have intelligent "assholes". In the long run, GGM10F and GGB5F believe that good personality is actually the most important and much more important than the text knowledge. In a metaphor made by CHL35M, if those, whose bodies are not healthy, are "defective goods", then those, whose personalities are not good, are "dangerous articles" and could be the disaster of the society, which CRB25M also agrees with.

1.4.8 Resilient

Some teachers in GH, CH, CC and CR believe it is successful that students can be psychologically resilient to the frustration or failures, which means they are able to face frustration, accept and withstand the frustrating situations, and able to handle their failures during the study; they don't give up easily, but have the tenacity of not giving up after many failures, and they can hold on persistently with good perseverance; they are able to conquer themselves, overcome the difficulties, solve emergent problems, and keep themselves going forward to their goals; they can deal with criticism and praise in a proper manner, are not proud of good study performance or feel self-abased to low exam scores, they allow themselves to have up and down in study, and their mood is not very much influenced by the evaluation from others, in one word, students with such a steady and resilient mentality can reach big success (GHK5F, GHU32F, CCD19F, CCD23F, CCD28M, CRB22F, CHH18F, CHL17F, CHL35M).

CCD23F and CHH18F find that, on account of the change of the one-child birth control policy, besides the 'single-child', now more children are the second ones in the families, both the 'single child' and the 'second child' are spoiled very much at home, they are like the plants growing in the glasshouse, and have very much lack of psychological abilities to be confronted with the frustration and adversity, and only a little thing can make them feel unfair. CHH18F explains that very often Chinese parents only blindly appreciate and praise their own children, and neglect the necessary criticism or family education, as a result, many children, especially those good at study, only expect praise from others and can hardly accept the criticism, which is a little bit psychologically unhealthy, and all the good students in her classes have more or less that kind of problem.

Therefore, from the teaching experience, CCD23F and CRB3F realize that generally those good students, who often get high exam scores, need more psychological education on the resilience to the setbacks, which is much more important for them than the knowledge education, because they have stronger sense of crisis and bigger pressure from the severe competition among the good ones, when they get lower ranking places this test than last one, they simply cannot face or accept it, they cry and become very distressed, then they have to be even more hardworking to get

back their former ranking. As a result, for a long time in such a harsh competitive environment without enough resilience against temporary setbacks or failures, “some top students have almost reached the point of the psychological collapse” (CCD23F, translated).

Because of the teaching experience in the Hauptschule, GHK5F gets a belief that successful education also means the students can learn how to deal with troubles and how to go on with difficult things, for which the most important thing is they really trust in themselves and try to do even it is hard in the beginning, perhaps they are not the best students, but they really try to find the answers or find a way to get the information, that character can greatly benefit their later life. But Chinese teachers like CHL17F, CHL35M and CCD19F think that nowadays children are lacked of perseverance and insistence which actually have close relationship with success, if without good perseverance and enough resilience to overcome difficulties, Chinese students cannot have good study performance or get high exam scores at school.

In Germany, it seems not a topic coming to the minds of teachers in the Gymnasium and Realschule, only two teachers in the Hauptschule have mentioned that the psychological resilience to frustration and failure is important and necessary for students. The reason could be “in the last at least 10 years it always showed that the Hauptschule was very very very bad, because the students didn’t have any self-confidence, because the whole society told them that they can’t do anything” (GGF7F), when the children are in the Hauptschule, they are very much disappointed to themselves and very frustrated to the situation (GHK5F, GHU32F). But in China the students in all levels of schools feel unhappy and frustrated in their study no matter they are good or not, which CCD23F thinks is closely related to the Chinese examination system.

There is a Chinese old aphorism from Ming Dynasty, ‘sharp sword gets sharp on grindstone constantly, fragrance of plum blossoms comes from the winter’s bitter coldness’, which till now is still highly appreciated to convince people that success comes from firm insistence and good perseverance through all the hardships and frustration. In the reality, some Chinese teachers like CHH6F, CHH18F and CCD23F really believe the hardship or suffering situation is good for children,

which can make them stronger in their characters, especially strengthen their willpower, when facing the frustration, the children shall think the frustration is a test for them to give them a chance to fight for the success, for success is never easy, without storm there's no rainbow.

CHH6F further explains that, for example, if a student cannot learn mathematics well, he/she has to try the best to work on it under a variety of pressure, and in this process of learning, he/she learns to endure the hard situations, to tolerate all kinds of uncomfortable things, and he/she has to struggle in the study, and to face something that he/she is not good at or dislikes or even hates, but that struggle could largely inspire the potential and the willpower to learn and push the character to grow, in the end that character really matters in daily life instead of the knowledge.

Compared with the good students who are surrounded by a lot of concerns and praise, those children, who are not good at study, are often blamed by parents and teachers, and feel ignored and alone in the class, but CCD23F thinks that negative feeling may be not totally bad, because the children learn by themselves how to survive in such a frustrating situation, and later when they are encountered with the similar situation in the society, they can more easily face and accept than the good students. As CRB22F has also said, “those children cannot understand or follow the teaching at all, but they can sit in class from the early morning to the late evening day after day, with such endurance and perseverance, they can be successful no matter what they will do in the future” (CRB22F, translated).

1.4.9 Self-restraint

Several teachers in CH and CC believe that for nowadays children it's very important to learn to be self-restraint and improve their ability of self-control, so that they are able to control their tempers, restrain their behaviors well, and be a little strict with themselves (CCD14F, CHH6F, CHL17F). CHH6F explains that, if students have enough knowledge but cannot control their own tempers or emotions, then it is difficult for them to complete some tasks successfully or get along well with others, and sometimes due to lack of self-control, they could bring disasters to themselves or the society. In CHL17F's understanding, for Chinese students to get

high exam scores, besides good intelligence, the indispensable ability is self-restraint or self-control.

From the perspective of CHH6F, because of parents' excessive doting on children, some Chinese children usually always get what they want or ask at home, and when they didn't get, they immediately become angry or mad, so since childhood they have not learned how to control their tempers and control themselves, which CHH6F thinks is a big reason that it can happen like a student killed his roommate only because he disliked that the roommate was better than him on study. But CR teachers didn't mention about this topic in the interview, it might be that children in rural areas are not so spoiled as those in cities.

Therefore, teachers think a good family education is very essential and important, which plays a big part in children's character development, but if without the cooperation of family, what school education can do cannot be that much, which is also the opinion shared by some German teachers like GGM10F, GGB5F, GRF10F, etc.. But of course, not all Chinese children are spoiled that bad, in the classes of CHH6F, she takes an example of the successful student, who perhaps never gets good results in the examinations, but he works hard, he is strict with himself and can control his temper, he behaves very well and is a guy with good principles, she thinks people like him normally could do great things in the society.

1.4.10 Honest

Several teachers in CH and CR believe the successful education on student's character is to teach students to be honest, reliable, creditable and upright in morality (CRB21F, CRB22F, CHL10F). CRB21F and CHL10F explain that Chinese education now is only focusing on the knowledge study, but it is more important for students to learn to be a good person with good morality of honesty, because the future society will be a society of integrity, and if a person gave other people the first impression with no honesty or trust, they would not contact him/her any more, and he/she wouldn't either reach much success in the career.

Honesty is very important to CHL10F, she often talks with students about that topic in class meetings, she tells her students that it is normal that everyone would like to

have a good result of examination, but they should never cheat in the examinations to get better results, when they do it, it's like to pour dark ink onto the white paper and it's hard to get rid of it, if they want to have a clean profile when they are leaving school, they should be honest and do everything in discipline. CRB22F believes that, since not everyone can make a living through good study, those who don't do well in study can also live a good life by their own hands when they have good morality.

1.4.11 Responsible

Only several teachers in the Gymnasium have mentioned that successful education should also mean that students learn to be responsible on what they do, especially on their study, they know they are responsible to stay at school and go on with learning no matter they like or not (GGH7M, GGF7F). Actually during the interview a lot of teachers in other schools agree that responsibility is a very important part of good personality, which should be developed during the school time, it is important that the students understand study is their duty, and their responsibility is to try their best to study well (GRR1F, GRB33F, GHG30F, GHU32F, GHW2F, CHH6F, CHH18F, CCD6M, CCD14F, CCD28M, CRB3F, CRB6M, CRB21F).

In CHH6F's opinion, responsibility also means being responsible for oneself and the others, for instance, when a student makes a mistake or does something wrong, he/she should have the courage to admit it and to apologize, which is responsible for him/herself and for the consequence of what he/she has done, that's also very important for students to learn. Teachers GGS5F and GGH7M think that sometimes the students can learn responsibility when they work as a team, where they get to know how it feels when the others are not responsible, so they can get some motive to be responsible, because they don't want others to have the same experience with them. In China students usually take part in the class management, so Chinese teachers think, when they are given some duty in the class, they can feel they are important, which inspires their sense of responsibility.

Responsibility is very important for GRK4M in his teaching, he wants his students to see they belong to this world and are a part of this big universe, they have to

become responsible to protect the world and to serve the people, they should be able to fight against the bad things in the world and to stand for their rights at the right moment, which he believes is the most important part of successful education, and students should know that, when they want to protect the world, the only possibility is that they have good knowledge, without knowledge, they cannot do it well.

1.4.12 Thankful

Some teachers in CH, CC and CR highly stress the importance of being thankful, they believe students should learn to be thankful, they should obey and respect their parents, and don't think that parents should do everything for them, but can understand the love of parents and help them do something at home, besides, the students should also be thankful to the teachers and classmates, because everyone is not alone but is a member of the school community and the society, it is important that they can always thank for what others did for them, and return to others and the society with good deeds, then they are good people and can be successful (CRB3F, CRB4F, CRB25M, CCD23F, CCD28M, CHH10M, CHH18F, CHL17F, CHL35M). But that is not a topic for German teachers.

CRB3F, CHL17F and CHH10M explain that many Chinese children do nothing at home, and they think everyone in the family should take care of them and does everything for them, which teachers think is not a good character, therefore, the teachers believe the gratitude education at school is very important to help children learn to be grateful and thankful to parents, and don't take what parents give or do for granted, then they could also become thankful to teachers, other people and the society. In the eyes of CHH10M, successful students are those who can change their mind through gratitude education, are able to feel the love of parents, understand that parents are not easy, and can help parents do some housework at home.

From the perspective of CCD23F, it is very important that children have thankful hearts and are sensitive to the love of their parents and teachers, and she believes, when the children take that love for granted without gratitude, something precious is leaving far away from them, but when a child has a heart good at feeling love, experiencing love, and loving others, then it is possible for him/her to live in the ocean of love and feel how wonderful the life can be. CRB22F and CCD23F agree

that in their daily teaching there are always chances to connect knowledge study with morality education, even in the exercises they often choose the texts full of humanistic feelings and virtues like selfless dedication, love of parents, filial piety, and so on, to help students have more understandings and practices.

CHH18F believes the most successful education on teaching children to be thankful is experiential education, for instance, in her class, she lets the students teach the lessons one by one like the teacher, each student has to prepare everything alone for the lesson and do the lecture before the whole class. After they finish the whole process, on one hand, they really have very good understanding and solid memory on the knowledge they have explained to the class, on the other hand, they get to know how much work the teachers must do for one lesson, and they really learn to value teachers' hard work and become more thankful, which persuades her to insist on this experiential education when it's possible.

China has a deeply-rooted tradition of filial piety, which means, except being obedient and respecting the parents and the elderly, children must also support and care for the parents when the parents are old. 'Filial piety' is widely known as one essence of Confucius culture and is called Chinese virtue, which is the ethical rock and the top moral norm of Chinese society, and plays a main role to maintain the family and social life in harmony throughout thousands of years. So, Chinese teachers have the big awareness that the 'gratitude and filial piety' to the parents is the core of moral education that should be a part of school education.

In CCD28M's opinion, family is a small society, when a child has filial piety and respect to his/her parents, then he/she is also able to respect the elders in the society, so he believes that school education has the duty to teach children how to behave at home where is the place of practice for the social life in the future. But in a culture where the filial piety to parents is highly demanded that children should listen to and do all that parents say, it's not surprised that perhaps not all but at least most of Chinese parents still overpower their children's life and decide almost everything for their children.

1.5 Social skill

From the realistic angle, successful education surely doesn't mean that all children must go to the Gymnasium or college, for everyone is different, not all children can study well, that's why GGM10F and GHK5F think the most stupid thing for parents to do is to send all children to the Gymnasium where many children really struggle and have only bad experience at school. But "if everyone became a scientist, the society would have big problems" (CCD28M, translated). In the opinion of CRB6M, if the students only have high exam scores, but are very bad at communicative ability, or have no sense of collective honor, or have bad social behaviors, they cannot be successful, or reach big success in the future, in some sense, to learn some social skills becomes a more important topic for children.

However, some Chinese teachers like CHH6F and CHL10F think that social skill needed in the society is what children can learn only when they are in the society, not in senior high school where they can learn nothing else except some text knowledge, and they don't either have any chance to develop it. Similarly, CHL17F, according to some talks with her former students, confirms that the students learn more social skills and abilities in colleges, but in the senior high school their school life is very simple only about knowledge study, and they have lessons through the whole day from 7:00 to 21:30 and have very few activities, actually only in activities, she believes, students can really learn some skills and abilities important for the future life in the society.

As to the teacher CRB4F, she thinks that what she can do is just to help her students improve their study performance, because the situation in the school is that examination scores measure everything, and it is very difficult to do other things in such a knowledge-centered educational background with the big pressure from the exam competition, which she can do nothing against, but she hopes that in class students could learn to communicate with each other and help the others in learning when she makes them study in groups sometimes.

Maybe some people think social skill belongs to the personality or ability, but it is a very topic that teachers in two countries have talked a lot in the interview and highly regard its importance for children to learn and improve no matter in the daily school life or in the society later, so it's found very necessary to discuss it separately as a coding category. What's more, compared with other coding categories, teachers from two countries reach very much more common agreements on the topic of social skill.

1.5.1 Social communication

Teachers from all types of schools in two countries believe that successful education is to help children develop their skills of social communication and become socially active persons, so that they know how to talk with teachers and classmates, and are able to have good communication with people, they know how to deal with interpersonal relationship properly and get along well with others, and they have good behaviors like the way they give their hands, the way they look in the eyes of others, the way they are dressed and smelled, in short, social communication is the basic social skill children need in their future social life, and a good ability in social interaction can be more likely to lead to the success than good study performance or the professional working capability (GGS5F, GGB5F, GGH7M, GRF10F, GRD21F, GHG30F, CCD5F, CCD6M, CCD14F, CCD19F, CCD23F, CCD28M, CRB4F, CRB6M, CRB21F, CHH6F, CHH18F, CHL17F, CHL35M).

CCD5F, GGS5F and GRD21F have discussed that school life should not be only about studying knowledge to get good marks in exams, since, if that was all students could do, they wouldn't enjoy school time very much, instead, they should keep in mind that they are going to enter into the society soon, it is very important that they are socially competent and become social persons to be involved in some experiences of social life. About the social life, GGH7M thinks nowadays it is more important for students to know about the interpersonal interaction and "to be able to interact in a conflict way or in a diplomatic way, or in a way that you can achieve your goals without struggling too much, if you don't know how social interaction works well, how you have to treat people, it's very difficult to succeed your profession" (GGH7M).

From the observation of CCD28M, compared with 10 or 15 years ago when the communication was more face to face, he thinks now it is more through Internet or different means of information technology, as a result, many children indulge in an unreal world, and communicate very little with their families or people around, they are very poor at social communication and interpersonal skills.

Besides, some Chinese teachers including CRB3F, CRB22F, CCD14F, CHL17F, etc., have mentioned that there is a phenomenon among Chinese students that is

high score and low ability, which means many students with very good study performance put all their focus on subjects' study without much concern on other things, so they have either bad communicative ability, or poor practical ability, or low level of morality. In the eyes of CCD19F, if some good student is also good at interpersonal communication, then he/she is really excellent and successful.

As some Chinese teachers have honestly confessed in the interview, their main task is to help their students pass the final examination of Zhongkao or Gaokao, because it is the principal requirement from the school and educational bureau, and is also the biggest expectation from the parents and many students themselves, all in all, the exam score is all-important and other things have to be put aside. But teachers CRB21F, CHL35M and CCD23F keep the opinion that school is a small society, teachers must have kind of a principle in their minds that students not only must finish their study, but also should learn to communicate with teachers and classmates, so that in the future they know how to communicate with the bosses and colleagues at work.

In daily teaching, CCD19F and CCD23F have realized the textbooks of Chinese and English cover many good stories that they can connect with moral education to help students learn how to communicate and get along with others, and how to behave well in a social way. In the Realschule where GRB33F works, there is a kind of social project for students, one lesson per week, which is also called pedagogy lesson to train the students' social behaviors, so that they can also realize it is an important thing to pay attention to.

1.5.2 Teamwork

Teachers in all schools believe it very important to improve children's social skill on cooperation, sharing, teamwork and group experiences, so that they are able to get in touch with people and be accepted into groups, they know how to interact and work with other students in a team, they have teamwork awareness and sense of collective honor, they are of solidarity and can unite classmates, they are easy to integrate in class collective and get along well with each other, and they would like to help others and contribute to the team development, because the society is a collaborative institution where everyone is in a team at work and has to cooperate

with others or other teams, it is very important for students to be aware of that and strengthen the ability at school to learn how to behave in the society, no one can only stress his/her own effort and neglect the teamwork, therefore, teamwork is a key word of successful education to educate children to be social members, for education is more than school (GGB5F, GGS5F, GGH7M, GGM10F, GRK4M, GRF10F, GRB33F, GHK5F, GH07M, GHU32F, CCD6M, CCD19F, CCD23F, CCD28M, CRB3F, CRB6M, CRB22F, CHL10F, CHH18F, CHL17F, CHL35M).

In the class of GGS5F, there are some students who have very bad social backgrounds or had some tragedies happened in their families, when she finds out those are the main parts of their life that they have to face every day, she always takes time to talk with them personally and then understands it is more important to teach them how to get together to help each other and to be a social person, than to teach them how to speak English, German or read literature, so, often she has lessons in class where she doesn't talk about subjects, but about the situation in class to let the students think about how to interact with others and how to make a good class community.

GGH7M also believes that the social education based on the problems happened in the classroom is very necessary, which can help students change their perspectives and make them aware of the negative consequences when they don't learn to cooperate in their groups, so that they can realize it is the problem of cooperation in the end and think about the ways to get together. In the viewpoint of GRB33F, she thinks in Germany "a lot of students today they are not used to live in the social group, some of them only see themselves, ... they think that's me, and all the other sides maybe are not important, if you have a lot of students who only think 'that's me and I am very important', it is not a good base for learning", and they could always have conflicts with others, they won't have friends, and they will have more difficulties in the society as well (GRB33F).

Therefore, teamwork is a very important social behavior, and it is proved that it's very necessary to be a good member of the class community, also because, when a student is accepted by the group or the class collective, as the teacher CRB3F has found in her class, he/she can get a big influence from the peers or the class collective to make him/her more easily follow others to do the right things, and

when he/she can work with others, he/she learns the social things, the others can help him/her to work and to go forward, which is a good base to go on with more progress in learning and learn to be a member of the society.

CCD28M explains to his students that teamwork is like playing a football game, when everyone of the team plays his/her role and tries the best, works hard and helps teammates to do the best, then the whole team can win and can do a great thing. Moreover, in CCD28M's belief, teamwork has a very positive relation with members' progress in study and also social skills, for students learn how to act or cooperate in a team and find solutions in a cooperative way with teammates, and he also finds, the more time he lets students work in groups, the better their study performance can be, so most of the time of each lesson he asks students to study in groups.

Actually many teachers in both countries e.g. GGD15M, GRB33F, CCD23F, CCD28M, etc. like students to do social learning or group work, and they believe it can help a lot on students' teamwork skill, for example, in the team, everyone might have different sub-tasks and they have to work together to finish the whole task, or they have to think of one topic firstly on their own, and then they talk and discuss together within the small group, change their opinions or explain how they find the answers, listen to the others to get to know what others think about the topic, and in the end they reach some agreements or find the best answers, as a result, they learn not only the knowledge, but also the process of thinking, and the more important is in such a cooperative way they practice how to act in a team.

An advantage of group study when good students and weak students work together is the peer coaching, which teachers think is different from listening to teachers and has a better effect on students, for example, in the peer coaching the weaker ones can understand better and more easily, and really learn from the good ones, perhaps due to the peer pressure that the weaker ones see their peers knowing more than them, which pushes them to learn and work harder, and the good ones can also profit from this tutoring for it can help them organize the knowledge in a clear way and bear what they taught in their minds (GHO7M, GGM10F, CCD23F, CHL17F).

CRB3F likes to use the peer pressure to help weak students to learn, because she finds the class collective is especially important for the weak students who don't want to be rejected by the other students due to their bad exam scores when the average score of the whole class or the study group is counted, so she helps the weak students make their individual goals to reach some scores a little lower than the average score, for which they must work harder to reach, and they really work because of the sense of tension or pressure from the class collective.

As to the students with lack of awareness of teamwork and sense of collective honor, the way CCD5F treats them is that she lets her students to study in small groups and they must help each other to make sure that everyone knows and learns the knowledge, if she checks someone in a group, who cannot answer the question about the knowledge, she will ask the whole group to stand outside the classroom, which she finds very effective to push students to help each other and to really learn.

From a positive view, CHL17F and CCD28M think that among peers there are peer's competition pressure and role's gradual solidification, which means, if a student wants to be a leader in the group, he/she must pay more efforts and help others more often, and this competition can become a big motivation to push each team member to be better, but such a process or experience doesn't exist when everyone just sits there and listens to teachers. Besides, in CHL17F's opinion, it's also good to let students do some difficult questions in groups, so that they find they're not the only ones who don't know the answers, which could make them feel a sense of safety without too much panic and frustration in front of the difficulties.

In Germany, students have quite a certain amount of time to do some project work, for example, in a Realschule GRF10F works, the students have three times a year to do some projects with certain topics, each topic takes about two weeks and twenty hours in all, and about 4-6 weeks in a Hauptschule GHU32F works, generally the students have to work in the team, they can meet each other out of school to get some information from other people or do some research on the Internet or in the field, then in the end the team must do the presentation in front of the class, which helps a lot in the teamwork skill of students.

But in Chinese schools, students have very rare chances or are not allowed to do projects or activities out of school, according to the explanation of teachers CCD14F, CCD19F, CCD5F, CRB6M, CHH6F, etc., on the one hand, there is no positive correlation between study performance and participation in social activities, due to the exam pressure, they have no time to let students do some projects or activities, and the students have to study all the time for good scores hopefully to be enrolled into better schools in the end.

On the other hand, the safety problem in the activities becomes much bigger and more important than the benefit of activities, many schools dare not organize students to do any social activity outside school and teachers are not allowed to do either, because students' safety is more important than doing projects, and no one can predict what will happen in the activities, in some schools every semester teachers must sign a 'safety liability statement' to make clear that it is their responsibilities if any safety problem happens to their students in activities, and even if some safety problem happens in class, the teachers could lose the job. So teamwork skill for Chinese students is more likely to be trained during the study in class.

1.5.3 Respect and tolerance

Respect and tolerance is believed among teachers as the basic rule to get along well with other people, and the foundation for a good learning atmosphere in class, they believe the successful education is that students could reach a certain level of respect and tolerance on each other, for example, they can respect teachers, learn to be fair, tolerant and more sympathetic to others, look more at the good sides of others and tolerate their shortcomings, they know they must respect others at first if they want to get respect from others, and they learn the social values to develop themselves into fit members of the society, and to be able to live together with different people successfully, which is very important for a good society (GGH7M, GGM10F, GGD15M, GRD21F, GRB33F, GRE35M, GHK5F, GHO7M, GHG30F, CCD19F, CCD23F, CCD28M, CRB21F, CHL10F, CHH18F).

As far as GGM10F is concerned, one thing she would love to have is more respect in the school, but unfortunately she doesn't feel there is much respect for teachers,

for she had classes where some students were lacked of respect to teachers, they destroyed the whole class atmosphere of learning, made her teaching almost impossible and also made her very exhausted, so she believes one important thing for successful education is there should be respect for the teacher and the others. CCD19F also believes respecting teachers is the basic principle that students should have.

Respect and tolerance are very important in the belief of GRE35M, which he believes in for a long time and are indispensable for a good life and a good society, for he wishes to live in a society which is democratic and free, “where people can live together in a way they show respect, they show tolerance, and to live in a democratic way, so they have to learn it in the school”, in some sense, school is also a society and it is important to know how to get along well with each other (GRE35M). GGH7M has noticed that, in Germany, because of the world globalization and European immigration, different values have become more important than before like tolerance and openness to the new and different ways of life, which students have to learn so as to reach a certain level of respect to others.

In Germany almost every class has students with different nationalities, it is an important topic for teachers like GGM10F, GRD21F and GRB33F that students don't bully someone when they are together in the school, and they think the bullying problem caused mainly by the cultural differences and gaps for example, so it is very necessary for students to learn to tolerate and respect others from different countries, for which the teachers often talk openly as a class topic to let them know the different habits and traditions from different cultures, so that they can understand more about others and treat each other in a more tolerant way, which is also to learn in school for the society.

For teachers GGM10F, GRE35M and GHU32F, they believe it is important for teachers not only to show students what respect and tolerance mean, but also to treat students with respect and tolerance as well, then students could learn a lot from teachers as their role models, and might also realize or feel that they are important in the eyes of teachers and are appreciated by teachers. GHG30F is quite proud of her good relationship with students, the success she thinks is that she often lets her students tell her openly in class if she has done something improper or making them

feel bad, and after their talks, she immediately makes an apology to them, which harvests very much respect from her students.

As far as GGF7F and CCD19F are concerned, they very dislike to name or label some students as 'bad students', which they think is very negative and unfair for the students, since children are just different, sometimes they have difficulties or problems on learning, and sometimes they make mistakes or troubles, but they just need the help of teachers and there is nothing bad enough to say they are bad, essentially it mainly depends on how the teachers look at them and how much respect and tolerance teachers show to the students.

Some teachers, CRB3F, CRB6M, CCD6M and CCD19F for example, believe that every child has some talent and ability, when teachers don't look at them through 'colored glasses', they can find out every child has shining points and has something he/she is good at, so it is very important for teachers to keep a tolerant heart and try to see the good sides of students, not to take everything too serious or blame children for every small mistake, which could be a big hurt to their feelings or a damage on their self-esteem and character. They also concern that the students are adolescents at difficult ages, the more teachers reproach them, the more they contradict teachers, which doesn't help in the relationship between teachers and students, and they also realize that the harsh criticism only arouses their adolescent psychological inversion and pushes them away from teachers and the teaching goals.

Therefore, take an example of CRB3F, each time when she is walking to the classroom, she says to herself repeatedly that every child is lovely and good, which builds up a lot of positive moods in her heart, then day by day she finds her class atmosphere becomes more and more positive and happier, the interaction with students is getting better, and students also become more active in class and learn faster in a good mood, which proves that the healthy and positive psychological hint does influence a lot on a single person and also the whole environment where he/she is, and that positive energy can also infect and cheer up the people around.

In consideration of cultural differences, respect and tolerance might have different meanings, for instance, in Chinese teachers' eyes like CRB21F has said it is not a respect to teachers when a child doesn't sit straightly or properly in class, but

GGF7F doesn't think it disrespectful when students eat the gums in class. During one-year teaching in a school of the USA, CHL10F found the students there would not say hello firstly when they met face to face in the school, and she had to say hello at first and then they answered back, which made her sad. From that experience, CHL10F thinks that respecting teachers is a big success in the education system of China, and also a good tradition from Chinese history especially under the influence of Confucianism. Perhaps in some sense, sometimes it's not really disrespectful, but just different understandings or standards from different cultures on the behaviors called as respect.

1.5.4 Follow rules

Some teachers in GG, GR, GH, CC and CR believe successful education needs discipline on students and rules for the class, so that it is possible to have a well-organized class where one speaks, the others listen, then learning can be successful, and when the students can obey school's rules and regulations, they can be successful students, therefore, it is important to let students get an understanding about the rules, learn the social rules, learn to follow and keep the rules to become people with discipline, then they can find their places in the society, and their future life will be easier, for the society is made by rules, however, discipline doesn't mean to make the students fear the teachers, because if learning is associated with fear, it doesn't really work, and the relationship between the teachers and students cannot work well either (GGS5F, GGF7F, GGH7M, GGM10F, GRF10F, GRD21F, GRB33F, GRE35M, GHO7M, CCD19F, CCD28M, CRB21F).

GGF7F teaches the students from Grade 5 till Grade 12, and she has gotten an impression that the children in lower Grades need strict rules, and they need to be told very straightly what to do and what not to do, so that they can learn to obey teachers, be quiet and concentrate on what they should do. However, in GRF10F's teaching experience, sometimes when she is strict with her students, they misunderstand the discipline and think she dislikes them. So it is important for teachers to show students that "you are maybe very strict with yourself as well", and show them there are some funny things that they can do in class, but still there are also some rules they have to respect (GGS5F).

According to the talks of GHH38M, German students have changed a lot during all those past years, about 40 years ago when a teacher walked into the classroom, everyone automatically stood up and said ‘Good morning, Mr./Mrs. ...’, and no one would dare not to do it. But now as GHO7M has mentioned, the students usually come 5 minutes late, in class they wear caps, look around, keep talking with each other, eat some bubble gums, and give no attention to the teacher, everything is written in the school rules, but they don’t follow.

Some teachers agree that it is very difficult for the students in the Hauptschule to hold on the rules, or learn how to stay together at school, they are always loud, and sometimes they do everything they can to bring teachers to the limits. As a matter of fact, the problem of lack of discipline among students is not only in the Hauptschule, for example, in the Gymnasium, GGM10F had a class where the teaching was almost impossible, there were some students who couldn’t be quiet, they talked with each other, and ran around or hit the others, even though all the rules were put on the walls, it didn’t make the situation much easier.

Therefore, from the perspectives of GGM10F, GRR1F and GRD21F, teachers should not always be friendly to students, sometimes students need to be told that, if they don’t stop breaking the rules, they will have to face some consequences, like stand in front of the classroom or be kicked out of the classroom or go to the principal, so that they don’t think they can do anything as they want. However, in the reality, the teachers have also realized that the way of removing the troublemakers from the classroom for a while, to talk to them outside the classroom, or let them just stand outside, sometimes works, but might not change their behaviors in the long run.

There’re also many other ways for teachers to deal with students who break the rules, take the example of the teacher GRF10F, e.g. if her students break the rules, at first she friendly tells them to stop; if they do it again and again, she will give them extra work or they must come to an extra lesson after school, or she will tell their parents and write something in the class books of students individual; if it is really bad, after three times there is a consequence, which could be that they are not allowed to come to school for one day, or three days, or one week, or they have to

leave the school; and above all the consequences, the first thing she does might be that she looks bad at them.

As to the teacher GGH7M, he would like to deal with those students in some constructive ways, for example, give students some small extra work when they just misbehave occasionally, so that they don't feel very free to do everything they want; make some contracts with them by reaching some consents, and talk later to see if they feel better or worse to behave within the rules; find out the reasons why they don't want to follow in an easy and right way; for those who don't care about being expostulated or penalized, normally being harsher doesn't work, then it is very important to work with parents together.

For teachers, rules are very important and usually they talk about rules in the beginning of school year, the teacher GGM10F likes to work out the rules with students of new classes together, she makes students into small groups and asks them "what are our rules in our class" and "what do you need to feel good in class", and so on, every group writes down some rules and shares with the whole class, in the end they reach some common ones to put on the wall. GHO7M believes there are also some social rules that students must learn, which include, for example, the students should be punctual, respectful and organized in order, which he thinks are the basic things that the society wants from the students.

In China following rules also means following the crowd or most of the people, for Chinese people have a strong "crowd psychology" or "herd mentality", which makes them follow the big crowd blindly and believe the truth is on the side of most people. So Chinese teachers like CCD14F and CRB3F think that the successful education means that students should do what most of people think is right, and follow what the national leadership says, the students should have the belief that they must study as well as they can in order to make more contributions to the motherland in the future and have the sense of honor and of national pride, which also belong to the political and ideological education at school.

Most Chinese teachers in the interview haven't talked about the problems of Chinese students on following rules, partly because in China there is a long time of tradition in each class with the student management system, which means to give

students different roles or duties in the class administration and let students manage students, for example, the monitor takes care of big and small class issues, disciplinarian maintains the class order and student discipline, sanitation commissioner arranges students to clean the classroom regularly, and the like. It's convinced that from the class duties students feel responsible and self-disciplined, they understand that they themselves must keep the rules at first to be good examples before the classmates.

Normally the students appointed as leaders have to have good study performance or some talent/ability in that area, for example, a subject representative has to be good or the best at that subject study. In order to have more students to be involved in the class management, there is also, for instance, a student who takes care of the light of the classroom to turn on/off, or some students who make sure the blackboard clean before the next lesson, for which students don't need to be very good at study. Sometimes teachers also appoint some difficult student to be a leader, like CCD6M, he asks a boy, who used to lead a group of boys to do something bad, to be the vice-monitor of his class, which changes the boy very much and till now he has never made troubles again, instead, he studies very hard now and all other teachers start to like him.

Among all Chinese teachers in the interview, only the teacher CHL35M have mentioned a little about the discipline problems of students in his school, where there are only the rest students who cannot be admitted to the top senior high schools, and who are much harder to be managed, also because the students live in the area of coalition between the urban and the rural areas, many families there got rich one night because of the house demolition and community renovation, they were given a lot of money and several new apartments, thus, the parents have no worry on their children's future life or living places, they overlook the discipline on their children and pay no much attention on their study.

1.6 Family support

Some teachers in German schools highly emphasize the importance of family support in the successful education, and they believe the reason that children can be successful at school and can go to the Gymnasium is that they are loved by their parents and have a

lot of support from the parents, and if there's no family support, it is difficult for children to be successful, and most of the time they go to the Realschule or Hauptschule, like the students at the Hauptschule, who often don't have the support from home, therefore, the success of education in Germany is not because of the education system, but because of what kind of family the children come from, if the children are supported by the family, at least most of them are successful in the school (GGB5F, GGD15M, GRF10F, GHU32F).

Teachers GGB5F, GGD15M and GHU32F also explain that family support means children live in a family where they talk about things they do at school, the parents are interested in what their children do, they show their children that education is important and has a big value, they let their children work alone but have an eye on the school things they have to do, and it's really important that children can see that their parents do some reading or are interested in different things, not only sit at the front of the TV sets a whole day, then with the good start the parents give the children from home, the children can go on well with school.

It has been discussed that in Germany, family support is essentially important partly because most of German schools end at lunch time, and children spend a lot of time at home, in Germany "the family environment, therefore, has a strong influence on a child's academic development, learning process, and cultural adaptation process" (Frankenberg et al., 2013). GGD15M, GRE35M and GH07M argue that with good families it is no problem to give children more free time to let them do their things on their own, usually most of them are brilliant and have learning interest and self-motivation, on the contrary, those students, who have difficult social backgrounds, or have divorces in their families, or have both parents who work the whole day long, always come to school without homework and don't learn for the examinations.

From the teaching experiences of GHU32F and GHW2F, they confirm that students in the Hauptschule have no much family support, and many cases are that the parents cannot support, because both of the parents work very hard with very low salary, and they are very seldom at home together, sometimes the children don't see their parents for days, quite a lot of students have to get up in the morning by themselves, and come to school without breakfast, some in Grade 5 even have to cook on their own, and the most extreme situation is they have smaller siblings to look after. In the Hauptschule

GHW2F works, they have 2 teacher-parent evenings every school year, but nearly no one comes, for the parents either have little babies at home, or have to work till night, and some of them are just not interested.

In the opinion of GRF10F, sometimes when the parents have problems or are not rich, or are immigrants who don't speak German at home, they don't know what is going on in the school and are not able to support their children, as a result, those children are very slow in learning German language, they cannot read or write, and cannot be successful at the elementary school, then in the end they cannot go to the Gymnasium or Realschule. GRF10F believes that it is not because the children of immigrants are not intelligent, but because the education system in Germany doesn't help them and the children are not supported by their families either, thus, at school they always have problems and won't be successful.

However, GHU32F doesn't agree with the opinion that parents from foreign countries cannot support their children or help them in the homework for they don't speak German and don't know the system of Germany. Instead, GHU32F believes that that the children have parents who cannot support them has nothing to do with what nationalities the parents have, because the parents, who don't know German language very well, can still make sure their children to sit down and learn or do some reading, and can still help their children become more interested in things, when they show their children they are interested in different things.

But GHU32F has to admit that the children who have socially underprivileged parents cannot be successful in the school system of Germany, which is quite significant in Germany. One reason GRE35M has tried to explain is that the students coming from lower social groups need more help in learning and living together with other students, but the school and the education system don't do enough for those students, and the teachers themselves can hardly find time to help them personally.

The other reason that GHH38M thinks is many of the foreigners, who have been living in Germany since many years or decades, don't want to assimilate or become in contact with the German culture, so, when the parents didn't feel accepted or being members of the German society, they wouldn't tell their children that they must do the homework or read the books that their teachers told them, and moreover, if a family doesn't even own

a child's book, it is hard to believe that the children could get some support from the family. He also thinks that maybe when the German society became more tolerant and liberal, the foreigners could feel easier to come with Germans as one family, the situations of their children would be better.

As to GRB33F, even though many of the parents don't have the energy or time to support their children so much, she is happy that a lot of her students have older siblings who are very open and willing to come to school's meetings to listen and help, which she thinks is also a good family support for the students. The family support is not a topic for Chinese teachers, but the teacher CCD14F confirms that the parents of good students care much more about the study of their children than those of weak students, and if the parents at home don't ask about the children's study and have no requirement on the study performance, the children are usually not good at study, since there is no case that a child can keep on studying very well when the parents don't ask or care at all.

It looks like that German parents are quite relaxed on their children's study, but GRD21F declares that actually many parents want their children to bring good marks home. GHH38M further discusses that in Germany it is impossible to "find many parents who say, 'I'm not the one who is responsible for the development of my children, it's my children who are responsible for their lives, ...they are individual beings, and I cannot influence very much their future'", as a matter of fact, "most of the parents think they must open the ways (for the children), they must put every obstacle away so that they (their children) can work easier", but the problem is "maybe they (the parents) can help them (their children) for the moment, but they can't help them in general, if they have treated their children all their lifetime like that, it won't find a good end because the students have learned to just sit around on the sofa to wait" (GHH38M).

In China, it's not the case either that many parents don't care about the study of their children, instead, most of Chinese parents think the only thing their children should do is studying hard to get very good exam scores, and all other things are not important or necessary. Especially some parents in the rural areas, according to the opinion of CHH6F, they have no ways to help their children in a better future, so they believe study is the only hope and only way for their children to change their own fates and leave the poor rural areas to have a much better life than them, and for the parents living

in big cities, their only one child carries the hope and future of the whole family, and they also think the admission to college is a big honor of the family and a secure good future for children.

That's why most of Chinese parents no matter in cities or rural areas put a lot of concern and support on the study of their children, they push and even force the children to sit and study, they don't ask children to help in any housework, and don't let children play, just to make sure the children have enough time and can focus on their study. However, as CCD14F, CCD19F, CCD23F and CRB22F have found, not all children are fit for the way of finding a good job through good study, when some children don't like study, but want to do something else from their interest, it is hard for many Chinese parents to understand that and to support their children to develop in other aspects, sometimes the parents can try very hard to prevent their children to do what the children want.

In looking at both countries, there is a common thing that is the parents, whose children are good at study, give more support on their children's study, and are more active in the participation of school activities and meetings, than the ones whose children are not good at study, for example, the students in the Gymnasium have a lot of family support, but the students in the Hauptschule have no support from the families, their parents hardly go to school for the parents' meetings, which is the similar situation as in the top senior high school (80-90% admission to college) and average senior high school (10-20%) in China, the parents in two kinds of schools have very different attitudes to children's study, and the parents whose children are in the top senior high schools are very willing and feel honored to take part in the school activities and parents' meetings, but the parents whose children are in the average senior high schools pay pretty little attention to their children's study and school activities.

2. Successful teachers

2.1 Teach knowledge

Teachers from all schools in both countries reach the agreement that passing on the knowledge is the principal function of schools, and primary mission of every teacher in daily teaching, if a teacher cannot do well in teaching students knowledge, then everything else is nonsense, the teacher is not good or qualified, and for the students it

is good to learn a lot of subjects, since the more knowledge they know, the better they can experience and understand the world, and it also helps students to figure out what area they are good at, so that they can lay a foundation for the future working fields (GGM10F, GRB33F, GRE35M, CCD5F, CRB25M, CHH6F, CHH10M, CHL35M).

Gymnasium teachers like GGS5F, GGM10F and GGD15M make it clear that it's very important for them to teach the students text knowledge, and to prepare the students for the university, the students really have to learn everything, and they should not only know how to find the information in books, but also learn the facts by heart, and get training on the basic things like reading, writing, mathematics, etc., without knowledge no one will succeed anywhere in this world. For teachers, it is also important to teach students some learning methods and skills in knowledge acquisition, like how to read literature, how to understand the texts, how to learn vocabulary, how to find different solutions, how to systematize knowledge, how to make notes in class, how to review knowledge, and how to prepare for tests, etc. (GGS5F, GRF10F, GRD21F, GHU32F, CRB22F, CRB25M, CHL10F).

From Chinese teachers' understanding, Chinese school system is exam-oriented, and 70%-80% in the exams are about basic knowledge, and the examinations are difficult for the students, which makes the teachers focus only on passing on the knowledge to students, and if teachers don't spend all of the time on the knowledge's exercises and consolidation, students cannot get high scores in the Zhongkao or Gaokao, that's why in junior high schools the first goal of teaching is to help students get good scores in the Zhongkao, and in the senior high schools teachers have to train the students to pass the Gaokao, otherwise, it is also the waste on students' golden youth time (CCD5F, CCD6M, CRB4F, CHH6F, CHH10M, CHL10F, CHL35M).

It is believed that teachers are successful also when they can motivate students to learn the knowledge and inspire students to think and explore, when they can gain the learning interest of the students by connecting the knowledge with the real life or putting in stories or showing funny videos/films or in a way the students like to do, and when they can help students understand what they are doing and why they have to learn something, but teachers have also admitted that most of the time they don't have the time to find something interesting, and there're some facts that students just have to

learn without asking questions or having interest (GGS5F, GGF7F, GHW2F, GHO7M, GHU32F, CCD5F, CRB22F).

In both countries, teachers like to do class tests, in order to see if students have learned and kept the knowledge in mind. In Germany teachers perhaps make one test every week or every two weeks, 4 bigger tests during the year, and some teachers try to have one more test to give the students more possibilities to really learn the knowledge. In China teachers also do small or bigger tests very often to check students' knowledge and train them how to handle exams psychologically, for it is believed that practice makes perfect and it's necessary for teachers to do a lot of 'repeat' until the students really learn the facts.

2.2 Cultivate personality

Except the knowledge teaching, teachers in both countries also believe that successful education means to cultivate the personality of children, because knowledge can be easily forgotten and abandoned after school, but the education on personality can have a lifelong influence on children, and they think successful teachers always do personality education to cultivate students into wholesome persons, and help them develop their characters in their own ways and also for the society, for success only in the study or exams is not really successful for a person, success first of all is to be a good person with good personality, like honesty, kindness, respect, tolerance, responsibility, politeness, good manners, etc., which is more important for life in the long run than the knowledge (GGB5F, GGH7M, GGM10F, GRF10F, GRD21F, GHH38M, CCD6M, CCD14F, CCD23F, CCD28M, CRB3F, CRB6M, CRB21F, CRB25M, CHH6F, CHL10F, CHH18F).

In the opinions of GGH7M, CCD6M and CHH18F, good personality is the key to the interpersonal relationship, and without good personality, a person will have great difficulties to be happy in the life, or to find people who want to be friends with him/her, and the relationship in the social life will not be very successful, then it will be very hard for him/her to find a place in the society. In the teaching GGH7M does try to develop the students in the cooperation, sharing, group experiences, and to make them consciously aware of how they are seen in others' eyes, and how they are recognized

what they want to be, but he never forces students to be some special kind of people, instead, he wants to help the students to find their personal ways in life.

In the beliefs of Chinese teachers, a student with good personality is someone who is kind, optimistic, positive, generous, selfless, honest, responsible, gentle, tolerant, helpful, thankful, righteous, courageous, conscientious, hardworking, self-confident, self-motivated, and independent; who keeps the discipline and respects teachers; who has team awareness and sense of collective honor; who has a strong willpower and the ability to withstand frustration and can properly face criticism; who obeys and respects parents; who cares for others and has a heart of love on others and the motherland; who has self-control and does no harm to others or the society; who doesn't compare himself/herself with others unrealistically (CHH10M, CHH18F, CHL17F, CHL35M, CCD14F, CCD19F, CCD23F, CCD28M, CRB3F, CRB4F, CRB22F, CRB25M).

For German teachers, a student with good personality is the one who is open-minded, self-confident, self-motivated, responsible, helpful, friendly, and independent; who respects people and the nature; who works hard by himself/herself and doesn't look at or perfect on the others; who protects the world and serves the people; who is not mean, aggressive, greedy, or suspicious about others (GGH7M, GRB33F, GRK4M, GRR1F, GHG30F, GHW2F). It's sure that all the description above are teachers' personal opinions and it could be different if some other teachers participated the interview, however, as the former part about students' character development has discussed, there're indeed some common viewpoints from the teachers in the same type of school or the same country, which is also the value of this research.

Chinese teachers involved in the interview have confessed that in their stressful and tense teaching life they can hardly find the time or chance to focus on the development of students' personality, but once or twice a week there is a class meeting, which becomes a big opportunity for class teachers to highlight the importance of good personality or tell the students how to be a good person with Chinese virtues. In daily teaching Chinese teachers often take about 5 minutes within the lesson to talk about the topics related to the good personality especially when something happened in the class, which German teachers in any type of schools do it as well.

Besides, even though Chinese students don't have many school activities, many Chinese teachers believe students can develop a lot in their personality when they do some duties in the class management, and they also believe the hard study situation can helpfully develop the characters of students as well to make them stronger and become more successful in the highly competitive Chinese society. As to the subjects like Chinese and English, the textbooks have many texts talking about good personality, like sincerity, honesty, generosity, goodness, virtue, cooperation, indomitability, selfless dedication, etc., so the teachers in those subjects think that they have the advantage to do more on the student's personality cultivation during teaching the texts or doing exercises (CCD6M, CCD14F, CRB3F, CRB22F, CHH6F).

2.3 Have good relationship with students

Some teachers from both countries believe education is successful when the teachers have personal contacts with the students, and have good relationships with the students, they realize that it is very important that the students like teachers and feel being liked and appreciated by teachers, because, when the students like a teacher with whom they can talk with open hearts and no fear, then they like to listen to what the teacher says, and like the subjects he/she teaches, they can be motivated and learn for him/her, they can sit there and study even without his/her presence, but, if a teacher only brings the knowledge to students in a very rough way, it is very difficult for students to be willing to learn, in some sense, without touching the hearts and souls of children to build up the good relationship with them, teachers can educate them nothing (GGD15M, GRK4M, GRF10F, GHO7M, CCD5F, CRB6M, CHH18F, CHL35M).

Especially in the Hauptschule where a big number of students come from quite problematic backgrounds and lower-class parents with different difficulties, the teachers there believe successful education is that the teacher and students work together as a team, and "it's very important that the connection between the teacher and students works out, if it does not work, no learning is possible" (GHW2F). Hamre and Pianta (2001) find that "students from more disadvantaged backgrounds could have a greater need for relatedness" (Hornstra et al, 2015). As to GHW2F, she also believes it is important that the teachers there can show the students empathy, show them "they are able to be someone and to get into the system, ... show them that even though they are

at the Hauptschule, they are somebody who are cared of, and who are important for our social life and for the whole community and for the society” (GHW2F).

As to the importance of a good relationship with students, some teachers explain that it not only benefits the students, but also can make the teachers themselves feel enjoyable and pleasant in the school, so they look at the contact with students as the most precious thing in their jobs, and they think teachers should care for students, when students have some problems no matter on study or in life, the teachers can really help them sometimes, it makes the students know that someone is there for them, which is also a big part of the reason that teachers like their jobs (GHK5F, GHW2F, GHO7M, GHG30F, CRB25M).

To build a good and healthy relationship with students, teachers think they have to act in a nice way, be friendly and understandable to students, not to be too harsh to them, but love them, respect them, and care about them to reach their hearts, and when teachers treat the students like friends, it is easier to reach a close relationship with students (GGD15M, GHG30F, GRK4M, CHL35M). GHW2F suggests that the better the teacher knows a student, the better the student understands that the teacher is interested not only in his/her learning, but also in him/her as a person individual, then the more easily the teacher can get along well with the student during the school days.

Moreover, in order to make the students like a teacher, as CCD6M and CCD28M believe, the only one thing the teacher need do is he/she likes the students, and doesn't give up any chance of communication with the students, even it's just a small talk or a nod, and it is very necessary to have personal communication with students after class, because in class the teacher faces the whole class, the students cannot easily feel the teacher's special attention or care on them individually, but when the teacher has a small talk with some student after class, the student can be very happy about the teacher's concern on him/her personally.

In the opinion of GHO7M, he believes the best contact with the students is when teachers make things that have nothing to do with the school, which gives the teachers chances to talk with and do things with students in a free and relaxed way, so that they can know more about students privately, and the distance with students individual comes much closer. Similarly, CCD28M also finds that the relationship developed in

activities with students can be more sincere, and usually what the students remember about their school life is not how the teacher taught them on study, but the teacher played football with them or climbed the hills with them, for example.

However, some other teachers like GGS5F, GRK4M, CCD6M and CHH18F agree that in the teaching when the teachers show the students that they prepare the lessons very well, they thought about what they want to tell students, they are very structured and strict with themselves, and they put big efforts to make the lessons interesting and the class active, the students can understand they are important for teachers to do that, and then they start to put their trust on the teachers and follow their teaching ways, and when the students realize that the teachers are interested to listen to them and get the time for them, it's easier for them to open their hearts, and then the teachers could get the possibility to touch their souls and build up close relationships with the students.

As a matter of fact, the teachers in both countries also underline that a good and sincere relationship doesn't mean the teachers must always be nice to the students, and here different cultures make teachers in two countries have different ways to act before students. For example, German teachers believe in a direct and honest way like GRD21F and GHG30F have mentioned that the teachers should be like what they are, sometimes when the teachers are not in a good mood, they should simply let students know, when they are angry with what some students do, they should be direct to tell the students it is wrong and not OK.

However, Chinese teachers believe in a more indirect and euphemistic way that can avoid to hurt the self-esteem of students and make them more easily accept the teachers' correction on their mistakes or bad behaviors, but some Chinese teachers also think that treating the students is the same as treating their own children, sometimes it is necessary for teachers to be angry with students, so that they have kind of awe on teachers and can be more obedient, sometimes when teachers have some difficulty in getting along with the students, it is also a chance for teachers to reflect and temper themselves, and to grow up together with the students (CCD5F, CRB6M, CRB25M, CHL17F).

2.4 Encourage students

From the interview it can be seen that teachers understand very well that the children are different in their talents and abilities, and not every child in their classes can study well, so they think it is very wrong to call some children who are not good at study as bad students, it is very wrong to judge children by the exam scores, saying the one who cannot get a good score is useless, and it is very wrong to say only the admission to college is successful or only those good at study can have a good future, instead, the children need to hear that they still have hope in the future even if they cannot go to the senior high school or college or Gymnasium, and they can still reach the success through their own efforts in what they can and are good at.

Therefore, teachers believe that, to reach the successful education, it is important for teachers to treat all students impartially, give them positive feedbacks focusing on what they are good at, encourage especially the weaker ones more to keep them trying to do something as good as they can, and try to be more patient and flexible to them, push them a little bit to work slowly and continuously, and give them a good feedback as long as they make some progress or just finish the homework better, since the comparison with peers is necessary, but the self-comparison to see every student as a single person is more constructive and important (GGS5F, GRB33F, GRE35M, GHK5F, GHH38M, CRB3F, CRB4F, CRB6M, CRB22F, CCD6M, CCD14F, CCD28M, CHH6F, CHH10M, CHH18F, CHL10F, CHL17F).

It is believed that successful education needs appreciation and encouragement, which can become the strong positive power to keep children going on with the study when there is not very much fun. As GGH7M suggests, teachers can often see that the subjects don't really attract the students, so teachers have to always motivate and encourage students, awake their learning interest by telling them at least they can gain some skills by learning mathematic for example, like being able to analyze better and develop logic understanding, in the end they can also get good marks that help them go further in a higher level of schools.

Some Chinese teachers find that, when they often encourage their students, appreciate them and praise them, not to rebuke or humiliate them harshly for their mistakes, but point out their problems in a euphemistic way and kindly give them some advices, that kind of warm educational way can take root in their hearts, then they can easily accept the teachers and like the teachers more, and they themselves can feel ashamed of being

against the teachers or making troubles in class, as a result, the class atmosphere becomes good and positive, and the teaching can be successful (CCD6M, CCD19F, CRB3F, CRB25M, CHH18F).

In the Hauptschule with many students who cannot see their strengths, teachers there believe it is very important for the teachers not to give up on them, but act as a kind of motivator to encourage them to believe in their capabilities, and some teachers especially like GHW2F and GHK5F do have strong beliefs on their students and tell them ‘you are important, I believe in you, I want you to believe in yourself as well, and I know you can do this’, so they really fight for the students day by day, and hope that the students can trust themselves a little bit more and fight for themselves too, even though they have to start any topic with very easy tasks, they never give up but try again and again to encourage students to do something that they can reach whatever they are able to.

Based on the teaching experiences, teachers GGM10F and CCD6M conclude that it is important to tell the students they did well, but teachers shouldn’t always say it, because the students will not take it seriously any more, and sometimes it is not realistic to rely only on the encouragement, for it doesn’t work well on some students who are very difficult to be pushed forward, or who are really not interested in study, or who don’t want to do anything about learning, or who have already given up themselves, so encouragement is not omnipotent and sometimes teachers have to count on some other methods.

2.5 Discipline students

Teachers from both countries also believe that successful teachers should have discipline on the students, it is the teachers’ responsibilities to correct students’ improper behaviors or wrong ways, and it’s important to make conversation with students right away and tell them how to behave, not to wait until too late (GRE35M, GHW2F, GHK5F, GHG30F, CCD14F, CCD19F, CHH6F, CHH18F, CHL35M). In particular dealing with troublemakers or students who misbehave, GRF10F and GRE35M suggest that teachers have to be strong and strict to stop them and tell them that is not OK, try to talk with them to find another way that they can act properly, and give them some possibility to reflect what they have done and to change their behaviors.

From the perspectives of teachers GGF7F, GGM10F and GGD15M, when children are around 14 years old, they are confused and don't like to learn at their ages, which is very clear, and sometimes they don't think straightly but do some stuff which they regret afterwards, so it is important for teachers to show the students that they have to learn, and let them know why it is important to learn the knowledge and to reach their personal development. They also agree that teachers have to be a little bit tough to train the students on the vocabulary, methods and skills in a proper way, and sometimes the students need to hear "if you don't learn, you have to go, you have to go to another school because you are not good enough" (GGF7F), then they may sit down and learn, and for the smaller children, they need more discipline, so it is more necessary for teachers to be very straight to them on everything, tell them what to do and not to do.

In both countries, teachers have similar ways to discipline students, they stop the bad behaviors of students and tell them clearly how or what to do, and they make the students who disturb the class stand at front of the class or outside the classroom. In Germany the students have enough time to do their homework after school, but GGF7F has mentioned that sometimes they don't do it, not because of the time or ability, but because they don't want to do, then the consequence is they are sanctioned with bad marks in their profiles, for the marks in German, English and Mathematics are quite important, then normally the next time they do their homework.

In China, as CCD6M and CCD14F have told, when students come to school late or don't do their homework, or fight each other, usually they can expect some criticism and punishment, for instance, they have to stand in the corner of classroom to listen to one lesson, or stand a whole day without lunch, or write a self-criticism to promise not to do again, or get a bad record in their files, or their parents have to come to school for some talk. To be fair, Chinese teachers have a little bit harsher ways to discipline students than German teachers, and if the Ministry of Education had not expressly prohibited the physical punishment on students, beating students could have become a very normal and common phenomenon in Chinese schools.

For German teachers, they are quite relaxed and would like their students to find their own ways to study independently, and sometimes they maybe give the students some tips or structures to help them a little bit. For Chinese teachers, it is very important to discipline students on their study habits, and they believe a good habit can lead students

easily to succeed in the examinations and even in the future jobs, for example, teaches teach them how to deal with details, how to listen to teachers, how to write notes in class, how to make a plan of every day, how to prepare for lessons, how to review the knowledge, how to search the information for difficult questions, how to do things efficiently, and how to develop the habits of reciting something in the early morning and do homework alone, etc. (CCD14F, CRB21F, CHH6F, CHH18F).

2.6 Be a role model

Some teachers realize that, although it is a task for teachers to teach students knowledge and learning methods, there are actually many ways for students to get the information and the teacher is not the only source, so they believe the main job of teachers is to set good examples or role models for students, also because students learn more important things from teachers through observation and imitation, no matter in class or out of class the teachers' words and behaviors always have effects on students consciously and unconsciously, and a teacher's good personality or positive character can affect students positively to bring them forward (CCD28M, CRB3F, CHH18F, GHO7M).

From their own study experience, teachers have found that a teacher can be someone whom the students take as their role model, or somebody whom they don't want to be, and it's very clear for them that, when a teacher is happy and nice to the students, the students will start to be that way, but when the teacher often shouts at the students and is always angry and does everything impatiently, the students will act like that too, that's why it is very important for them to be good role models for their students and have some positive influence on the students' development (GGS5F, GRR1F, GRK4M, GRE35M, CCD23F, CRB3F, CHH18F).

However, after noticing their influence on students, the reactions of Chinese teachers and German teachers are different. Chinese teachers become more and more cautious before students, for fear that their words and behaviors exert some bad impacts on the students. But from the interview it can be seen that German teachers are not so cautious as Chinese teachers, for them it's more important to be honest, direct, open, and reliable to their students, and show the students what is right and what is wrong, show them how to behave in a certain way, show them the teachers are also human beings and can

laugh about things and can also make mistakes, when they are angry, they don't want to have a fake smile before students (GGS5F, GRK4M, GRD21F, GRE35M).

Teachers agree that they don't need to be actors/actresses before students, but, when the different cultures in two countries are taken into account, it looks that German teachers could be more direct or straightforward than Chinese teachers, and Chinese teachers might be more introverted and restrained on their emotions than German teachers, which, however, doesn't mean Chinese teachers wouldn't shout at students when they were angry, it perhaps might not be the case for German teachers to shout at students because of the quiet and calm characters of German people at first glance especially.

From this research, it's important for some German teachers to face their mistakes before students and make apologies, which they believe can be good examples for students to learn to do the same, but it could not be so easy for some Chinese teachers to do that, for it's like kind of losing their faces, but it doesn't mean Chinese teachers cannot make apologies for mistakes. Teachers like GRE35M, GHH38M, GRK4M and CHH18F state that, when some characters are very important for them, they act like that to show the students what is responsible, curious, open-minded, or hardworking, for example.

2.7 Invest a lot at work

That education can be successful greatly depends on the teachers' investment at work. As the saying goes, 'no pains, no gains', a successful teacher loved by students is never a lazy and irresponsible person. CCD28M has made it clear in the interview that he believes, when a teacher wants to be a good one no matter driven by the responsibility or self-interest or love on this job, he/she has to bear a heavy workload, put a lot of energy on lessons and students, and work much harder than others, especially in China when he/she wants the students to have good study performance, he/she really has to take a lot of efforts and time to teach and train them in class and after class as well.

According to what teachers told in the interview, it seems that in both Germany and China the society has quite negative comments on teachers, in the opinions of GHO7M and CCD19F, the society thinks the teachers are very lazy, they get so many holidays a year and have such a high salary, but they work very little, they have only two lessons

one day and teach the same things every year, however, the truth is that people outside school don't see the whole picture of a teacher's job, the students are different, the teaching in every class is different, the work every year is also different, the teachers do much more work out of lessons.

For instance, people don't see that very often the teachers take their own free time after school to contact the parents about their children's problems or their study, no matter to call them, write them emails, or meet them somewhere, which have to be done when the parents get off the work and have the time to talk, and when some students have troubles, teachers also take their time to talk with them personally and to help them as much as they can (GGD15M, GRE35M, GHO7M, CRB21F).

Chinese teachers have their own offices in the school, normally several teachers sit in one office room, but everyone has his/her own big table with a computer, and enough space around the table, with this table every teacher does a lot of individual tutoring for slower or weaker students, prepares for lessons, corrects students' homework, and they work at school a whole day from the early morning of students' self-study time till the late evening/night tutoring, and for the class teachers, they have a lot more class sundry duties to do except teaching, in the boarding school the class teachers have to stay very late at school to make sure their students have been in bed and then they go home.

In the public German schools, usually all teachers in one school share one big teacher's room with a small table for everyone, where they have no room to put their own things, and cannot work with their computers or prepare lessons for the next day, so every German teacher has to make his/her own office at home, and at home they prepare for lessons, correct students' homework or test papers, and sometimes they also work on weekends at home offices. So teachers actually invest much more time and energy than what people think, and education cannot be successful without teachers' big investment.

It can also be found from this research that teachers in both countries all spend extra hours after class or after school with especially the students who are not good at study, it is not extra paid, but teachers simply feel responsible to help those students be able to experience some success and find their self-confidence in the study, even though in the end they still cannot get very good marks, for some teachers, they do such a kind of tutoring every day no matter in class or after class, and no one can count how many

hours a day a teacher works, it's just a lot. When teachers see some students have problems to understand something or are not able to do some exercises, they don't hesitate to help and they take time to explain to them again and again (GRD21F, GRE35M, CCD19F).

Some teachers like GRR1F and GRK4M believe, when the teachers only open the books and go straightly on to every page, it has nothing to do with the children, and when children only sit in front of the teacher, it stops everything in their mind, they don't really listen to the teachers or think of the topics, there is no learning and that is really not education, so, a successful teacher has to be creative in the teaching, and the lessons should have a lot of fantasy, for the children have many fantastic ideas, however, to be creative means the teachers have to put a lot of energy and time on the lesson preparation, and create the teaching materials on their own.

Take an example of the teacher GRK4M, in order to create his own teaching materials according to his educational philosophy, he needs more time on preparing for lessons than other teachers and cannot take the full workload as required for every teacher, as a result, he has to take fewer lessons each week, and get less salary every month to keep his teaching belief. He doesn't treat students as a big pot just to put the water inside, instead, the personal thing is very important for him, he always tries to imagine a lesson for his students, and look for what they want and don't want, and he often tries to make a big invent in his lesson so that the students can see his teaching is fantastic. But sincerely that is not easy for every teacher to do, and not possible for Chinese teachers for they have to strictly follow the instruction of examination outlines if they want to be successful in the education system.

2.8 Create learning atmosphere

The teacher CRB25M thinks that the educational environment is also important for children, successful education means children could grow up in a comfortable, harmonious and tolerant school environment which can help children form good characters. Some German teachers pay attention to create a structured class environment where students are motivated to learn the knowledge, where they respect and are friendly to each other, where they can keep the rules and be quiet, where they

can listen to the teachers and concentrate, and where they can learn and do the tasks the teachers set for them, then education is successful (GGM10F, GRF10F, GHK5F).

Some Chinese teachers like CRB3F, CCD6M and CCD23F prefer to build a class atmosphere to make the students feel the sense of crisis, and to increase the students' sense of competition to give them more pressure psychologically, so that students can fight for their study, which the teachers believe is very necessary and can help the students survive and gain a foothold in the fierce competition of Chinese society in the future, for example, as long as a student makes a progress in a small test, his/her name will be put on the blackboard in the back of the classroom, which everyone sees as an honor and a praise before the whole class, so the teachers believe such kind of appreciation education can help every student get the motivation to study harder for more progress, as a result, the whole class atmosphere is very positive and all students want to be better in such a benign competition.

For some German teachers including GGB5F, GRD21F, GHK5F and GHO7M, humor is very important for a good and positive learning atmosphere, they think the class should have some fun and every day in class there should be a moment of laugh, even the teachers can laugh about themselves if something doesn't work out the way they wanted, it gives everyone a very good feeling. To have a good learning atmosphere needs not only positive humanistic environment of the class, but also good physical environment of the classroom, GRR1F and GHO7M think that, when everything in the classroom is clean and neat, the light is colorful, pictures and paintings are on the wall and a couch is in the corner, which can give the students a very good feeling sitting in the classroom, comfortable like at home.

2.9 Do individual teaching

Individual teaching is a key word and a big goal, which many German teachers want to reach, almost all German teachers in the interview have stressed it. Some teachers believe successful education is that the teachers firstly look at the students and then decide what to teach to meet their needs, and take each student as an individual, give them individual tasks, individual feedbacks, and try to make it possible for each student to have some success in a day and reach his/her optimum, for everyone has a zone of proximal development (GRF10F, GHW2F, GHK5F, CHL17F). Teachers GRK4M,

CRB3F and CRB6M explain that children have different individualities, education should not kill their individualities to educate all children into the same, but let them decide what they want to do, and let them grow up in their own ways and reach their different goals and optima.

In every class there are always fast and slow students, and after a while the gap between the best and the weakest students can be even bigger, so in teachers' beliefs the ideal situation is the teachers think about not only the topics that they have to teach, but also the students, so that they can find the right task for every student, or different tasks for different levels of students, then the good students are able to do more tasks and the weaker ones can take more time on their easy tasks, in the end all of the students are supported in the way they need individually, and every single student has his/her own tempo to reach whatever he/she can, which, however, teachers also admit is very idealistic and more like an illusion (GGS5F, GGM10F, GGF7F, GHW2F, GHH38M).

To say the least, German teachers think that it is also ideal to give students sheets in different levels and let them work on their own to get information from the internet, but then it is difficult because they must change to the rooms with computers, therefore, it is easier and more practical for them to have small groups with the students in the same level, and they can manage to give different levels of tasks for different groups, so that at least the students don't lose the consciousness to try their best, perhaps they can have a little success at the end of the day and be a little bit happy, and for teachers it is also easy to copy some papers with different topics and give each topic to each group, so that they can talk together and work in the groups, but it is just not possible to give everyone a different task (GGD15M, GRR1F, GHW2F, GHK5F, GHH38M).

Even though some teachers advocate to respect each child's individual development and teach students in accordance of their different levels, in the reality it's quite impossible to do the individual teaching, for example, the class is very big, which means a lot of lesson preparation that cannot be done by one single teacher, and the point is the teachers must go through the textbooks and finish the teaching tasks in very limited time, they cannot take too long time for one topic, and don't have enough time to concentrate on students individual, otherwise, they will get stuck in the middle of the book, so usually they teach the whole class the same content in the middle level, and the

students only get the normal level of education, not in the ideal way (CCD19F, CRB6M, GGH7M, GGM10F, GHW2F).

Then later after class or after school teachers can offer extra classes or tutoring in a more individual way for several students who need more help or who want to learn more (GRR1F, GRB33F, GHK5F, GHU32F, CRB6M, CCD19F, CHL17F). From a comparative perspective, German teachers have much stronger awareness and desire on individual teaching than Chinese teachers, and they're more likely to see the students as individuals, and would like to help each student to find his/her right way, and as long as a German teacher wants, he/she has the possibility to do the individual teaching at least in some lessons, for they have the freedom in their teaching and the whole environment in politics and culture supports for the individuality (GGS5F, GHH38M).

However, Chinese politics and culture encourage the strength of one collective, and depreciate the individuality, "in China the education doesn't take students as individuals but as one group" (CRB25M, translated), and the education doesn't try to keep the different individual character of each student, but "teach all students into the same" (CRB6M), which could be a big reason that Chinese teachers in the interview didn't think the big number of students in each class is a problem, but almost every German teacher strongly appealed to smaller class, when actually the number of students in one Chinese class is about triple that of a German class. All in all, individual teaching is not a very topic for Chinese teachers.

Conclusion

As a conclusion, based on the discussion in the former parts, it is very clear that teachers' beliefs in successful education have significant personal signatures with the foundation of their own theories and experiences, which are branded with the characteristics of the cultures they are immersed in, and are also shaped by the education systems and sometimes disabled by their teaching conditions. Even though, subjectively, a quite number of teachers from the interview believe their beliefs direct their teaching practices, they have to admit

that objectively there're big conflicts or differences between their beliefs and the reality, and sometimes due to the different constraints, it's so difficult for them to do what they want to do in their classes that they are seen not to follow or keep some of their beliefs.

However, because of the importance of the beliefs for teachers, they do try to achieve what they believe whenever it's possible. Therefore, it proves again the considerable realistic significance of studying teachers' beliefs. From teachers' descriptions on their beliefs and the realities they have to face, we can get to know what kind of students can be expected from their teaching, but it's also true that not every student can be reached, and all students cannot become the same, even though most of the time the teachers could have the same teaching and expectation on them. It's also the case that not every teacher can be successful in affecting or changing the students in the way he/she wants, which, however, is not enough to deny that teachers do play a big role of the influence in children's life.

Just take a look at the teachers' stories, it's not hard to see how much they were influenced by their teachers, and in the same way consciously and unconsciously they become the influential figures for their students. From that sense, it can tell that education is essentially a heritage or even a copy from generation to generation, which is not only on knowledge, but also on behaviors, humanism, values and the like. Sometimes the teachers really become role models that their students want to be, so education should never undervalue the influence of teachers on students. Therefore, the future of education on children is not written in the big educational plans and aims, but is dependent on the teachers' voiceless and vocal teaching behaviors, which also shows the complexity and unpredictability of education.

Taken together, all teachers from both countries have more negative opinions than positive statements on education systems and their teaching conditions, on which one more question has to be asked: what could it mean in the reality or what might be the problems behind? From teachers' experiences, it's not difficult to find that the hegemonic ideology plays a stable and dominant role in the education systems of two countries, and the school education always internally struggles among different values. In each country education system has never stopped reforming, but what and how to reform seems a question that has no satisfied answers in the reality, and in history it's not often to hear some educational reform was very successful, partly because the teachers have been treated only as passive receivers, and their opinions have been very seldom asked or accepted.

1. Educational problems

1.1 Hegemonic ideology

Frankly speaking, no matter in the federalism of Germany or the socialism of China, the school system is quite bureaucratic and dominated by the ideology of hegemony, and the authority of education is not situated in the school which is even not entitled to the rights from the book purchase to the teacher appointment. The product of dominant hegemony is at first the phenomenon of educational inequality, which, besides the tremendously unequal distribution of educational resources, partly derives from the social inequality. Undeniably, a main function of the education system is to reproduce and maintain the existing social classes and social order, and also to serve honestly to the benefits and goals of political authority.

For example, the Chinese textbooks are stuffed with the indoctrination of red political power of communist, and the German 3 tracks of schools, which divide children into different tracks according to their social backgrounds mainly, reinforce the educational inequality, effectively increase the social stratification and protect the social status of the upper class by keeping the Gymnasium untouched even when the comprehensive school is being founded. It's clear that without all types of school together in one school there's no comprehensive school, but out of the consideration at political ends, the party in power has to take care of the interest of the voters who are the proponents of the Gymnasium.

What's more, among German schools, to place the children from the disadvantaged social backgrounds, especially those with the immigration background constituting the lower class of German society nowadays, in the low track of school is also to protect and continue the absolute advantages of original Germans as the upper class, which can also be seen in the job market where some jobs are not available to people with foreign backgrounds. In the unified school system of China, the educational inequality is not less, besides the greatly uneven distribution of the educational resources among schools and different areas, the examinations also play a big role in the social stratification and act as filters to sort out children into different levels of schools or universities.

In the study of Zhang and Huang (2018), they discuss that Gaokao, in the functionalist perspective, is an equalizing machine to provide a fair competition for all children, and becomes an important way to change the destinies of the people especially from the lower class, but from the conflict theory, educational inequality is eternal and will last forever, school education and exam selection act only as the tools to help the social upper class monopolize their dominant class status and exclude other classes, which, therefore, accomplish the big mission in the reproduction of the existing social strata.

In Germany the education system does help Germans keep the family tradition and social status, but in China can really change the family destinies of some Chinese people. On the surface, the Gaokao looks fair and equal, but social dominant class can still resort to their monopoly on the high-quality educational resources, and make sure their children to have the advantage in the Gaokao competition through the conversion of power and capital (Zhang & Huang, 2018). It can be seen that those key or top schools are crowded with the children from ‘good’ families who play either money or power or both, so, essentially, the educational opportunity has lost its equalization and the educational equality is only a platonic fantasy out of the reality (Gai, 2013).

Furthermore, in two countries both of the education systems pay attention to teach the young generation the social values and train them to become the fit members of the society, and feed them with the knowledge benefitting the social stability and the current structure of the society. As the sociologist Bourdieu has emphasized, the most hidden and special feature of education system is that it hides the objective truth about its close relationship with the social stratum structure, and school education through the cultural reproduction model translates the social class differences into students’ academic achievements and then legalizes them (Zhang & Huang, 2018).

Rust & Rust (1995) declare that the schools actually become “an agent of the larger social, economic, and political context which fosters them”, a reproducer of “the social, economic, and political relationships reflected by the prevailing institutions and ideologies”, and a defender of the existing social order as well (p.6). As a matter of fact, when schools must stay in the shadow of the bureaucratic hegemony,

the hand of administrative authority never leaves schools alone, and schools are also “considered as subordinate elements of the hierarchical system of public administration, any substantial change within a school is not an educational matter that can be left to the professional freedom and competence of teachers, but a political one” (Phillips, 1995, p.63).

According to Phillips (1987), a school system with a highly bureaucratic structure has normally “common syllabuses and agreed teaching styles to be followed” among teachers, and is “bound to succeed in producing higher measurable results than one which is more liberal, or flexible, or relaxed, or autonomous” (Phillips, 1995, p.66). As a school’s headmaster, CCD28M believes that the main duty of school is to comply with the needs and instructions of the national leadership and service the society, to design the moral education according to the national values, organize the lessons according to curriculum planning, and implement the teaching according to curriculum standards, but if schools cannot meet the requirements of the nation, they are incompetent schools where the students they educate are not the ones in demand.

From that essence, Carnoy and Levin (1976), on the basis of the ‘correspondence principle’ they developed, have argued that “stable and enduring educational systems are those which closely mirror the social, economic, and political conditions of the society of which they are a part”, therefore, if there’s some change taking place in those broader spheres, then change in the education system can be expected to occur, which further brings “schools in line with social conditions and economic demands”, however, in the other way round, it will be very difficult or quite impossible to make some changes or do some reforms starting from inside schools without the changes in the larger contexts (Rust & Rust, 1995, p.6-7).

Therefore, educational hegemony also manifests itself as a power of administrative intervention and control in the school behaviors, but as CRB25M believes, when education is bound with administrative intervention, it is not education at all. For example, when an administrative order arrives at the school where CRB25M works, saying, in one class with 50 students there must be 30 students admitted to senior high school, then all the teachers have to fight for that goal, however, school is not a factory to produce standard components through the production line, the aim of

teaching cannot be a number, and for students who have difficulties in learning, it is really a success when they make some progress, but according to the administrative requirement, they are 'defective goods'.

During the interview several teachers from two countries emphasized that they had no time for student individuals, for they must finish their teaching tasks according to the teaching plans in the limited time. GHH38M explains that there are topics that have to be taught, and there is something that either the state or the school authority tells to do, and there is no reason for teachers not to obey. CRB6M admits that teachers must do what the school and the superiors ask to do, and if they don't allow teachers to do what teachers want to do, then the teachers have to give up.

Therefore, for teachers, obviously, it is more important to concern how to complete the specified teaching plans from above than to make sure what the children have really learned, and more important to go through the books than to help children work out what they're really interested. Again when the administrative power stays above the teacher's subject existence, the teacher immediately has to be the representative or spokesperson of the higher authority, and his/her teaching turns more likely into the service of political ambitions, which might explain why teachers do what the authority wants, not what the children want.

What's more, in class educational hegemony performs as the teachers' control and dominance on students. It's found that teachers with the hegemonic thinking usually make themselves as the center of instruction, they play the role as the knowledge authority, and prefer the teacher-centered teaching in their classrooms where they are experts "in a highly structured learning environment" to supervise the learning process of students (Hermans et al, 2008). Snider and Roehl (2007) state that "experienced teachers were more likely to believe that classrooms should be teacher centered and that learning did not always need to be fun".

From the interview, it also proves that it is very important for many teachers to have the power of control on the whole class, and losing control can be a big fear and the failure of teaching, and only when everything and everybody are under their control, they feel the learning environment in class is favorable and their teaching is successful. So for them the success of a lesson means how they teach, not what

students learn, which persuades them again to highlight the importance of having the structured lessons so that all students concentrate on the teaching and listen to the teacher, which actually they do most of the time especially when they have time pressure or exam pressure.

This research also shows that teachers with more than 20 years of teaching experiences for example like GRE35M, GHG30F, CRB22F, etc. have more confidence on their control over the students and are more satisfied with their teaching experiences than the younger or new ones, for they have had good knowledge about how to get along with or deal with all kinds of students without harsh punishment, they prefer the students who do what they say, and they have quite authority before their students so that the difficult students dare not make troubles in class. Besides, as GGF7F believes, the younger the students are, the more control and discipline the teachers should have on them.

Some research reveals that the effective instruction generally follows two simple rules, one is that a student's failure or mistake "is immediately followed by increase in control" of the teacher, the other is that a student's success leads to a decrease in teacher's control (Forman & McCormick, 1995). Teachers, who believe in a 'custodial ideology' on student control, explain the class atmosphere "in terms of conflict and control", and look at students as "irresponsible and undisciplined persons who must be managed through punitive measures", so in class they believe one of their main tasks is to establish rules and keep the students under control, and during the teaching they show "more external in their locus of control, authoritarian and dogmatic, ...and less progressive in their educational attitudes" (Woolfolk et al., 1990).

Many previous studies in various countries have demonstrated that a large number of teachers depend on controlling strategies to motivate students to learn, like pushing students to think or act in some certain ways by extrinsic incentives, rewards, pressure, punishment or control, however, the results show that high levels of teachers' "dominance or control have been associated with adverse motivational outcomes" among students, that is to say, the more control teachers have on students, the lower intrinsic motivation students have on their study (Hornstra et al., 2015).

As Reeve (2009) has explained, usually “teachers consider lack of motivation to be an innate characteristic of students”, when they see students with low motivation, they are more likely to “resort to controlling strategies” or use more extrinsic incentives, for they find controlling strategies are more effective to make students work without having to bring up their inner motivation that they think is very difficult to wake up, as a result, the teachers may prefer the teacher-centered teaching style, and conclude that “they will more efficiently reach their instructional goals when using the controlling strategies” (Hornstra et al., 2015).

However, the problem is in the controlling-and-controlled classes, teachers don't conceive of individual student as someone who can possibly bring to the classroom “a set of cultural meanings and understandings that might necessitate changes in pedagogy and that might indeed become a valued part of the interaction that is the essence of curriculum”, but they usually ignore or overrule students' own perspectives which are not seen as something constructive or important, and students don't feel themselves to be valued, appreciated and respected in class, they're more like passive receivers and not active participants in the meaningful process of learning (Prime & Miranda, 2006).

Therefore, as the research found out, “when teachers were more didactic and controlling in their interactions, students produced shorter utterances and fewer elaborations, asked fewer questions, and showed more evidence of misunderstanding” (Forman & McCormick, 1995). Even though with those consequences and with the new policy that Chinese teachers should spend less time on lectures in class, and give students more time on their autonomous study, but some teachers from the interview confess that they cannot do that, because they don't want to lose their leading role in class, and they believe they must guide the students to understand the meanings of texts and correct their mistakes, which students cannot do on their own.

Kerdeman (1998) has argued that “our modern understanding falls prey to the illusion that our control is complete, that we are independent and self-empowered subjects who order the objective world”, as a response, the modernist education “rooted in the assumptions of dualistic epistemology” is committed to feeding and celebrating the pursuit of control, even when the postmodernism, constructivism

and all other new trends have largely developed and expanded in recent years, in the education system hegemonic ideology stays invariably dominant “to empower the individual to gain increasing control” in order to avoid the big fear caused by losing the power of control.

A good question that we should ask ourselves is “whether education is something under our control, or something that has its own power in which we must learn to participate” (cited in Kerdeman, 1998). CHH18F notices that many teachers in her school have job burnout, they have no passion but feel stressful and depressed at work, and teacher trainings don’t help to fill their energy or stimulate their enthusiasm, in her opinion, it’s important for the school leadership not to focus only on teachers’ teaching performance, but pay more attention to teachers’ self-development, let teachers participate in school management to have more sense of achievement, and also have some fun in the school, then they can be expected to do their jobs with more responsibility and passion.

When the teachers are given full play on their subjective initiative in an autonomy-supportive school environment, in the classrooms they might be more willing to encourage or grant their students autonomy rights as learning subjects. Research has indicated that “autonomy can be facilitated by transferring responsibility of the learning process to students, providing choice, connecting to students’ interests, providing explanatory rationales, and creating meaningful and relevant learning activities” (Hornstra et al, 2015). With the increasing autonomy of students, the teachers’ dominant hegemony will be counteracted by the power distribution and students’ participation, and the class could become more likely to be student-centered.

Some research tells that in a student-centered class, the classroom environment is very open and students’ self-inquiry and exploration are encouraged, the teaching is “delineated with accents on the individual needs and interests” of the students who are granted the subjective status of learning to manage their own learning process, and the teacher is there more like a supporter to help in their independent study and in setting the goals that student individual could reach (Hermans et al., 2008). Meanwhile, the teachers and students “reshape their ways of understanding, their knowledge structures and the meanings that they attribute to events and ideas as a

result of the interactive process, (and) they also continually reconstruct their views of each other” and their views on the meanings of life (Chen, 2006).

However, some cross-cultural studies discover that “autonomy is a value of Western, individualistic societies and that it might not be as beneficial to students who have a background from more collectivistic cultures” (Hornstra et al, 2015). This research finds consistently that students’ individual autonomy and independence on study are more important for German teachers than Chinese teachers, for which German culture and educational policy provide much more support and encouragement, but on the side of Chinese teachers, class collective is much more important than students individual, and student’s autonomous ability is suppressed and ignored in the school education which, however, highlights that the individuality must be built on the commonality.

All in all, education is not about control, but about participation, inspiration and support, it is to accompany children in their personal development, and it’s believed that education cannot be successful without student’s subject participation, for the student is the most important part of education. So, it is important for the teacher to lose the fear of less control, and invite every student to work together in the discovery of this world and to participate in the management of the class and school, so that everybody could feel like being a democratic part with his/her voice in the school, because school is also a working place for the students.

1.2 Value orientation

1.2.1 Examination-oriented or development-oriented

As far as educational values are concerned, the first question to ask is whether education should be examination-oriented or development-oriented. To put in a simple way, it is whether the education is about the score or about the person. In the eyes of teachers, is the examination really so important? Are those children who are good at exams really successful? Let’s see how teachers answered the questions:

Coding	GG	GR	GH	CH	CC	CR
Yes	0	1	1	2	0	1
No	0	1	1	1	3	3
Yes and No	6	4	4	3	3	2

From the table above, it can be seen that 2 teachers in Germany and 3 in China think that the examination is surely important, 2 German teachers and 7 Chinese teachers don't think it's important, and 14 German teachers and 8 Chinese teachers think the examination is only important to get admission to the next school, but is not so important as personal development and social competence, high exam scores could mean the success of study at school, but cannot guarantee students to be also successful in the life or later jobs.

Therefore, for the majority of teachers in two countries, they agree that school education should have the orientation to children's development as a whole person, which is much more important than having good scores in exams. In their opinions, if getting high exam scores is the only thing students can do, their school life must be miserable, sometimes the students who are very good at exams can be very stupid persons with no ideas or ethics, and even can't really manage their own life.

In consideration of all teachers' perspectives, usually students, who can get high exam scores are intelligent and hardworking, have good knowledge, good study methods and good learning abilities, for them good marks are also good feedbacks and give them good feelings, with good exam scores they can go to good schools or study the university programs many students want, and they can find better jobs or have more possibilities on success in the future, moreover, when they can do exams well, at least they are not so depressed in study or don't have so many problems with teachers and parents as the ones who are not good at exams.

However, as it shows most of the teachers agree that success on study doesn't mean the children can also be successful in other areas, and doesn't tell they are successful persons, because it's only one factor of success

which actually depends on many other more important factors, for instance, the children are open-minded and self-confident, are socially active and good team players, are friendly and ready to help others, are optimistic and happy, are not proud or self-contemptuous, they are able to solve problems and handle stress, are healthy and have positive mentality, they have good self-control and self-management, good morality and good habits, good communicative abilities and can speak in public, they have the sense of collective honor and can get along well with people, they have right attitude and strong perseverance, have tenacity of not giving up after failures, and they can always try their best to get better, and develop themselves in the all-round way.

Although almost half of the Chinese teachers approve of the development-oriented education and another almost half of Chinese teachers don't think exams are important, as a matter of fact, all teachers admit that Chinese education is definitely examination-oriented, and children's study career is decided only by one exam score, which is so crucial that teachers have to focus on only training students how to get high scores and cannot concern their development in other aspects. So, in some sense, the school acts as a production line and produces many 'exam machines' only knowing the knowledge and methods to deal with exams and having not many other abilities or skills.

Furthermore, from the angle of Chinese society, a student's success is defined by the scores, only the exam scores matter, even in the eyes of students the one getting high scores is a good and excellent student who can go to the best senior high school or university, and has more advantages at the competition in the job market later, thus Chinese people put a lot of faith in the exam scores. Perhaps some teachers would like students to develop in a full and balanced way, in the reality they could only find themselves 'dancing with shackles', and their ideas even get no try.

It might be true that, without the big pressure of examinations, Chinese education could be more relaxed and lively, however, Chinese cultural soil can hardly produce a better way of evaluation which can be more fair and

equitable than the exams beyond the hands of ‘relationship’ or ‘black-box operation’. CCD28M is right that the examination like Gaokao or Zhongkao is a mechanism, when it exists, it can drive the exam orientation stronger, and if it does not exist, the exam orientation will be weaker, but whether the education is successful or not depends not only on the mechanism, but also on the people who implement the education.

So, the question is if the Chinese teachers can teach every student in their classes very well when there is no exam or no big pressure from the exams, unfortunately, the answer could be a clear ‘no’, which can be seen in German schools where there’re much smaller classes compared with super big classes in most Chinese schools, and where the education is not so much restrained or controlled by exams as Chinese schools, but German teachers still have big problems to reach every child or teach their students in an ideal way.

GGF7F has a good opinion that the worth of a child is not what he/she gets as grades at school, but how his/her heart is and what kind of person he/she is. The examination is only a result, but education is a process, which is far more than the examinations, so it’s not in doubt that education has to be process-oriented and individual development-oriented, not examination-oriented, and it’s not wrong for teachers to help students get good results in the end, but it should not be the only thing teachers do in class, even in the process of pursuing good exam results teachers have to ask themselves what else they can offer students in their personal development.

1.2.2 Knowledge-oriented or student-oriented

The theory of Humanitarianism was originated and developed in the west, and Humbolt’s Gymnasium in Germany could be a good example of the human-oriented thought which travelled later to China and aroused a passionate response among Chinese scholars in the area of education, who put forward the concept of ‘student-centered teaching’ in the reforms of Chinese primary and secondary education. However, what is happening in class both in Germany and in China is still the other way around, not

student-oriented, but knowledge-oriented, teachers pay more attention to the knowledge teaching than student's personal development, which is proved in this research by the teachers especially in China where the education doesn't treat every child as a whole person.

Many teachers in the interviews stressed that they must finish the teaching plans before some dates, which is so important for them that they don't let themselves get stuck in the middle because of spending more time on students individual. But they have no problem to give up on some students, especially the troublemakers or very weak students, they admit that their teaching perhaps only covers half of the students, and none of them believe education can reach every one, instead, they give many reasons to explain why teaching is quite impossible to be student-centered in their classes.

For instance, the most popular reasons are that they have no time to diversify or do individual teaching; it's not possible for one teacher to prepare the materials for every student of the class; the classes are too big for teachers to know every student well; they have too many other things to do; there're many facts that students just have to learn by heart and cannot be differentiated; there's no time to wait for the weak students and the school system doesn't help them; individual teaching will increase the huge gap between the strong students and the weak ones and then make it impossible to teach the whole class or make a lesson for all students.

As the teacher CHL17F has realized during the years of teaching, for most of the teachers if not all, it is very important to be the main character of the 'stage play' in class, and students are just parts of their 'stage props', when they finish their teaching as they planned, they think their lessons are successful, but in fact it may be not, because what the students have received and learned is to tell whether education is successful or not. As some teachers believe, education doesn't deal with machines, but alive children with different personalities and talents, and in order to reach the success of education, teachers have to put students at the first place in their teaching to find out what they need and what they should develop, and then provide help and support for their study and development.

Some teachers get the impression that some students still don't understand after they have explained 3 or 5 times which they think should be enough for students to understand, the reason might be that teachers usually have higher expectation on students' study performance and think students having better learning abilities, and they don't take students as the center of the teaching but only judge students from their higher levels. Therefore, the knowledge-centered teaching is only the teacher's "monologue show" by treating children as knowledge containers, and conceivably it can make children easily fed up with the boring and stressful knowledge learning and testing.

Undeniably, it is necessary to teach students the basic knowledge of the general things, but that is not the main issue concerning their life, teachers have to help the individual student to find his/her personal way in life, which is much more significant and far-reaching than to learn text knowledge. Knowledge can be found and learned everywhere in this information age of today, which is only the medium of teaching, but students are the living individuals with thoughts, feelings, and different kinds of abilities, who are the subjects and aims of education that has to be student-centered, for the education without seeing children as individuals has lost the real meaning of education.

1.2.3 Individual-oriented or society-oriented

Whether education should be individual-oriented or society-oriented seems a topic that has been discussed for a long time, for example, Pring (1976) and Hirst & Peters (1970) agree that education is to help in the development of individual potentiality and in the growth of mind, but Ashton et al. (1975) argues that "education is the means used by society to ensure that new generations will maintain it both practically and ideologically" (Xue, 2005).

During the interview the teachers from different kinds of schools in two countries also talked about their opinions, and the following is the result of their answers.

Coding	GG	GR	GH	CH	CC	CR
Individual	2	1	0	1	1	0
Society	0	1	1	2	1	0
Combined	4	4	5	3	3	6

From the table above, it can be clearly seen that only 2 or 3 teachers in each country believe education should be either individual-oriented or society-oriented, and most of the teachers think education should find a middle way or a combined way between individual orientation and society orientation. In the comparison between two countries and among schools, the differences are tiny, which also means teachers in different schools from two countries share the similar opinions on this issue.

The teachers who approve of individual-oriented education believe that student's self-development should be the center of education, which is much more important than to meet the need of the society, because a person who doesn't develop himself/herself well cannot meet the development of the society, and when a student finds his/her interest during learning the different subjects and develops a good character, he/she will have no problem to adjust to the society after school. In the opinion of GGF7F, it is not successful to teach children to become good workers to fulfill the economical stuff which is important, but the person is much more than his/her work power, so successful education should teach every child to become a person with a full and wholesome character to live a fulfilled life.

The teachers, who highlight the society-oriented education, agree that all the students in the end will enter into the society, so the most important for education is to teach students social skills to be able to be part of the society, and to serve "the purpose of preparing students in line with the expectations of society and as such guarantee(s) the cultural heritage" (Hermans et al., 2008). If education stress too much on students' individuality, it doesn't help students to develop into social persons, but help in the self-centered character, which cannot make them be the fit members the society wants and needs, instead, they will always have trouble in the social life of society.

Most of the teachers believe the school education should combine student's self-development and the expectation of the society together, neither of them is more important than the other, and it's the duty of school to make sure the children have their own development and also develop themselves for the society, for both sides must go together. On one hand, the society is the background of the school, teachers have to teach students social values and norms to prepare them for the society, and on the other hand, it's also important not to kill the student's individuality but to treat everyone as a single person and help his/her specialty to develop further, so that in the end everyone can find his/her own position in different areas of the society.

In essence, children's self-development and the development of society have no contradiction with each other. When everyone of the children had a good development, all of them together could bring good behaviors and positive energy to the society, then the society would become better, and when the society had a better development, it would have higher demands on its members, which would push everyone to enrich himself/herself to be better. Therefore, education is successful when it can orientate itself in children's development of both their individuality and social generality, so that teachers don't forget the students individual while thinking of the society, and don't leave the society behind while focusing on the students.

In the reality, however, the situation seems more complicated and out of control, and from this research among 18 teachers in each country, 16 German teachers and 13 Chinese teachers believe that there're differences or conflicts between students' self-development and the expectation of parents and the society, which might show the school education has not reached a combination between the developments of students and the society, or the society has much higher requirements and expectation on the students' development. As a result, students cannot meet the demands of the society when they leave school for the society, and school education becomes a target in the critical and discontented voices of the parents and the society, for it does well in neither the student's personal development nor the preparation of students for the society.

2. Educational reforms

As to the teachers of two countries, they think there're a lot to be improved and changed in their working conditions and education systems, and most of them express their wishes on the educational reforms. Based on the results of the interview, it can be concluded as follows about what reforms teachers believe are necessary.

2.1 Comprehensive school

It is well-known that Germany has a long history with three tracks of school system, but the disadvantages of the system have always been a hot topic of discussion among German people, for which some kinds of comprehensive schools have also been tried in many states. About the comprehensive schools, the teachers involved in the interview have very different opinions as well, some say yes that it is a good thing, and some oppose strongly the establishment of comprehensive school. In China, there's a long history with comprehensive school especially in the period of the compulsory education which provides the same subjects for all children in the same Grade to study in the same type of school.

From the table above, it can be seen that 11 teachers talked about the reform on *Gemeinschaftschule* (a new type of comprehensive or community school), but actually 3 *Gymnasium* teachers and 2 *Realschule* teachers dislike the idea to build up the *Gemeinschaftschule*, 4 *Hauptschule* teachers, 1 *Gymnasium* teacher and 1 *Realschule* teacher are quite positively looking forward to it. There're 2 Chinese teachers from junior high schools, who don't think the Chinese single school type is good, but would like to have different types of schools to fit the different levels of students.

It is said that as early as 1968 West-Berlin at first introduced "the model of the comprehensive school", and very soon other states of Germany also followed to establish it "accompanied by unprecedented ideological, political and pedagogical discussion" (Kempkes, 2009). Originally the comprehensive school was designed to replace the 3-track school system, not to be a complement, however, compared with 3 tracks of schools, especially the *Gymnasium*, comprehensive school couldn't

successfully win the hearts of parents, but has left itself “at a strategic disadvantage in the competition for gifted students” (Kempkes, 2009).

Seemingly, Germany has never stopped trying comprehensive school types, partly because the old tracked education system has received tons of criticism, and one big argument is, as Becker et al. (2016) has concluded, that the highly selective secondary school system contributes largely to the “social inequality and achievement heterogeneity” and the variances among students’ achievement unfortunately get even much bigger when the schools have also big variations in curricula.

What’s more, the early ability grouping among German children at the age of 10 has also confirmed the big disadvantage for the “low-achieving and socially less privileged children”, which “may reproduce societal strata that are ability-based but simultaneously socially exclusive” (Becker et al., 2016). In the research, Hahn (1998) discusses that the social segregation associated with German education system essentially hinders the development of a liberal democracy, and the selective school system still prevails “the idea of grading down all the pupils who can’t cope with the standards set by historically evolved curricula and inflexible teaching methods” (p.123).

Even some German teachers from the interview confess that the tripartite school system is not fair to all children, and the children’s home situations and social backgrounds decide so much on their school career. But some Gymnasium teachers don’t believe that can be changed by putting children all together into one school, which will nevertheless make the teaching much harder because of the bigger gaps among students’ different levels, and the worse consequence is the good ones don’t push the others, but those weak, unmotivated or destructive ones tend more likely to destroy the atmosphere of class and pull down the good ones, however, if in a more homogeneous class with interested and smart children, teachers can really achieve a lot and the students can help each other a lot.

For the 2 Chinese teachers who would like to have different types of schools, they see, in junior high school and even in primary school, there are already a quite number of students who cannot follow the teaching, and they feel very unhappy and

suffering every day in class, so the teachers think it would be better if children in different levels go to different types of schools, so that the children good at study could continue in their higher challenging levels to prepare for the university, and those weak students could go to another school where they could have easy levels of study, learn through activities and develop their other abilities or skills for professional jobs later, as a result, the students in each school could get proper and sufficient supports for their study and development.

However, in some sense, sorting children into different types of schools is more like to protect the advantages of the children who are more able and socially privileged, so as to enable them “to maximize their attainment and insulate them from negative peer pressure” (Hallam & Ireson, 2003). The study of Burke and Sass (2008) tells that the “well-performing students suffer from being in a class with low-ability students” (Kempkes, 2009). But Hallam and Ireson (2003) argue that among all research “there was much less agreement that bright children are held back in mixed ability classes, ...there was very strong agreement that mixed-ability classes provided the less able pupils with positive models of achievement”.

Burke and Sass (2008) also confirms that “low-ability students benefit from sharing classrooms with high-ability peers” (Kempkes, 2009). Besides, considerable empirical evidences have proved the big influence of ‘peer group effects’ on students’ achievements, which explains again the positive effects on students’ performance by having also high-ability students in one class, because “good students strongly contribute to classroom discussions, aid students with below average capabilities, contribute to a high motivation in class and less frequently disturb classroom instruction, thereby helping to improve the learning achievements of their peers” (Kempkes, 2009).

But some Gymnasium teachers think the idea that in comprehensive school every single student has his/her own way and own tempo in learning to reach whatever he/she can is very idealistic and unrealistic, because it’s impossible to motivate students with different sheets or paper, or teach them at their ages with no pressure, since no child at 14 years old wants to know mathematics, they need some pressure to learn it, and they must hear that they have to change the school if they are not

good enough in the Gymnasium. So in their eyes the way of learning in the Gemeinschaftschule is just a dream.

To make the situation more problematic is it's supposed to have the Realschule, Hauptschule and Gymnasium in one Gemeinschaftschule, but in fact the Gymnasium stays and only Realschule and Hauptschule come into the Gemeinschaftschule, so this kind of joint school can only be "used as an alternative to represent the low ability-track in the process of abolishing Hauptschule" (Kempkes, 2009). It is not a real sense of comprehensive school, which, in the end, will be more likely to become a new rest school as the teacher GRE35M worries, and where the students in the level of Realschule would become more and more like the students at the Hauptschule level.

Most of the Realschule teachers don't want this Gemeinschaftschule, also because the Realschule doesn't have the problems like the Hauptschule, and they think the school of Realschule provides a perfect education for children by combining the theory and practice together, but when the new Gemeinschaftschule starts, the Realschule will be completely gone in the end, and there will be only students for the university and the rest who can do perhaps the jobs nobody wants to do. For parents, it also makes no sense to send their children to the Gemeinschaftschule when their children have the possibility to go to the Gymnasium, and they won't send their children to a school where there are also students of the Hauptschule.

Almost all Gymnasium teachers also agree that the Gemeinschaftschule cannot work in the reality, because it is not the concept that the whole community goes to school together, when half of the community is taken out to go to the Gymnasium, the rest of the community is not the community. However, they also think that it would be much worse if there's no Gymnasium, for the parents are strong proponents of the Gymnasium. GGH7M believes that the right way is to invest money in more personal life and more individual tutoring in the Hauptschule and Realschule, which would help to improve the situation a lot more than changing the whole school system, and which wouldn't be so costly than to spend money on the reform for the establishment of Gemeinschaftschule which is really not the future.

As Kempkes (2009) has mentioned, in Germany, the situation is the “political parties support ability-tracking if their members’ or electoral constituencies’ offspring are predominantly enrolled in the higher educational track, and thus profit from ability-tracking”. Because of the political big involvement and decision, some German teachers have even more worries on the future, for no one knows what will happen after the next political election. They think the main topic the government should consider is whether students shall have the possibility to learn according to their different abilities and intelligences, or it’s more important to bring all students together into one type of school since later they will live in one society, and they shall have the chance to make the experience with all kinds of people in the school.

Therefore, teachers who support the comprehensive school think that it’s wrong to divide children into 3 different tracks of schools, which is not a real image of the reality, and there should be “a form of school that makes it possible that society is not split, and children do not grow up in different – let’s say ghettos, the segregation, separating the society is a very terrible thing” (GHH38M). They believe that Germany needs a new concept to find a possibility to have the individual teaching for different students and also to have them all together in one school, not to separate children at their very important time of age.

From the opinion of GHU32F, the children should be together in one school at least till Grade 10, and she thinks some private schools in Germany are on the way of the right direction, and they educate all students together no matter what families they come from and what capabilities they have, they are sort of comprehensive with the concepts like Maria Montessori or Celestin Freinet, and highlight the importance of the personal development of each child. But in the reality, considering the long history and good experience of 3-track school system in Germany, it’s not easy to say whether the comprehensive school could blend in with the larger context of German culture and tradition to become successful, prosperous and popular.

2.2 Small classes

The idea of small classes gets the most ‘votes’ from teachers of both countries, and becomes the most desirable to be included in the educational reform. Some research also shows that “teachers strongly favor class size reduction” (Snider & Roehl,

2007). In the teaching teachers have gotten the feeling that they've never achieved their ideals or reached everyone because of too many students in one class, and they think the most difficult thing in their teaching is to satisfy all the students in the class at the same moment, if possible, they would like to have small classes, like 20 will be nice and 15 will be awesome, so that they are easy to see who need some extra help, and they can have the possibility to get to know each student in person and help them individually.

There's research which shows the significant correlation between class size and students' achievement, and reveals the positive effects and big advantages of small classes (Shin & Koh, 2007). Some researchers believe that students can gain more benefits in small classes, where usually they reach higher achievement and have more personal communications with their teachers, and from the side of teachers, they also show higher expectations on their students' learning in small classes and cover more teaching materials effectively (Shin & Koh, 2007).

However, teachers also doubt that the reform on small classes could be achieved because it would cost a lot more money, and the money is not there. In the research of Snider and Roehl (2007), they question whether small class size can really lead to student's good achievement to make it worth the high price of having small classes, and they find that it is actually not the class size, but the teacher's positive or negative expectation that plays a bigger role on student's achievement, which is also the famous 'Pygmalion effect' in Psychology. Even in small classes if teachers hold lower expectations on students, the teachers "show less warmth towards them, give fewer opportunities to respond, and provide less feedback, which in turn can result in lower achievement" (Hornstra et al., 2015).

Snider and Roehl (2007) have more findings in their study which "used random assignment of children in an attempt to determine if reducing class size from 24 to 15 would result in higher achievement", and they argue that the result shows small class size does have "statistically significant improvements in reading and mathematics, especially for students who participated in small classes in kindergarten and first grade", but later when small classes were implemented in a state of the USA, "the results were disappointing" and didn't reach the same outcome as expected.

Therefore, small classes “may not be a panacea for solving low achievement among students”, and in the research of Brousseau and Freeman (1988), they have found that 50%–87% of teachers agree that no matter how hard they try, there’re always some students who could never master all of the basic knowledge and skills in reading and mathematics for example (Snider & Roehl, 2007). As a conclusion, small classes might be a factor of influencing the students’ study performance, but not the only one decisive factor.

Surely small classes could be much easier for teachers to have personal talks with students, “to provide more individualized lessons and to monitor student behaviors and learning progress” (Shin & Koh, 2007). But from the opinion of CHH18F, she doesn’t agree that the communication with students will be certainly good or successful in a small class, it’s true that the time for each student is more than that in a big class, but it is not the crucial thing, for sometimes with maybe only one talk a teacher can touch the heart of a student and has no need to take more time to talk again and again, and sometimes it also happens that a lot of talks still cannot help to get closer to a child who doesn’t want to open his/her heart to teachers.

Anyhow, one thing is undeniable that it is very much more pleasant to teach a class with 25 students in a Gymnasium than a class with 88 students in a senior high school for example. When it’s possible, small classes shall be highly recommended, for it is undoubted that small classes are beneficial to both teachers and students in many different ways, in particular, more helpful in the personal relationships between teachers and students, and in the student’s individual development, and if teachers want, they really can have more time to put more concerns on each of students in small classes than in huge classes. From the interview, 9 German teachers and 3 Chinese teachers eagerly want to have small classes.

2.3 More teachers

Half of the interviewed German teachers believe that one of the most important things in the education system is to have more teachers. For them it’s very important to work with other teachers in a team to share the opinions, prepare for the teaching materials together, get some new ideas from each other, and even when they are having some problems with some classes, it’s very necessary for them to

know that they are not alone facing those problems. So they think they definitely need support from each other, and believe they can give more support to students individually when there're more teachers who can work with them together.

Besides, German teachers also think that they really need a teacher in the psychological profession and at least one social worker at each school, because now several schools share one social worker who has to change the work schedule among schools and cannot even stay in one school for half a week, and when there are children who really need the help of psychologist or therapist, no psychology teacher is available at school, and parents also refuse to send their children to the psychologists. In the opinions of teachers, social workers can help a lot in dealing with difficult students, talking with parents, preparing students with the professional information, and can also help students change the school tracks if they become more capable of faster learning, because it's possible to change but not so easy if they don't have that support.

In Germany now there're fewer children than before, so some schools are closing down, some teachers might have to leave, and the recruitment of new teachers are stopped, but German teachers from the interview really hope to keep at least all the teachers for smaller classes or have more teachers for one class, which would be very helpful in the teaching situation. One teacher in junior high school, CCD28M, has mentioned in the interview that in China many schools especially in cities are also lacked of teachers, for the number of children is increasing, but there's no more staff quota of teachers, which means the teacher recruitment licensing institute has the fixed number of teachers as authorized personnel and doesn't recruit more teachers when schools need more.

However, as Hao and Yu (2013) declare, the management of primary and secondary school staff establishment is highly centralized at the provincial authority, the school has no rights to employ teachers and the school's superior department can only hire teachers with short-term contracts or in temporary terms, who have no possibility to become authorized personnel with permanent teacher license, on the other hand, the teachers with permanent license cannot be weeded out. Therefore, CCD28M believes that the rights to recruit teachers should be given to the school's superior department at least, not an independent agency - teacher recruitment

licensing institute, who doesn't know how many teachers a school really needs, and moreover, a flexible staffing mechanism is also needed so as to have a system of teacher entire personnel appointment.

2.4 No reforms

5 German teachers state that there have been too many reforms in German school system and should be no more changes, four of them are Gymnasium teachers who prefer to stay with the old system of 3 different school types. The biggest problem teachers think is that there were so many reforms wasting too much money, and the people who started the reforms even didn't wait to see the effects or to see if they could be worked out, and before the reforms could work, they have already started the next change, so it's hard to tell if one of those reforms has brought something good. As a consequence, the schools are always on the way, always on hand, always on the run behind the reforms, and when the schools just start to change, the next reform normally has been coming.

What has impressed the teacher GGS5F more is some of the people who try to change and reform things in the school system have not been teachers for a while or have never been teachers, so they don't really know what's going on at school. The teacher GRR1F doesn't think the education system needs reforms, because in her eyes the system is good and the school type is not a problem, any problem within each type of school can be handled by the school individually, and from her opinion, it's important to work with the children in small classes, not to think about new ideas about the whole system, not to reform the schools all the time, since it takes a long time to make something new.

Kempkes (2009) also declares that "frequent changes in the education institutions are indeed perceived as a problem". Some teachers like GRE35M and GHH38M think the problem in the school system is not only too many reforms, one after another, but also those so-called reforms are really not reforms that reduce the knowledge by putting several subjects together for there're not enough teachers, and are actually only aimed to save the money, but the government calls them as reforms and says they're from the theories of pedagogy, so in the end the students

would not be better. Compared with too many and fast reforms in Germany, in China some teachers don't think reforms can really work in the reality.

For example, CRB25M doesn't believe the educational environment can be changed by the reforms when there's still the administrative intervention on school education. In CHH6F's opinion, any reform has to rely on the economic condition, without enough development in the economy, nothing could be changed in a short time, at this stage, the only way for Chinese students and teachers is just to be hardworking, adapt to the situation and endure the hard time. Also some teachers think that there're already a lot of reforms on educational policy, which were good and had no problems, but could not be completely carried out by the schools, in the end the reforms turned out to have no use or influence in the reality, because nothing can be changed in the school if the student evaluation doesn't change but still depends only on the examination results.

Although the educational reform inside the system is very difficult especially in China, CHH18F suggests that one reform from the bottom up might be operable, which means the changes of teachers, because even in an examination-oriented education system teachers still have to learn advanced ideas, learn to be responsible, have innovative awareness, lay emphasis on their class/lesson reforms, pass at least some of their beliefs onto students and cultivate them accordingly, which can also make the teaching and school education very different and much better without big reforms in the whole system.

2.5 Evaluation system

7 Chinese teachers in the interview have mentioned that the evaluation system of students and teachers should be changed and reformed, because they believe the change of evaluation system can lead the radical change in the school educational situation, since the system of entrance examination acts as the baton of education, and when the evaluation changed, then everything would change for sure, but if the evaluation still took exam scores as the only measurement, nothing else would change in the school.

Some Chinese teachers suggest that student evaluation should be a comprehensive evaluation including children's moral characters and different kinds of abilities, and should also be a process evaluation from the beginning of school day till the graduation of senior high school, plus the results of college entrance examination, with all of which the university then decides which students they want. However, Zhang and Huang (2018) argue that "the current system of social creditability in China is not yet sound, so, if comprehensive quality evaluation and daily study performance were included in the admission standards of the Gaokao, it would be followed by the phenomena of falsification and the power of rent-seeking" (translated).

Some teachers in junior high schools think, as to the senior high school entrance examination, scores could be replaced by grades, e.g. up to some score is grade A, between some scores is grade B, then C and D, as long as a student could reach B, he/she would be able to go to senior high school. Grade is better than score, because when a student gets 120 out of 130, he/she still wants to get 121 or more, but if using grades, his/her score is already in grade A, then he/she doesn't need to fight for more scores, but can put more focus on other subjects or interests.

There're also some teachers who suggest that the examinations should be for graduation, not for entrance to the next school, because students try so hard to get the entrance and then the entrance to college is just a kind of finish, after they're in the college, they don't think they need to work hard any more, or maybe there should be an exam after students are enrolled in the college, or an exam organized by the university for students who want to get in, so that the Gaokao can be cancelled and then there will be not so much pressure in the whole secondary school system, or there should be different kinds of assessment methods and not the exam results being the only measure to decide where the children should go further.

Besides, what's important is students themselves should be responsible for their own exam results, which should not become the main standards of the evaluation on teachers' teaching performance, because it's not fair or reasonable to evaluate teachers according to their students' exam scores, which could largely depend on what kind of students they get. Another reform should be on the teacher's professional title and honor evaluation, teachers should be given more chances to

take part in the higher titles' evaluation, otherwise, they have no way to get their salary increased, but the honor evaluation is unjust, non-transparent and not available to most of teachers, which should be changed too.

2.6 Support for parents

2 German teachers and 1 Chinese teacher think there should be more support for parents, like to help them support their children in a better way, help them change their mind to see the strong points of their children who are not good at study, help them understand their children better, and work out the problems of their children with teachers and school together, and so on.

2.7 Change of Hauptschule

Some teachers in the Gymnasium and the Realschule think that in German school system, only the Hauptschule has problems and it has not enough students, partly because when children are called losers in that school, it is not good for their feelings and study motivation. Therefore, the Hauptschule must be changed to find a way to survive and think about other ways to get children into the school. But those teachers cannot tell how to change the Hauptschule, for them the key point is the change should be inside the Hauptschule, not to touch the Realschule or Gymnasium.

2.8 Whole-day school

One Gymnasium teacher and one Hauptschule teacher would like to have the whole-day school, because they see some students have the needs to stay longer at school, especially the students in the Hauptschule, many of their parents must work and are not at home during the day and can't look after them, it's important for them to keep the children at school from 7 am until at least 3:30 or 4:00 pm in an organized way. For those students, it's important as well to have lunch at school, do the homework at school, take extra courses and extra time at school with teachers, and make some sports or music in the free time of afternoon.

In the belief of GH07M, the German school system must be a system where students stay the whole day at school, and then at 16 o'clock they go home, it's a

finish of the school day for them and also for teachers. But from the experience of GGD15M who worked in a whole-day school for a while, it works like that teachers don't have to stay longer at school, because next to school there is a big university and there are many university students who would like to work as volunteers in part time at school just for getting in contacts with children and helping children or developing their own skills of being teachers in the future, and there're also some parents who would like to help a little bit in the school to see how it works.

In the research of Freitag and Schlicht (2009), they discuss that “in Germany’s public debate, all-day school is often touted as a means to decrease social inequality”, which is “an official objective of the federal all-day school treaty”, because “in all-day schools, all pupils, regardless of social background, are socialized in a similar and enriching environment over the period of an entire day”, however, due to “the strength of the half-day school tradition in Germany, no federal state can boast high enrollment rates for all-day school”. Undeniably, a whole-day school can cost a lot more money than a half-day school, so from the reason of saving money, the whole-day school might hardly become an advocacy in Germany.

In a realistic angle, the teacher GGH7M argues that the whole-day school could be a good thing if the school had the space for sports or arts, had the people who were there and were able to occupy themselves with the students, or if there were really a lot of activities that were different from normal school life, then the whole-day school could become quite attracted to students, but it's not good just to have the students to be present at school and supervise their doing homework, and it's also difficult for the teachers to be glad to stay longer time at school.

2.9 Individual education

During the interview, many German teachers expressed their wishes on individual education, and one teacher believes that there should be individual learning at school, so that every student can have the contact with the teacher, can decide what he/she wants to do, and can study the materials matched to his/her level, and it's also important for teachers to make lessons for children's heads and hearts, not only for their heads. There's one Chinese teacher who believes it is very important for

teachers to cultivate children's individuality, because the education in China only stresses the commonness and doesn't pay attention to student's individuality, and the individuality actually is more important than generality.

As the last words of this research, after all the comparisons, I would say every education system has its own advantage and disadvantage in the context of its own culture and social environment. But education itself is also beyond all the national boundaries, and has the same aim that is to respect the difference of every child and make every child's potentiality become present, like Kemp (2006) has quoted the idea of Rousseau, saying, "educating first and foremost requires an understanding of the various differences in students' predispositions, depending on age and gender --- every age, every station in life, has a perfection, a ripeness, of its own".

Furthermore, it's important for the school education to allow all the abilities and talents of children to "be awakened and also to be tested out through more demanding tasks at the appropriate level in each case" (Hearnden, 1976, p.62), which means education has to fulfill its tasks of inspiration and guidance. During the meantime, education has to be committed to "the entitlement to promotion and development of individual talents, inclinations and skills, and qualifying persons, thereby, to shape their personal, professional, and social life on their own initiative" (Rust, 1984, p.xxx).

Essentially, education can never be successful when it ignores the children, for education is a topic about children's development, and, without love and concern on children, education is only a pseudo-proposition. Any utilitarian aim or quantifiable result is not qualified to boast the success of education, which, however, should be described by the children's experiences and growing-up in a constructive and positive way. Unfortunately, education in both Germany and China is not so cheerful or optimistic, and it doesn't enlighten the minds of children very much, but is keen to train children to be machines or manpower.

But as everybody can see, now our world is going to have more machines to take over many jobs of human beings, and the rapid development of information

technology has allowed us to get the knowledge or information easily on the internet. When a job can be done by machines, it's very sure that they can do much better and more precise than human beings, so what our present education can teach children to survive among machines and robots in the future is not what machines can do, but something machines cannot do, like the ability of creation, the ways of thinking, the feelings of love, the sense of arts, the values of morality, the spirits of humanism and the skills of sports, etc., otherwise, the education is only in vain.

Frankly speaking, this research is only a small try to discover the education, which is far not enough for the big topic of education itself, and many interesting details cannot be covered or go deeper in such a short study. Even some teachers in my interview said to me that with this topic I could really write a book. Therefore, I believe it's very necessary for the future research maybe in some new angles or more realistic and practical perspectives to go deeper and wider on the topics like successful education, educational reforms, teacher's successful teaching, student's sustainable development, class culture construction, and so on.

To make it in a simple way, what has been discovered in this research is that the secret of successful education lies in the teachers' beliefs, and the determinant to the success of education rests with teachers' behaviors which are definitely influenced by teachers' beliefs. Like a saying goes, we are what we think, and when teachers kept a lot of negative minds on the education system and didn't feel satisfied with their teaching conditions, the outcome of education couldn't be pleasant or satisfying. So to change the face of school education, except the educational policy, has to start from changing the minds of teachers.

Personally I think the big value of this research is to give the teachers a platform to speak out their opinions, to uncover the realistic face of school education and confirm the key role of teachers in the development of children. In any case, we should not forget that the teacher is one important key to the successful education, their opinions and behaviors describe the real picture of school education, and their voices should especially be heard in the educational reforms. Generally, education is an eternal topic which can never become old or out-of-date, we have to always think about what we can offer children for the future life and check constantly how we are doing.

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Interview questions

1. What do you believe is successful education?
 - Why do you believe that?
 - What or who affected your belief?
2. Has your belief changed since you became a teacher? In what aspects?
 - What helped the change?
3. Do you think your belief directs your teaching?
 - Can you give an example from your work experience?
 - How do you try to realize successful education in your class?
4. What kind of students is successful in your belief?
 - How do you help students to be successful?
 - Do you think a student good at exams is successful?
 - It is more important for students to focus on their self-development or to meet the development of society?
 - Do you think there is conflict between students' development and the expectation of parents and society? Please give examples.
5. Can you put an order of these words based on what you think is more important for students to have and improve at school? From the most important till the less. Independence, Responsibility, Self-confidence, Self-motivation, Learning interest, Lifelong learning, Text knowledge, Physical and psychological health, Practical ability, Good personality
 - among these, what are covered in your teaching?
 - besides those, what else is also your concern in your teaching?
6. Do you feel satisfied at your teaching job? In what aspects?
7. What do you think is successful in present educational system?
 - Is there any conflict between your belief and the reality?
 - How do you deal with the conflict?
 - What support do you need to fulfill your belief in practice?
 - What reform do you think is necessary for the educational system and your working condition?