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"Research begins in wonder and curiosity but ends in teaching"

(Lee Shulman <http://www.leeshulman.net/biography.html> 16.02.2014.).

## **1. Introduction**

"[B]ecause we cannot properly understand teachers and teaching without understanding the thoughts, knowledge and beliefs that influence what teachers do." (Borg in Barnard and Burns 2012: 163) and appreciating the importance of teacher cognition is a "significant contribution to our understanding of the process of becoming, being and developing professionally as a teacher." (Borg in Barnard and Burns 2012: 163).

Understanding and appreciating teachers' opinions and knowledge about the particular qualities of English teachers would be highly beneficial to subject-specific teacher training; a field which is ever changing and developing since the social, cultural and circumstantial factors which influence teachers' decisions whether or not to apply or follow their beliefs and opinions are constantly evolving as well.

If the understanding of the specific characteristics of what distinguishes an English teacher from teachers of other subjects was supported by empirical data, the outline of the profession would be more realistic and could be presented in greater detail to interested parties/students.

Furthermore, the newly introduced acceptance tests for the academic year 2014/15 of the University of Vienna concerning the teacher training programme could be individually specified for the particular subjects in order to establish more informative results, as intended by the university (cf. <http://aufnahmeverfahren.univie.ac.at/>, 12.2.2014).

Furthermore, the literature review of this paper will present a great number of studies "from the United States, Hong Kong, the United Kingdom, and Australia, but there remain many L2 education contexts where the study of language teacher education has yet to make an impression." (Borg in Barnard and Richards 2009: 168) and my diploma thesis can raise attention to the fact that especially the Austrian teaching context, with its specific educational circumstances, has been rarely scientifically examined with regard to teachers' cognitions on the particular characteristics of English teachers. Borg calls for increased engagement with "primary and secondary schools in the state sector" regarding teacher cognition (Borg in Barnard and Richards 2009 168) and my diploma thesis can be seen as a baby-step towards this direction although I did not choose to rule out the participation of teachers of private schools.



## **2. Historical background**

### **2.1 Introduction**

In order to present the current understanding of the term *teacher cognition*, I believe it to be meaningful to build this definition on a demonstration of the historical development of this particular research field, which emerged approximately 40 years ago (cf. Borg 2006: 5). This chapter will present the gradual composition of the different aspects that today comprise the concept of teacher cognition and display the most interesting features of current research. Starting in the 1970s, we will see that the main research interest was to analyse teachers' decisions, which was strongly influenced by the study of psychology (cf. Borg 2006a: 6). The aim was to generate the most successful instructions to optimise teacher behaviour and generate the ideal teaching behaviour (cf. Borg 2006a: 5). Criticising this prescriptive and somewhat one-sided approach, researchers in the 1980s slowly moved on towards incorporating different aspects of teachers' knowledge into the discussion (cf. Cantu & Warren 2003: 51.). Also at this time, research on the notion of teachers' beliefs and theories increased substantially. Additionally, the connection between research on teacher cognition and the practical use of research findings in teacher education processes was forged and continues to be a vital aspect of today's studies (cf. (Clark & Yinger 1979: 2). During the 1990s, these developments continued and research concentrated on the internal processes and entities of theories, beliefs and knowledge of teachers. Furthermore, research on teachers' beliefs and theories was expedited by two diametrical but nevertheless simultaneous steps; on the one hand, the general definition of a person's beliefs helped to clarify the concept. Equally, dividing the field into a number of different research foci opened the starting point for more elaborate studies (e.g. Pajares 1992). Analysing teachers' knowledge and attempting to define and categorise it, was the main research interest of many influential studies of that time and additionally helped to reduce some of the ambiguity regarding the terminology within research on teachers' mental processes (e.g. Carter 1990, Fenstermacher 1994). Also, as stated above, defining the concept of teachers' beliefs furthered the development of research on teacher cognition towards its current state (e.g. Pajares 1992). Furthermore, during this decade, novice teachers' cognitions were included and compared to experienced in-service teachers' perspectives and theories (e.g. Carter 1990). This period also shows the emerging focus on the connection between teachers' beliefs and their practices (e.g. Pajares 1992). From the year 2000 until today, research on teacher cognition continued to expand in range and variety so extensively that comprehensive reviews were no longer available.

Instead, reviewers offered research guides (e.g. Munby, Russel and Martin 2001) or concentrated on specific research foci and directions. Nevertheless, some of the milestones of research of the 1990s have continued to play an important role until today. For example, studying mental processes of teachers is still based on the research field of teacher education. Moreover, the close link between teachers' cognitions and their practical work continued to inform researchers like Borg (e.g. 2007, 2013), or Phibbs (e.g. 2009). The years 2008 and 2009 showed extensive research on pre-service teachers' cognitions (e.g. You & Jia 2008, Harper & Rennie 2009). Connecting teacher trainees' mental processes to those of in-service teachers was, however, a newly introduced field of research (e.g. Polat 2010, Gao & Ma 2011). Another innovative development of the beginning of the 21<sup>st</sup> century was presented by the analysis of teachers' and students' cognitions (e.g. Yoshida 2010). It will be shown that the similarities and differences between unexperienced and veteran teachers' attitudes and perspectives introduced during the 1990s are still a rather unexplored part of research (e.g. Gatbonton 2008, Leshem 2008). The initially primarily North American context of research extended to studies from various different countries of the world and forced me to selectively highlight only some of them. The general development of an increased research interest in teacher education and consequently teacher cognition, also noted by Borg (2014) will be examined in more detail. As stated above, many more research foci emerged and I decided to list the most interesting and striking perspectives.

## **2.2 Perspectives and research on teaching change – The 1970s**

Simon Borg, one of the most influential and prolific figures of the scientific field of language teacher cognition, also involved in studying teacher education and professional development, teacher research and research methods, started his review of the history of teacher cognition in the 1970s with the description of Dunkin and Biddle's concept of teaching as a "process-product approach" (2006a: 5). This was the common understanding of teaching during the 1970s. Dunkin and Biddle defined teaching as the relationship between the following four variables:

[...] *presage* variables (e.g. teachers' personal characteristics and teacher-training experiences), *context* variables (e.g. learners' personal characteristics), *process* variables (defined through interactions between teachers and learners in the classroom) and *product* variables (e.g. learning outcomes). (in Borg 2006a: 5).

Hereby presented is the idea that learning is the result of teaching and that the goal of studying it is to find out which teaching activities most effectively produce the best learning outcomes. Only the observable teaching behaviour was analysed and focused on without

regarding cognitive processes of teachers as the background and the base of behaviour. I would like to add here, that the prominent epistemological concept of behaviourism in psychology at that time had substantial influence on the research on and the understanding of teaching (cf. Borg 2006a: 6). The shift from a formerly behaviourist theory dominant in research on education, towards a cognitive perspective on the processes of learning, also brought about a different view on teaching and teachers. Borg (2006a: 6) stated that “developments in cognitive psychology had highlighted the influence of thinking on behaviour.” and thus already provided alternative views on teaching in the late 1960s. Shifting the focus towards the mental lives of teachers as the basis for decisions regarding their behaviour in classrooms, combined with “an increasing recognition of the fact that teachers played a much more active and central role in shaping educational processes than previously acknowledged” (Borg 2006a: 6) gave way to the understanding that the processes of teaching and learning were far more complex than had been originally assumed. Additionally, researchers began to realise that the idea of establishing generalisations concerning desirable teaching behaviour was limited and deficient (cf. Borg 2006a: 6). The aim of analysing processes of teaching under a mainly behaviourist perspective gradually evolved towards highlighting the role of teachers “as active, thinking decision-makers” (Borg 2006a: 7) in educational processes and thus, the importance of analysing their mental lives was recognised. Emphasising and reinforcing this new understanding, the report of the 1974 National Institute of Education’s National Conference on the Studies in Teaching under chairman Dr. Lee Shulman called for further research and can therefore be seen as an “important event that marks the emergence of teacher thought as a legitimate topic of educational research” (Cantu & Warren 2003: 51.). One of the results of this report was the substantial funding that became available for this field of research within North America and for quite a while, research was limited to a mainly North American context (Borg 2006: 7). Additionally, the perception of teachers was also substantially influenced by these events. Borg (2006a: 7) explained that understanding teacher behaviour to be “*thoughtful*” instead of reducing it to a schematic implementation of regulations that had been imposed by external forces like the curriculum and educational researchers, moved the role of the teacher into the centre of attention. Once again, the impact of psychological research on the development of the study of teacher cognition can be made visible at this point and I would like to elaborate on this aspect: Borg (cf. 2006a: 7) listed Shulman and Elstein as two significant contributors to the change in appreciating teacher cognition as essential part on the way to understanding teachers and the process of teaching. Elstein, a renowned physician, author and lecturer, and Shulman, also an

author, lecturer and educational psychologist, were additionally involved in the report of the National Institute of Education. They were engaged in a highly innovative study of analysing physicians' line of thoughts and how they made their choices. Shulman accomplished to adopt the findings on how physicians assessed situations, made decisions and solved problems to the field of applied educational sciences and linked teacher behaviour to that of practicing physicians. He explained that teachers, just like physicians, face the job requirement of rapid decision making in multi-layered and highly individual situations under immense time-pressure (Shulman and Elstein, 1975: 35 quoted in Borg 2006: 8). To sum up, it can be seen that findings in the field of psychology, more specifically the similarities between physicians' and teachers' processes and circumstances of decision making, furthered the development of the study of teacher cognition.

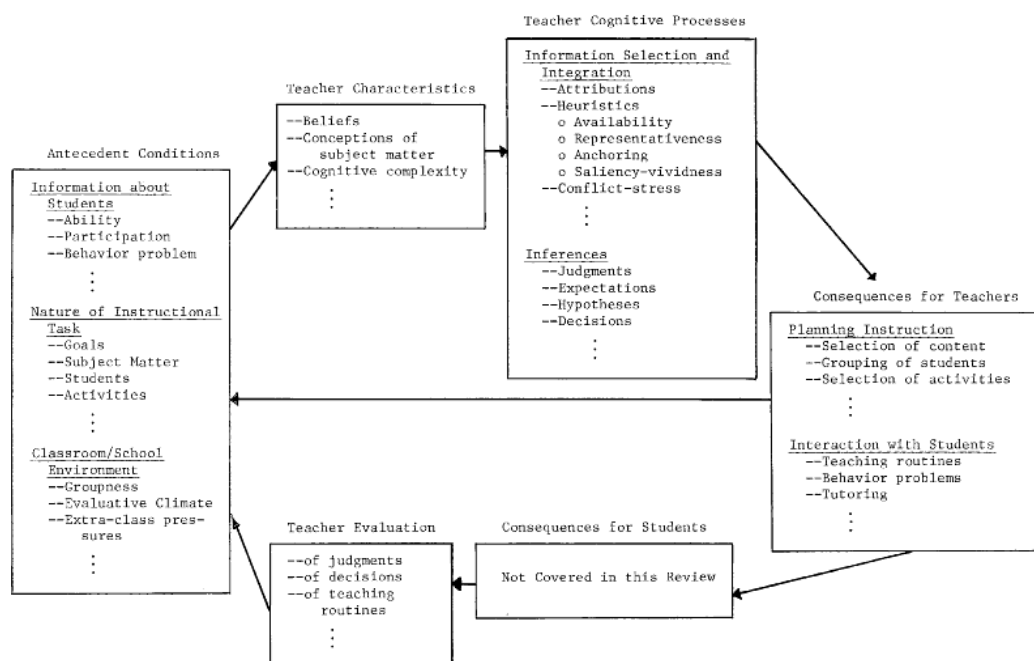
The scientific discussion had of course not yet reached its current form, since researchers at that time did not include several aspects of cognitive processes that are taken for granted today. The main focus continued to be on four issues regarding cognitive processes of teachers, reflected in Clark and Yinger's review of three studies of that time. Their 1979 paper listed teachers' "implicit theories of teaching and learning" (Clark & Yinger 1979: 9) and "[t]eacher planning for instruction, a process involving teacher thinking, decision making, and judgement, as a strategic site for research on teacher thinking." (p. 4). At this point one might feel surprised to be reminded that planning for instructions involves cognitive processes. Borg called attention to the fact that "[t]he study of planning in teaching was at the time dominated by a prescriptive model in which objectives were the basic initial unit in the planning process followed by the selection of learning activities, decisions about their organization and about their evaluation." (2006a: 8). Nevertheless, the ongoing shift in perspective is underlined by Clark and Yinger, because in their opinion, teacher planning had its beginning in focusing on the content and the setting of teaching. They believed that in a further step, teachers then moved on to forming their process objective as they focused on their learners' "involvement" (Clark & Yinger 1979: 15) and concentrated on the students and the activities. However, the main research interest continued to focus on "What works with whom?" (Clark & Yinger 1979: 2) in order to establish effective and successful teaching behaviour and promote it throughout the profession of teaching. Borg (cf. 2006a: 9) reminded us that, although the contributions to the contemporary understanding and work on teacher cognition of research during the 1970s were limited, because they were still unable to answer the countless questions that continued to be raised, they were nevertheless substantial. He argued that one aspect that was introduced during the 1970s and is understood to be self-evident today, is that

“teachers’ thinking and behaviours are guided by a set of organized beliefs and that these often operate unconsciously.” (Borg 2006a: 9).

### **2.3 How do teachers make decisions and what do they know? The 1980s**

Moving on to the next decade, I would like to present another important educational and scientific step that was taken at that time. Picking up on the newly established belief that studying teaching without considering the mental processes of teachers could only be partial, Shavelson and Stern (1981: 8) explained “that research linking teachers’ intention to their behaviour will provide a sound basis for educating teachers and implementing educational innovations.”. In doing so, they introduced another reason why research on teaching should also consider the mental lives of teachers. In addition, they stated that the hitherto mainly psychological approach had become increasingly multidisciplinary in their 1981 review (cf. Shavelson and Stern 1981: 1). However, the earlier presented process-product and practical outcome-oriented approach towards teaching remained largely unchanged. It had not yet made way for the new goal of understanding “why teaching is as it is.”, although researchers like Clark and Yinger (1979: 3) called for such an approach. Borg (cf. 2006a: 9) explained that research during the 1980s concentrated on generating and promoting rather normative guidelines for successful training, in-service education and practices of teachers. However, the understanding of teaching as a linear and mainly product-related process was beginning to be gradually replaced by the appreciation of the interactive relationship between classroom proceedings and teachers’ thoughts (cf. Shavelson & Stern, 1981: 10). Shavelson and Stern (1981: 10) created a circular concept that was intended to show “how teachers integrate information about students, the subject matter, and the classroom and school environment in order to reach a judgement or decision on which their behaviour is based.”. This model is illustrated in Figure 1.2. Borg (cf. 2006A: 11) emphasised that this recognition of the reciprocal causal connection between teachers’ cognitive processes and their classroom behaviour represents a vital aspect of the current understanding of teacher cognition. Teachers’ decisions about certain actions clearly have a cognitive origin. Within their classrooms, they have to consider immense amounts of information regarding aspects of their students, the environment and their teaching objectives and in a further step make meaningful and sensible decisions within split-seconds. Shavelson and Stern (1981: 10) showed that this can be seen as an immensely complex problem, when they explained that our mental capacity “to process all the information in [our] environment is limited”. Clark and Yinger’s research suggested that this psychological task of highly elaborate information processing leads teachers to rely on mental routines in order to perpetuate the workflow (Clark & Yinger 1977

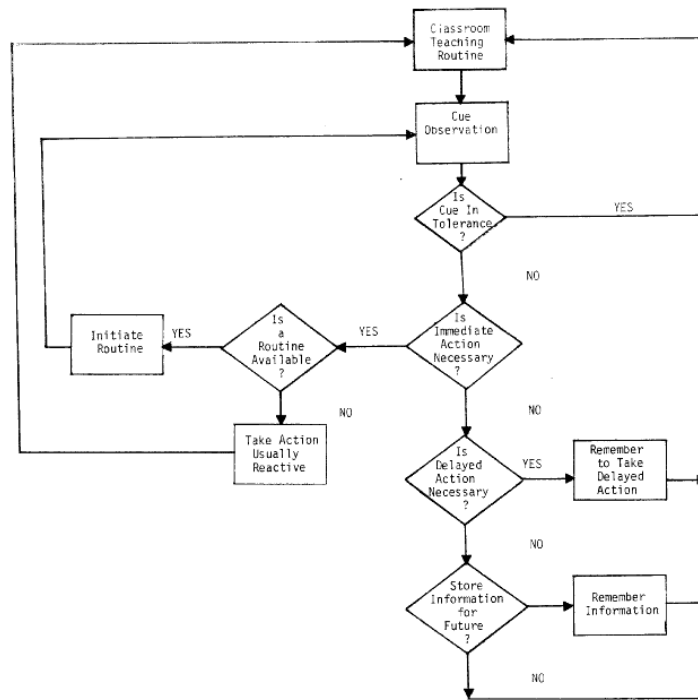
referred to in Borg 2006: 11). As a consequence of trying to keep up the “flow of activity” (Borg 2006: 11) these practices are often continued although they might have proven to be unsuccessful (Clark & Yinger 1977 referred to in Borg 2006: 11). In another, even if somewhat limited, model of the decision-making process of teachers (see Figure 1), which is based on their learners’ cues regarding the usefulness of their choices, Shavelson and Stern (cf. 1981: 47) made a valid point of presenting the importance of routines in teaching. They did, however, miss many other equally influencing aspects.



**Figure 1:** “Overview of the domain of research on teachers’ judgements, decisions and behavior” (Shavelson & Stern 1981: 11).

Their concept based teachers’ interactive decisions on cues that are picked up from learners in order to determine whether a certain form of teaching behaviour was beneficial to the process. Clark and Peterson, however, soon found that this concept lacked several different influencing factors:

First, a model of teacher interactive decision making should reflect the definition of interactive decision making as a deliberate choice to implement a specific action rather than a choice of actions from several possible alternatives. Second, a model of teacher interactive decision making should reflect the finding that the majority of teachers’ reported interactive decisions are preceded by factors other than judgements made about the student. These factors might include judgments about the environment, the teacher’s state of mind, or the appropriateness of a particular teaching strategy. (Clark & Peterson 1984: 75)



**Figure 2:** “Model of teachers’ decisionmaking [sic] during interactive teaching” (Shavelson & Stern 1981: 48).

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Additionally, Shavelson and Stern (cf. 1981: ) themselves recognised that another essential issue regarding the research on teacher thinking had been generally disregarded and suggested that further research should include the aspect of subject-matter knowledge regarding the preparation of and implementation of teaching. They argued that “[r]esearch should examine how teachers communicate subject matter structure and the manner in which they do so.” (Shavelson & Stern 1981: 59).

### **2.3.1 Practical knowledge and teacher cognition**

Another term describing a kind of knowledge, that was found to be involved in teachers' mental lives and originally coined by Elbaz (cf. 1981: 45), was the concept of practical knowledge, which she identified as teachers' empirical knowledge about their students' learning preconditions, requirements and tendencies. Borg (2006a: 13) pointed out that "Elbaz's work was seminal; at a time when the dominant conceptualization of teachers remained firmly behaviourist, her work connected with the emergent interest in teacher thinking, but presented a different, more holistic perspective on the study of teachers' work to that adopted in the earlier, largely psychological studies of teacher decision-making.". In her study, Elbaz contrasted the then popular tradition of focussing on decision-making processes with her endeavour to understand the mental concepts behind a teacher's work and promoted the, for her, central role of the teacher in educational processes (cf. 1981: 45). In the late 1980s, the models that had concentrated on decision-making processes and information-processing were challenged more increasingly, because it was felt that the aspect of teachers' mental lives was not covered sufficiently. Also, Munby (1982: 202) made a point of mentioning that the concepts that had influenced research on teacher cognition at the beginning of the decade did not involve "teachers' beliefs and repertoires of understanding", to a satisfying extent. Borg (cf. 2006a: 13) recorded that this appeal for further research on beliefs as vital part of teachers' mental lives presented to be an important development for the concept of teacher cognition.

Shavelson and Stern also included another interesting and previously ignored point in their findings on how research on teacher cognition should be best continued. They stated that "[v]ery little attention has been paid to how knowledge of a subject matter is integrated into teacher' instructional planning and the conduct of teaching [(cf. Shavelson, in press)]." (Shavelson & Stern 1981: 59). Adding to the discussion, Halkes and Olson (cf. 1984: 1) stressed the need for a distinction between research on the most effective teaching practices and examining teachers' mental lives in order to understand them and the teaching process in their report at the first ISATT– the International Study Association on Teacher Thinking, conference . This organisation was founded in 1983 and has, although under a changed and more general term (International Study Association for Teachers and Teaching) greatly contributed to the research field of teacher cognition: "Research is not limited to studying what teachers do but tries also to understand how they think and feel about what they are doing and the cultural contexts in which their work is embedded"



(<http://www.nesse.fr/nesse/activities/research-mapping/teachers-and-teaching/institutions/international-study-association-on-teachers-and-teaching> par. 2). The founding of the ISATT can be argued to have marked a point in time during which essential contributions to the scientific discussion of teacher thinking took place.

### **2.3.2 The processes of how teachers think**

Clark (1986) and Clark and Peterson (1986) confronted the earlier view of teachers as physicians of the educational system, whose tasks were to form diagnoses, make rational decisions and solve problems within the learning process. The upcoming more constructivist idea of a thoughtful teacher, who makes sense of the psychosocial teaching environment that had previously been ignored as important part of the influencing factors on teachers' mental lives and their decisions, was especially emphasised by Clark (1986: 11) as one of the major research developments of that time. Clark also identified this scientific shift towards examining teaching in its authentic settings as to find out the manifold underlying circumstances and effects on teachers' performances as a vital one in relation to the connection between science and teachers' practical work in general. Instead of using the study of teacher thinking in order to construct regulations as to what successful teaching behaviour should be, Clark (1986: 14) demanded the study of teaching to serve the actual work of teachers by means of "portraying and understanding good teaching in all of its irreducible complexity and difficulty.". Going hand in hand with this was Clark's (1986: 16) criticism on the choice of research environments for studies that had mainly focused on "nice, well-organized, upper middle class suburban elementary school classrooms", because they only presented a partial view on the reality of teaching and learning processes. Borg (2006a: 16) adds, that "[a]nother gap in research at the time was the lack of attention to issues of **quality** in the teaching that had been studied;". Warning further research from neglecting either of the two components, Clark (cf. 1986: 257) introduced a new and enhanced model on how teachers' thoughts and their actions were co-dependant on each other. Together with Peterson, Clark (cf. 1986: 257) claimed that the three equally balanced parts of teachers' thought processes were directly intertwined with teachers' as well as students' classroom behaviour and student achievement. Borg (2006a: 17) showed that besides the constituent of teacher planning, with the teacher's pre-active and post-active thoughts and secondly, the component of interactive thoughts and decisions, Clark and Peterson were then able to utilise a more substantial body of research on educators' theories and beliefs, as it had been demanded by Munby (1982 in Borg 2006a: 17) earlier, and could thus include this aspect into their model.

Borg continued to explain that this step represented a substantial extension to the components of teachers' thought processes (Borg 2006a: 17). Also offered by Borg (2006a: 17) was a point of criticism considering the selected research environments until that time, that "had focused largely on the work of experienced elementary teachers (working, I would add, in the USA)". Clark's (cf. 1986: 268) suggestion to include novices as participants in longitudinal teacher cognition studies presented to be all the more substantial since it has been shown that people's beliefs, thoughts and opinions about teaching are relatively stable long before trainees enter teacher education programmes. Borg (2006a: 13) put it this way: "[O]nce established, beliefs may be resistant to change even in the face of strong evidence." As the research field of teachers' theories and beliefs grew, it was divided into one part that concentrated on beliefs regarding learners. According to Clark and Peterson (cf. 1986: 285), the other, relatively newly established, line of research focused on teachers' tacit assumptions about the teaching and learning process. They stated that the purpose of examining this aspect of teacher thinking was to identify the kinds of mechanisms that influence the perception and processing of information performed by teachers (cf. Clark & Peterson 1986: 286).

### **2.3.3 What teachers know**

The development presented above lead researchers like Lee Shulman to integrate yet another form of knowledge into the discussion on teachers' cognitive processes. Shulman (cf. 1987: 1) heavily criticised both research and researchers on teacher cognition of that time when he stated that the aspect of subject-matter knowledge had been quite obviously neglected. In what can be understood as a call for reform in all areas concerned with the study and development of educational processes, Shulman (1987: 20) explained that his aim was "[a] proper understanding of the knowledge base of teaching, the sources for that knowledge, and the complexities of the pedagogical process". Shulman developed different categories of teacher knowledge (see Figure 1.3) but emphasised the relevance of pedagogical content knowledge.

- content knowledge;
- general pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter;
- curriculum knowledge, with particular grasp of the materials and programs that serve as “tools of the trade” for teachers;
- pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;
- knowledge of learners and their characteristics;
- knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and
- knowledge of educational ends, purposes, and values, and their philosophical and historical grounds.

**Figure 3:** “Categories of the Knowledge Base” (Shulman 1987: 8).

Borg (cf. 2006a: 19) assumes that this specific category had the greatest influence on the understanding of and research on teacher thinking, although he admits that there had been discussions regarding the particular benefit of this concept. Shulman’s (cf. 1987: 8) conceptual idea was to remove the boundaries between content and pedagogical knowledge, since both were inextricably involved in the process of understanding the nature, effects and presuppositions of specific subject-matters in connection to learners’ individual needs and abilities and the particular necessary steps that are necessary in order to meaningfully present such subject-matters in the classroom. In other words, pedagogical content knowledge enables teachers to convert and adapt knowledge according to the specific requirements of the particular teaching environment and circumstances and is understood to be subject-specific. Building on Shulman’s work, James Calderhead (1987) furthered the notion of knowledge as the central concept in teaching by publishing a compilation of papers on teachers’ thinking. Borg (2006a: 20) says, Calderhead helped to replace the term “teacher *thinking*” with the concept of knowledge, which is currently the most strongly associated with the study of teacher cognition.”. Borg (cf. 2006a: 20) also made clear, that teacher knowledge continues to be the prominent research interest, above all other concepts connected to the mental lives of teachers .

Another characteristic that started to become visible at that time was the variation and even confusion within research on teacher cognition regarding the different terms and definitions. Borg (2006a: 20) criticised that “the commonality among studies of teachers’ beliefs was often masked through the use of diverse terms for describing their focus.” and that comparing studies and theories, which initially seemed diverse due to the varied terminology, prove to be difficult for researchers. Although at the beginning of the 1980s Elbaz had tried to promote the role of the teacher to be examined in more detail, at the end of this decade, the teachers’

actual operations within classrooms had still not become a research focus regarding the study of teachers' thoughts and beliefs. Moreover, teachers' biographical backgrounds were largely ignored, although Clandinin defined personal practical knowledge to be rooted in teachers' personal development:

We see personal practical knowledge as in the person's past experience, in the person's present mind and body and in the person's future plans and actions. It is knowledge that reflects the individual's prior knowledge and acknowledges the contextual nature of that teacher's knowledge. It is a kind of knowledge carved out of, and shaped by, situations; knowledge that is constructed and reconstructed as we live out our stories and retell and relive them through processes of reflection.

(Clandinin 1992: 125).

Clandinin and Connelly argued that understanding a person's biographical history would support an overall understanding of teachers' mental processes within teaching and learning processes (Clandinin & Connelly 1987: 499). This more holistic approach towards the study and appreciation of teachers' cognitions marked another important developmental step of research of that century, concluded Borg (2006a: 21). Following this perspective, Calderhead (cf. 1991: 207) examined what learning to teach meant and emphasised how preceding research had presented teaching to be a "*multidimensional*", "*simultaneous*", "*immediate*", as well as unpredictable and public process. At the beginning of the 1980s, Clark had already uttered the appeal for utilising research on teacher cognition in order to scientifically support the actual work of teachers. Together with Connelly (in Fenstermacher 1990: 12), he once more stressed that it could only be beneficial for both fields to closely cooperate. They stated that "what is at stake is less a matter of working theories and ideologies and more a question of the place of research in the improvement of practice and of how researchers and practitioners may productively relate to one another." (Clark & Connelly 1990: 12 in Fenstermacher 1994: 9).

At this point, research made an important development by concentrating on teacher training processes and studying teachers' mental lives in order to use these insights for improving teachers' education. Contrasting research of the previous decade with its main influence originating from the field of educational psychology, Borg (cf. 2006A: 21) shows that the focus on learning to teach remained to be central to the study of teacher cognition. Another vital contribution to the field of studying how teachers think was Donald Schön's work on teachers' reflections about the multi-layered and complex processes in classroom situations:

The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour. (Schön 1983: 68).

Borg (2006a: 21) states that further research on teacher education concentrated on examining the aspect of reflection in its great variety and its influence on teacher learning. Fenstermacher (1994) then moved on to incorporating the issue of reflection, along with the aspect of practical knowledge, as parts of the research on teacher cognition. His aim was to analyse and understand the actions of teachers. In doing so, Fenstermacher also confronted the earlier tradition of focusing on teacher planning and their decision-making processes with the goal of providing teachers with ready-made knowledge.

#### **2.3.4 Teacher knowledge has found its place in the world**

It can be argued that during the late 1980s, teacher knowledge had become a fundamental part of research on teacher cognition, even though the traditional emphasis on decision making had not yet been removed. Nevertheless, researchers like Mitchell and Marland (cf. 1989: 117) stated their cautious regard of understanding teachers' thought processes as decision-making and explained that they believed this approach did not fully embrace the complexity of teachers' mental lives and presented the necessity of more multi-layered models.

#### **2.4 The 1990s – What teachers know, believe and how they learn to teach**

Borg (cf. 2006a: 23) shows that the extent of research on teacher cognition had experienced a substantial growth during the 1980s, so that it was no longer possible to give a meaningful and comprehensive review of the existing volume of material. This was the reason, why studying teachers' thought processes from this point onwards, meant to intensively focus on specific fields or aspects (cf. Borg 2006a: 23).

Carter's (1990: 292) review for example was centred upon "what teachers know and how that knowledge is acquired.". She distinguished three different classes of knowledge: firstly, she defined teachers' information-processing and therein incorporated studies on decision-making and expert-novice studies. Secondly Carter identified teachers' practical knowledge with its aspects of personal and classroom knowledge. Her last category contained pedagogical content knowledge. Borg (cf. 2006a: 23) reviewed that Carter's way of categorising the different strands of knowledge was partly distinct from earlier classifications in terms of the differentiation between information-processing and decision-making perspectives. Also, he

remarked that Carter's examination of not only experts, but also novice teachers and their cognitions, brought upon interesting contributions to the study of teacher cognition of that time (cf. Borg 2006a: 24.). Carter (cf. 1990: 299) found that seasoned teachers were equipped with substantial classroom experience, of which they made use in order to relatively exactly predict classroom situations. However, Carter had to admit that her findings were not able to explain how such knowledge was acquired. Borg (2006a: 24) warns at this point, that "[t]here was also the danger in some of this work that expert knowledge was being used normatively, to define what teachers generally should be doing;" and reminds the reader of the prescriptive tradition in teacher cognition that still seemed to have some effect on research during that time. Nevertheless, Carter's contribution to the study of teacher knowledge was substantial, as she managed to reduce some of the earlier mentioned confusion connected to terminology. She explained that the difference between pedagogical content knowledge and practical knowledge was that the former was more deeply rooted in the regulative features of the curriculum. Carter (1990: 306) also understood pedagogical content knowledge as closer to "the collective wisdom of the profession than practical knowledge.". She completed her review with the realisation that further research would need to focus more extensively on the substance of what teachers should know about the circumstances, topics and tools of teaching (cf. Carter 1990: 307).

#### **2.4.1 What teachers believe**

Borg makes a point of indicating that research on teachers' implied theories and beliefs had been elaborated by Clark and Peterson (cf. Borg 2006a: 25) in their review of 1986, but that the difference between these terms and the psychological perspective on teacher knowledge had been somewhat ignored. Pajares (cf. 1992: 316) presumed that distinct and extensive studies on teachers' theories and beliefs and their influence on decisions, judgements and actions within the classroom had been hindered by the unclarity regarding the broadness and definition of the idea. He established a narrower and more defined understanding of educational theories by assigning them to specific contexts and circumstances as well as particular issues. Thereby, Pajares (1992: 316) paved the way for a great variety of distinct viewing angles for further research. He also managed to form a relatively general definition of what a teacher's belief might be, by explaining it as "an individual's judgement of the truth or falsity of a proposition, a judgment that can only be inferred from a collective understanding of what human beings say, intend, and do". Pajares' basic assumptions regarding teachers' beliefs have continued to further research on teacher cognition until today. Concluding his work, Pajares (cf. 1992: 327) stressed the role of the connection between research findings on

educational beliefs and what teachers actually do and know and how they help their students to achieve, introducing the concept of teachers' cognitions and their influence on their practical work. Borg (cf. 2006a: 27) noted that until the early 2000s, research on the influence of teacher cognition on learner outcomes had been scarce.

#### **2.4.2 Subject-specific and interdisciplinary findings on teacher cognitions**

Following Pajares' appeal towards more specialised perspectives on teachers' educational beliefs, the early 1990s showed a substantial growth in research in the fields of science and Mathematics. Borg (cf. 2006a: 27) added that this tendency remained valid throughout the beginning of the 21<sup>st</sup> century. Research findings on teachers' beliefs by Thompson in the 1992 handbook on Mathematics and teaching, for example, also contributed to the current discussion on teacher cognition and language/English teaching. She somewhat challenged the significance of differentiating between beliefs and knowledge by stating that it was primarily important to understand how these two concepts influenced teaching (cf. Thompson 1992). However, by means of drawing on aspects of Green's 1971 findings in *The Activities of Teaching*, Thompson did clarify the notion of beliefs to at least some extent. She defined a system of beliefs as "a metaphor for examining and describing how an individual's beliefs are organized" (Thompson 1992: 130), by using Green's (1971) conceptual work on how some beliefs drew upon other prior ones. Thereby, a relationship between a hierarchy of primary and derivative beliefs was established. Green also organised beliefs as either central or peripheral, concerning the individual's level of conviction, clarified Borg (2006a: 27). He continued by pointing out that Thompson almost arbitrarily included and also omitted knowledge as composing feature of beliefs, which, according to him, reflected the difficulties of research conducted in this kind of field and time period (cf. Borg 2006a: 28). Apart from this, Thompson (1992: 140) managed to provide empirical evidence for the co-dependence of teachers' cognitions and their practices that had been argued by Clark and Peterson during the early 1980s: "The research also strongly suggests that the relationship between beliefs and practice is a dialectic, not a simple cause-and-effect relationship.". Finally, as already mentioned by Pajares and Borg above, another attempt to criticise the insufficient scientific research on how teachers' cognitions influence their students' learning processes was made by Thompson (cf. 1992: 140).

### 2.4.3 Concepts of knowledge

Adding to the variety of numerous different concepts regarding knowledge in the 1990s research on teacher cognition, Fenstermacher's partly philosophical approach corresponded to my interest in Psychology and Philosophy:

Writing as a philosopher of education, my interest is in how notions of knowledge are used and analyzed in a number of research programs that study teachers and their teaching. Of particular interest is the growing research literature on the knowledge that teachers generate as a result of their experience as teachers, in contrast to the knowledge of teaching that is generated by those who specialize in research on teaching. This distinction, as will become apparent, is one that divides more conventional scientific approaches to the study of teaching from what might be thought of as alternative approaches. (Fenstermacher 1994: 1).

Focussing on teachers' notions via taking the point of view of three kinds of research, Fenstermacher (cf. 1994: 4) firstly aimed at discovering effective teaching. The process-product approach generally thought of as being inspired by the conventional behavioural branch of psychology of the 1970s should be remembered here. The second type of research contained Connelly and Clandinin's ideas on personal practical knowledge and Schön's (cf. 1994: 5) concept of reflection. Lastly, Fenstermacher (1994: 4) discussed his research under the focus of subject matter knowledge. In his work, he also distinguished between formal and practical teacher knowledge. The latter entailed teachers' knowledge deriving from experience, the former term described "the concept of knowledge as it appears in standard or conventional behavioural science research". Furthermore, he tried to assign the three different research traditions to either of the two concepts with the goal of epistemologically comprehending the research on cognitive processes of teachers. Fenstermacher said that the first research tradition concentrated on formal knowledge. Consequently, the second type of research focused on practical knowledge. Assigning Schön's conception of reflective practice, however, caused ambiguity, although Borg (2006a: 29) stated the possibility of the priority of formal knowledge. By attempting to establish the particular focus of each of the three research perspectives, Fenstermacher tried to analyse the fundamental rules of the specific kind of knowledge that was at the basis. Opposing Thompson's approach, Fenstermacher (cf. 1994: 31) philosophically differentiated between knowledge and beliefs, but at the same time said that, defining it as a classifying umbrella term, knowledge could include beliefs, ideas, or concepts. Furthermore, he defined knowledge as "arising out of action or experience, that is itself grounded in this same action or experience" (Fenstermacher 1994: 13). In other words, teachers' actions generate what teachers know about classroom situations, their students'



needs, or interests and abilities. He regarded this differentiation as important and criticised other researchers like Kagan (cf. 1994: 30) for rather casually interchanging the two terms. In order to help regulate this terminological inaccuracy, Fenstermacher offered two different kinds of knowledge. As mentioned above, he argued that there could and should be an umbrella-term in order to refer to a group of constructs that could also include features like beliefs or concepts. Secondly, knowledge could also be used in the interest of regarding the epistemological status of a unit. In connection to this, Fenstermacher eventually arrived at the question whether there was evidence showing that practical knowledge is in fact knowledge, or if it was more of a hypernym without any epistemological status. Borg (see 2006a: 30) claims that this question was left unanswered.

#### **2.4.4 Viewing teacher cognition from a teacher education and educational psychology point of view**

As mentioned a couple of times before, the two major research focuses on teacher cognition, psychology and on the other hand, teacher education, continued to dominate the research area. Examples for this aspect of teacher cognition would be Calderhead's (p. 709-725) review of research in 1996, published in the *Handbook of Educational Psychology* (Berliner & Calfee 1996). Richardson's (1996: 102-119) review regarding the role of teachers' attitudes and beliefs in connection to teacher education, on the other hand, appeared in the same year, but in the *Handbook of Research on Teacher Education* (Sikula et al. 1996). She analysed works dealing with the effects of beliefs, held by active teachers as well as pre-service teacher students, on teacher education. Additionally, the literature review examined how these attitudes influenced teacher education programmes aiming at forming these very beliefs. Defining the term belief was one of the first steps taken by Richardson (cf. 1996: 104), understanding it as a thesis which is regarded to be true by an individual. Also, Richardson's differentiation between the concepts of knowledge and beliefs resembled Fenstermacher's epistemological distinction. Focussing on teachers' beliefs, Richardson took two different perspectives towards their role in learning to teach and first claimed that the beliefs of teacher trainees had effects on the contents and manner of their learning. Secondly, he addressed how beliefs could be changed within teacher education. In connection to the first perspective, Richardson established three different kinds of experience which influenced the formation of such beliefs. Borg (cf. 2006a: 30) summarised them as "personal experience, experience of schooling and instruction and experience with formal knowledge". The latter was defined as a scientific community's acknowledgements. Borg (cf. 2006a: 31) believed that the second category is worth emphasising, because controversial discussions regarding the changeability

of beliefs through teacher education programmes was recorded during that time. Richardson (1996: 111) found that “the results are complex. Some programs effect change and others do not; some programs affect certain types of students and not others; and some beliefs are more difficult to change than others” and summarised that teacher education programmes might not be as powerful concerning their influence on the development and change of beliefs as originally assumed. Reasons for this were prospective teachers’ developmental backgrounds and the acquirement of classroom experience during training and later in professional life (cf. Richardson 1996: 113). Calderhead’s (cf. 1996: 714) conclusion about teachers’ decision making merely reinforced the already accepted fact that instead of making active and new decisions in their classrooms, they rather trust well established routines which has been stated earlier on in this text. In 1992 Pajares had already suggested that research on teacher cognition during this time period had distanced itself from studying beliefs in a general manner and had moved towards an increasingly focused examination of beliefs about specific aspects instead, a point that had been reintroduced by Calderhead (cf. 1996, referred to in Borg 2006a: 31, 32). He (cf. 1996: 721) summarised the findings of his review by emphasising that teacher cognition research had contributed extensively to the study of teaching. Calderhead continued by explaining that teacher cognition research had underlined the multilayered system of issues that influence and contribute to teaching and learning processes. Specifying his statement, Calderhead (1996: 721) stated that “research has pointed to the elaborate knowledge and belief structures that teachers hold, to the influence of their past experiences, even experiences outside of teaching, in shaping how teachers think about their work, and to the diverse processes of knowledge growth involved in learning to teach.”. Moreover, he (cf. Calderhead 1996: 721) said that teacher cognition research had to clear up the ambiguities regarding several of the pedagogical processes that are part of teaching, as well as various distinct kinds of knowledge teachers made use of, in order to support their learners. Borg (cf. 2006a: 32) declared that the aspects emphasised by Calderhead had formed the foundation of teacher cognition research for the rest of that decade and present-day researchers of this particular research direction still rely on his findings.

## **2.5 Research of the beginning of the 21<sup>st</sup> century – teacher cognition today**

Because literature on teacher cognition and in particular teacher knowledge as the prevalent term in research continued to experience substantial growth, I will selectively display the most interesting and striking developments and features from the beginning of the 21<sup>st</sup> century until today.

Reviews on what teachers think, know and believe that provided an overview were scarce, explained Borg (cf. 2006a: 32). A few researchers like Munby, Russel and Martin (cf. 2001: 878), however, attempted to provide a research guide in 2001, highlighting the scientific disagreement regarding the definition and conceptualisation of knowledge as most difficult for researchers to overcome. The general dispute that was lying at the bottom of the challenging variety of conflicting perspectives on knowledge can be identified as a dichotomy. One approach, for example described by Shaker (cf. 1989: 1) was the definition of teachers' knowledge bases by the NCATE, the National Council for Accreditation of Teacher Education : "The knowledge bases used in professional education are broad and include the traditional forms of scholarly inquiry and theory development related to professional practice" (1987: 37 in Shaker 1987: 1). This specific account presented teacher knowledge as a subject matter that teachers had to learn and could then apply. Contrasting this view, the more practically informed approach by researchers like Munby and Russel (1992) or Abell (1998) claimed that knowledge developed over time because it was informed by and also the result of teaching activities. This situation resembled the tension regarding formal and practical knowledge earlier described by Fenstermacher. Verloop, Van Driel and Meijer who were also engaged with examining knowledge and established a relatively general description of teacher knowledge in 2001. They additionally used the term knowledge as an umbrella term for various mental constructions. Verloop, Van Driel and Meijer (cf. 2001: 446) understood knowledge as the entirety of all profession-related insights. Furthermore, they incorporated various kinds of different cognitive processes in their understanding of teacher knowledge, like for example reflected as well as unconscious but nevertheless interrelated aspects of teachers' beliefs, concepts and intuitions. They continued to argue that "[i]n investigating teacher knowledge, the main focus of attention is on the complex totality of cognitions, the ways this develops, and the way this interacts with teacher behaviour in the classroom." (Verloop, Van Driel and Meijer 2001: 446). Through the connection between teachers' knowledge and beliefs, they also loosely incorporated issues like teachers' worldviews, their ethics and morals and their attitudes (cf. 2001: 446). Verloop, Van Driel and Meijer, did however, in some way follow Calderhead's (1996), Fenstermacher's (1994) or Carters' (1990) perspectives of dividing and specifying teacher knowledge into categories by distinguishing between general and shared aspects of teacher knowledge and a singular teacher's cognitions. Borg (cf. 2006a: 34) said that scientifically investigating shared aspects of teachers' mental lives instead of solely concentrating on individuals, had not been a major focus of teacher cognition research. He added another significant contribution to research that derived from

this review by stating that “the authors examine the manner in which teacher education can make teacher knowledge available or accessible to prospective teachers.” (Borg 2006a: 34). Once more returning to the emerging interest in teachers’ shared and common cognitions, further research of the 21<sup>st</sup> century by for example Shulman and Shulman (cf. 2004) followed this idea of a wider context and a broader community to link studying teachers’ learning and developmental processes to. Here, a conceptual shift in thinking and consequently studying teacher cognition within one and the same researcher was visible, because Shulman’s earlier work used to concentrate on individual teachers.

The terminological situation has not improved towards more consistent definitions and less varied and ambiguous usage of terms since then, which seems to have become a conceptual problem of this research area in general.

### **2.5.1 Teacher cognition in teacher education**

Another general statement about current research can be made regarding the scientific area that seems to be most dominantly engaged in studying teachers’ cognitions. A great amount of research on understanding teachers’ mental processes and attitudes has been conducted within the field of teacher education, development and training. Furthermore, due to the vast expansion of this research field, I will from now on concentrate on teacher cognition with the focus on foreign language teaching, also because it is the main interest of this thesis.

Richard’s 2008 review on teacher education in the RELC Journal, an academic journal within the field of language learning, summarised the findings already highlighted above, concerning aspects like for example the professionalisation of language teaching, the categories of teacher knowledge, the role of teacher cognition in the field of teacher education, the importance of acknowledging the context of teaching and also offered his criticism on various different teaching methods. In his (cf. Richards 2008: 16) conclusion he calls for a coordinated approach towards increasing the accountability of second teacher education programmes.

### **2.5.2 Cognition and practice**

Countless studies compare cognitions and practices of language teachers and investigate the impact of teachers’ beliefs on their practical work in classrooms.

Reviewing the findings of studies that appeared between 2000 and 2008, Basturkmen (2012) found that the influence of beliefs on teaching practices was visible, though sometimes limited, but that clear conclusions could not be drawn. Between 2008 and 2013, numerous studies on the differences between teachers’ mental lives and their practical work, as well as

the influence of beliefs on practices, have been published. I would like to list the work of three researchers, who have more extensively published on this topic, as examples. Phibbs and Borg, who already collaborated in 2007 and investigated the connection between teachers' practical work and their cognitions, published further work on this topic. Phibbs (2010, 2009b) contributed substantially to the discussion of the relationship between teachers' beliefs and classroom practices. He (2009a, 2010c) additionally made the connection to teacher education and analysed the specific feature of teachers' perspectives and practical implementations with regard to grammar teaching. Borg added another direction by working with Al-Busaidi (2012) and examining what English teachers thought about and how they perceived the feature of learner autonomy. In his more recent work, Borg (2013: 29) also conducted “[a] qualitative analysis of classroom observations and interviews with three experienced Japanese teachers of English” in a Japanese high school regarding the relationship between their beliefs and practices in teaching grammar. Nishino (2008, 2011, 2012), concentrating on an exclusively Japanese context, studied secondary school teachers' thoughts, attitudes and actions with a focus on communicative language teaching.

Barnard and Burns (2012) collected eight international case studies concerning the connection between teaching and learning, including a chapter on the influence of teachers' cognitions on their practices by Le Van Canh (2012 in Barnard and Burns 2012: 90-108). He interviewed Vietnamese teachers about their thoughts on formal grammar teaching in the early stages of language learning and how they implemented their beliefs in their classroom practices. Van Canh found that “understanding the culture of the interviewees” (Van Canh in Barnard & Burns 2012: 98), additionally to appreciating the uniqueness of each individual was important in order to investigate the mental processes in relation to their practical work.

### **2.5.3 Pre-service and in-service teachers' cognitions**

Especially during 2008 and 2009 the interest in the comparison of pre-service and in-service teachers' cognitions gained great scientific attention and brought along a substantial number of studies with a variety of research foci. Because of this variety and great number of studies I will only list a few examples. Woodgate-Jones (2008) investigated prospective foreign language teacher students' perceptions of their own subject knowledge in England, You and Jia (2008) compared the training of pre-service teachers in the US and China. With a focus on pedagogical knowledge, Gathbonton (2008) examined experienced and novice teachers' experience and was *Looking beyond teachers' classroom behaviour*. Leshem (2008) for example studied how veteran foreign language teachers profit from novice teachers. Chiang

(2008) explored in which ways practical teaching experience influenced future foreign language teachers and found that it furthered student learning and promoted meaningful teaching. Bateman (2008) studied the attitudes and beliefs about the use of the target language in the (Spanish) language classroom of 10 student teachers over the course of their education. Focusing on prospective teachers' knowledge about language, Harper and Rennie conducted a study in 2009. Another analysis of how teaching experiences influenced the development of prospective foreign language teachers was conducted by Liaw (2009) in a Taiwanese context. Polat (2010) compared pre- and in-service foreign language teachers in their beliefs about self-competence and being ready for the practical work of supporting language learners in their learning processes. He emphasised that the approach to a content area teacher education should be informed by teachers' beliefs in order to ensure equality and inclusion for all language learners. Focusing on the aspect of learning and teaching vocabulary, Gao and Ma (2011) combined practicing and prospective teachers' views. In 2013, Polat, together with Mahalingappa, followed his own call and comparatively analysed in-service and pre-service teachers' beliefs about English language learners in content area classes. In his review, Sanchez (2013) found that especially novice teachers should critically analyse their own cognitions and view them against their teaching practices and goals (cf. p.55). He said that being more conscious about the various influencing cognitive factors that shape their own teaching methods would "enable teachers to develop an extended and honest conceptualization of second or foreign language teaching." (Sanchez 2013: 55). Thus his approach connects research on rather inexperienced teachers' thoughts and beliefs to the study of the connection between teachers' cognitions and their practices. I personally believe that research of this kind would be highly beneficial to the improvement of pre-service teacher training programmes and in-service education.

#### **2.5.4 Teacher and student cognition**

Also connecting and studying the different perspectives, beliefs and attitudes of two entities involved in the teaching and learning process, researchers like Diab compared teachers' as well as students' beliefs on the efficacy of various types of feedback to written texts within the English as a second language classroom in a case study in 2005. Hawkey (2006: 243) analysed the different cognitions of Italian teachers and their learners regarding task-based activities introduced by the "Progetto Lingue 2000", an educational reform programme designed by the Council of Europe Framework of Reference for Languages for foreign language classes in elementary to high school courses. The aim of Hawkey's (2006; 249) impact study was to "illustrate how mismatches between language learner and teacher

perceptions of classroom activity can be usefully analysed and may have implications for language learning and teaching.”. One of the findings opposed the teachers’ beliefs in the meaningfulness of pair work to the students’ negative perception of this strategy and their doubts regarding the effectiveness of this teaching method (cf. Hawkey 2006: 249). Another study on teacher feedback was conducted by Zacharias (2007) conducted interviews with 100 students and 20 teachers. In the same year, Griffiths compared students’ and teachers’ perceptions regarding different language learning strategies. Investigating the views of English students and teachers on testing in a Taiwanese context, Wu’s (2008: 6) research interest was inspired by the fact that “a score on an external English test is influential in enabling individuals to graduate from educational institutions or obtain job promotions.”. With her study that additionally included the feature of in-class assessment, Wu aimed at enhancing the testing and assessment techniques and consequently the results in Taiwan (cf. Wu 2008: 9). Focussing on the issue of learners’ success in second language learning, Polat (2009) surveyed the consonances of teachers’ and learners’ cognitions in Georgia. Tavakoli’s study investigated how ten English as foreign language teachers and 10 students perceived the difficulty of tasks in the same year. Revisiting the topic of feedback, Yoshida analysed Japanese teachers’ and learners’ perceptions in 2010.

## **2.6 Summary**

The study of teacher cognition has moved from focussing on information-processing and decision-making with the aim of improving teacher performances prescriptively, to the current main goal of understanding all the factors concerning teacher knowledge in its broadest sense. Today, researchers in the field of teacher education are in particular interested in teacher cognition research in order to support and help both, active as well as pre-service teachers with regard to teacher education. Because mental processes are highly complex, the research topic of teacher cognition shows a typically high variation of conceptions. Although great diversity can be an advantage, the various different concepts bear the risk of causing confusion within the field of research. Nevertheless, some general assumptions about teachers’ cognitions can be identified. Teachers’ cognitions are an often implicit, dynamic and individual organisation of mental constructs. Depending on the (psychological or philosophical) perspective, cognition is divided into thoughts, beliefs and knowledge, although the latter two terms are also used interchangeably. Because teacher cognition is an extensive field of study, we should keep the unifying aspects of the directive concept in mind. The central role of teachers in actively directing classroom processes, the influence of their beliefs and knowledge on their behaviour, as well as the complexity of the decision-making

process has been highlighted by research on teacher cognition. Additionally it has been shown that there can be a strong inconsistency between teachers' personally reported beliefs and their empirically recorded practices. This fact can be explained by the various social, psychological and environmental factors involved in the teaching and learning process and under which teachers have to operate. It becomes clear that these aspects should and have to be a part of teacher cognition research. Furthermore, it has been shown that another main research area examines how and why teachers' cognitions develop and change. Factors like individual experiences, connected but sometimes also unrelated to learning and teacher education programmes, have been found to influence teachers' beliefs. How determining the role of teacher education in connection to shaping teachers' beliefs actually is, has been object to vivid discussion in research during the beginning of the 1990s. However, today's research offers more detailed insight into teachers' thoughts and more defined guidelines for meaningful influence on teachers' beliefs to teacher education. Moreover, one of the central focal-points of the past, as well as the current research on teacher cognition, has been the issue of subject-matter knowledge, and how teachers transform it for their classroom actions. In further consequence, the incorporation of teachers' experience into the scientific discourse on teacher cognition was a logical step in the development of the research field. Studies have emphasised how teachers' classroom experiences shape their practical knowledge and as a result, their practices. As soon as researchers realised the value of comparing beginners to experienced teachers, they also discovered their distinct cognitions. Because of their increased experience, the concepts that lie at the basis of the instructional decisions of in-service teachers naturally excel those of novices. Comparing veteran to prospective teachers has become a wide research field at the beginning of the 21<sup>st</sup> century. Furthermore, studying the connection and differences between teachers' and learners' cognitions regarding diverse aspects of teaching and learning processes, has increased the understanding and appreciation of teaching methods and contexts. Also, the focus on pre-service teachers introduced in the 1990s has continued. We have additionally seen the raised interest in examining how teachers' thoughts and beliefs influence their practices during the early 21<sup>st</sup> century. Another development regarding the rapid geographical expansion of research contexts other than the initial North American focus that has been registered in this chapter. I believe it is safe to say, that this trend will continue in the future. Moreover, several other interesting perspectives and research directions that have emerged in the current study of teacher cognition have been mentioned. Especially findings in connection to foreign language teachers' beliefs and thoughts and how these influence teachers' practices have been presented. I think that, since



the field of research on teacher cognition is growing steadily, I can rather certainly predict that the variety of research foci, under which teachers' cognitions can be analysed, will also increase.

### **3. Definition**

At this point, I aim at providing a definition of the term “teacher cognition” by means of drawing on perspectives and findings of the research compiled in the preceding chapter. This definition will be the basis of my survey.

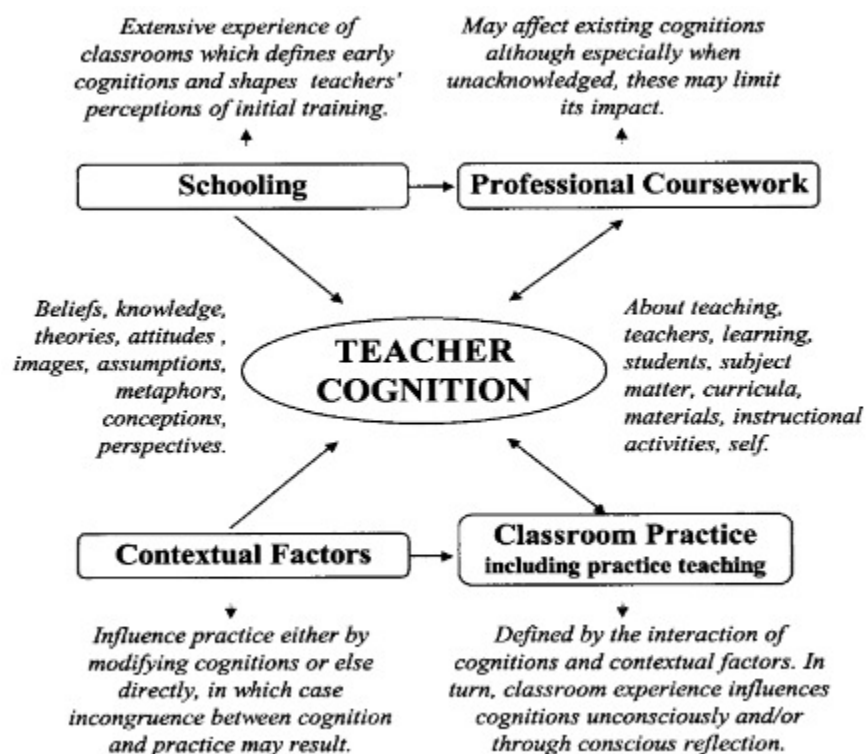
The study of teacher cognition is the attempt to achieve an “understanding of teachers’ mental lives” (Borg in Burns & Richards 2012, 163) and incorporates what teachers think, believe and know with regard to teaching and learning processes. This definition includes teachers’ opinions and attitudes about every and any aspect connected to teaching and therefore, this term includes the “unobservable dimensions” (Borg in Barnard & Burns 2012: 11) of teachers’ mental lives. For example, teachers have opinions about certain kinds of methodology and specific teaching practices which consequently influence their practical work and their choices of teaching methods. Naturally, teachers also have thoughts about their learners; what they need as a group and as individuals for successful learning, what they are (presumably) interested in and how to best deal with these parameters. In addition, teachers also have strong beliefs and opinions about their own identity, a term, which Borg had not originally included in his initial definition of teacher cognition. However, he later explained that “identities should be recognised as an important strand in teacher cognition.” (Borg in Barnard & Burns 2012: 11). Borg also incorporates the concept of emotions in his understanding of teacher cognition, since he believes that “emotions are closely connected to our beliefs.” (Borg in Barnard & Burns 2012: 12).

It has been shown by Fenstermacher (cf. 1994: 4) for example, that teachers’ cognitions are intensively shaped by their experiences and Richardson (cf. 1996: 104) later added that personal experiences outside of educational institutions also influence teachers’ cognitions. He also found that past experiences influence the adaptation of existing cognitions and that acknowledgements made by the scientific community were an additional crucial factor in terms of shaping teachers’ thoughts (cf. Richardson 1996: 104). As mentioned in the preceding chapter, research has not yet been able to determine the exact extent to which personal experiences and pre-, as well as in-service teacher training programmes sustainably and/or immediately influence the cognitive processes, knowledge and beliefs of teachers (cf. Richardson 1996: 111).

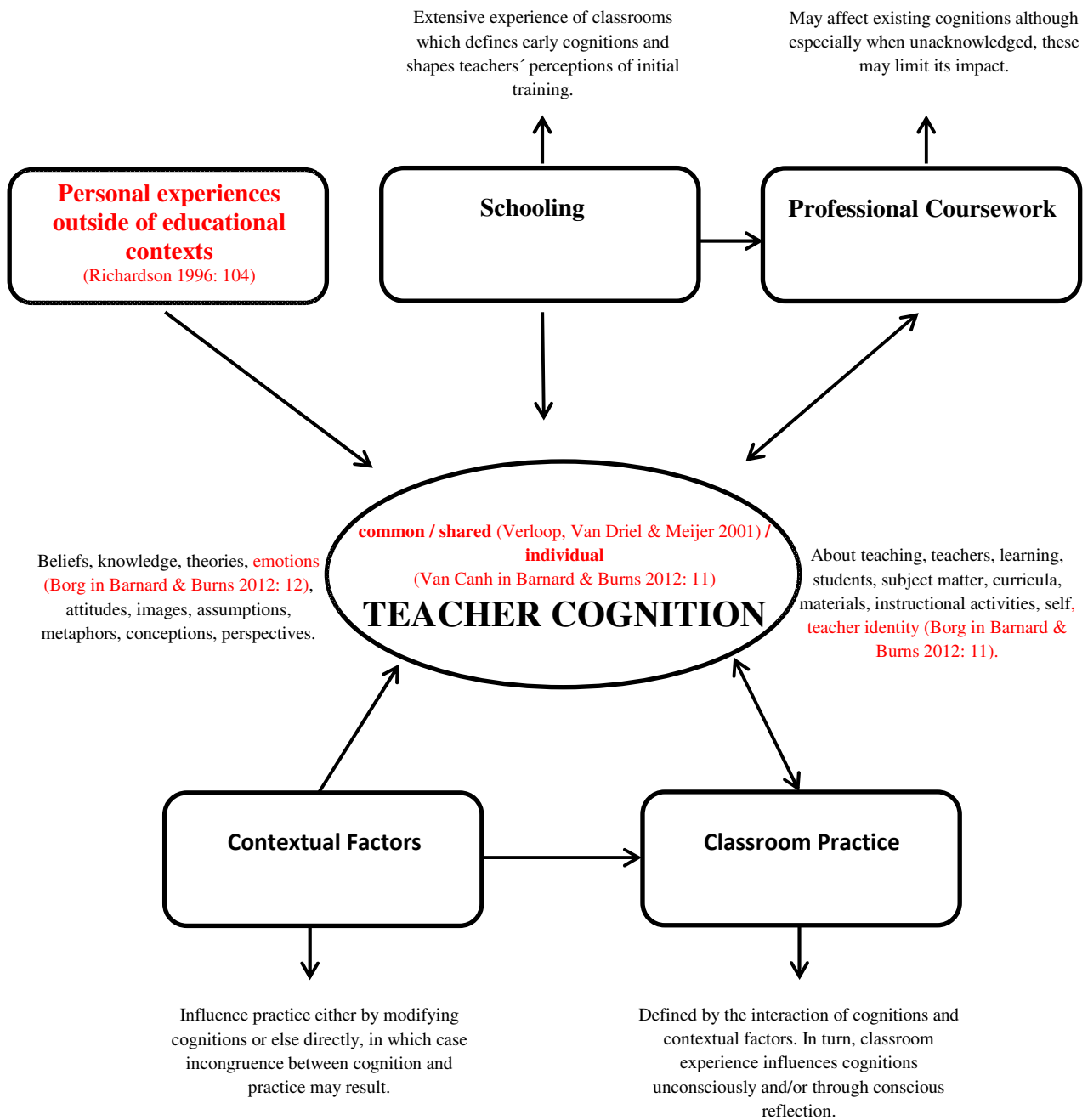
Moreover, said Van Canh (in Barnard & Burns 2012: 98) researchers have to keep in mind that, since teachers' thoughts are extensively dependent on their experiences, their cognitions have to be appreciated as highly distinct entities. Nevertheless, it has been identified by Verloop, Van Driel and Meijer (cf. 2001) that there are common and shared features of teacher.

In further consequence it has been found that what teachers think, know and believe undoubtedly influences their actions and has consequently immense impact on the learning processes and outcomes. However, Borg reminds us to also keep in mind that “what teachers do in the conduct of their professional activities is shaped, though not entirely determined, by what they believe and know.” (Borg in Barnard & Burns 2012: 1). This means that there are still unknown parameters worth discovering in further research.

I added the various factors that have been collected during my literature review and that have been presented above to Borg's (2003: 83) original model that defines teacher cognition and its various different influencing features. The unaltered model is displayed in figure 4, the modifications are marked red and can be seen in figure 5 and it represents the definition used for developing and analysing the findings of my study.



**Figure 4:** Original model (Borg 2003: 82).



**Figure 5:** Altered model (Original model: Borg 2003:82).

#### **4. Simon Borg - “The distinctive characteristics of foreign language teachers”**

In 2006, Simon Borg published the findings of his exploratory study on the distinctive characteristics of language teachers, with an emphasis on teachers of English as a foreign language, in the *Language Teaching Research* journal. Borg (cf. 2006b: 4) believed that it is possible to define the ways in which language teachers and especially EFL teachers are different from educators of other subjects. Moreover, he assumed that his findings were of significance for language teacher educators and that this field would benefit from the findings of his study.

Borg (2006b: 4) discovered that his findings “cannot be considered in isolation of the characteristics of language *teaching*.” and admitted that his study ultimately examined both, EFL teachers as well as their practices. In this way, his detailed investigative study “aims to extend our understanding of what it means to be a language teacher by examining ways in which language teachers [and their work] are seen to be different [...]” (Borg in 2006b: 3).

##### **4.1 Why this study?**

Not only did I choose Borg’s study as basis for my diploma thesis because I believe that teacher training, as well as the representation of this particular job description need to be based on empirical data in order to be meaningful and to further the process of education as a whole. Additionally, I appreciate Borg’s meticulous presentation of his research methods that enhanced my understanding of his and even the results of my own study. Furthermore, Borg extended the geographical context of research on teacher cognition to a central European environment. I saw an opportunity of using Borg’s findings as basis for establishing a replication study in order to raise awareness to the importance of studying the specific characteristics of particular subjects, respectively, English in this particular case.

##### **4.2 The parameters of the study**

The theoretical foundations of Borg’s study are twofold. On the one hand, Borg used findings of the field of enquiry regarding disciplinary features and secondly included aspects that characterised successful teachers.

Borg (cf. 2006b: 4) draws upon the work of researchers of psychology and education focussing on university circumstances that suggest various different ways in which certain subjects differ concerning teaching practices. He continues to emphasise the unique features of foreign language teachers in comparison with teachers of other subjects by Hammadou and Bernhardt’s claim that:

Being a foreign language teacher is in many ways unique within the profession of teaching. Becoming a foreign language teacher, too, is a different process from that which other future teachers experience. This reality is rooted in the subject matter of foreign language itself. In foreign language teaching, the content and the process for learning the content are the same. In other words, in foreign language teaching the medium is the message. (Hammadou & Bernhardt 1987: 302 in Borg 2006b: 5).

Borg (2006b: 5) refers to Hammadou and Bernhardt's five distinguishing factors of foreign language teachers' experiences, presented in figure 6, in order to display an example of the rarely defined and not empirically verified characteristics of foreign language teachers.

- 1) *The nature of the subject matter itself.* FL teaching is the only subject where effective instruction requires the teacher to use a medium the students do not yet understand.
- 2) *The interaction patterns necessary to provide instruction.* Effective FL instruction requires interaction patterns such as group work which are desirable, but not necessary for effective instruction in other subjects.
- 3) *The challenge for teachers of increasing their knowledge of the subject.* Language teachers teach communication, not facts. In other subjects, teachers can increase their subject matter knowledge through books, but it is harder for FL teachers to maintain and increase their knowledge of the FL because doing so requires regular opportunities for them to engage in FL communication.
- 4) *Isolation.* FL teachers experience more than teachers of other subjects feelings of isolation resulting from the absence of colleagues teaching the same subject.
- 5) *The need for outside support for learning the subject.* For effective instruction, FL teachers must seek ways of providing extracurricular activities through which naturalistic learning environments can be created. Such activities are less of a necessity in other subjects.

**Figure 6:** The five distinguishing factors of foreign language teachers' experiences (Hammadou and Bernhardt 1987: 302 in Borg 2006b: 5).

Also, the study of disciplinary characteristics presents the main moving cause for Borg's (cf. 2006b: 6) research. First, as mentioned above, the medium used in the foreign language classroom is also the subject matter of the lesson. The second factor regards the interaction patterns, like for example group work, that are especially necessary for meaningful learning activities but for other subjects are not explicitly required. Hammadou and Bernhardt claim that it is more difficult for foreign language teachers to keep their knowledge of the subject updated, since they require communication-opportunities in the target language. Also, depending on the particular language, the educational institution and the language environment of the specific country, some foreign language teachers might feel isolated because they might be the only representative of their subject within the staff. Finally, Hammadou and Bernhardt state that "extracurricular activities" (Hammadou & Bernhardt 1987

in Borg 2006b: 5) are not as important with regard to other subjects than for teaching a foreign language, because it is necessary to increase the learners' exposure to the target language wherever possible.

In a further step Borg builds on Grossman's claim that the subject matter of foreign language teaching is more equivocal and less hierarchically organised than subjects like maths for example. Additionally, foreign language teachers have more autonomy to decide which aspects of the highly complex subject they decide to address in their classrooms (cf. Grossman 1994: 6121). By means of displaying these examples, Borg highlights the distinctiveness of teaching a foreign language and the resulting special requirements and challenges upon foreign language teachers. The latter has been subject to extensive study within the research field of teacher education, especially from a learner-centred point of view. Several researchers like for example Girard (1977) or Prodromou (1991), have examined students' beliefs and ideas regarding the features of a good teacher (cf. Borg 2006b: 6). Besides Israeli learners' opinions, Brosh (1996) also included teachers' views into his research and identified five key aspects of a successful teacher. Knowing and having a good command of the target language, alongside being well organised and explaining and clarifying issues, were defined to be achievable features. Also, activating and maintaining the learners' interest as well as motivating them, was found to be important in order to be a successful teacher. Brosh also described that treating learners in a fair manner was central to the qualities of an educator. Finally being available to learners' was another desirable characteristic. Borg (cf. 2006b: 7) makes sure to state, that these qualities were not specifically limited to the characteristics of a foreign language teacher, but should be attributed to a good teacher of any subject (replacing knowledge of the target language with knowledge of the subject matter).

#### **4.2.1 Research methods used in the study**

Borg (2006b: 7) stated his "preference for interpretive modes of inquiry" and explained that he focused on his participants' views and attitudes in a way that was open to adjustments regarding organisational aspects of conducting the study. He claims that this flexible approach was meaningful because systematic and empirical groundwork had not yet been established and the specific character of Borg's (cf. 2006b: 8) study. In this way, he was able to rather freely adapt his way of collecting data with regard to results from previous stages. This does however not imply that Borg did not commit to certain principles or did not base his interpretations and findings on scientific arguments.

### **4.2.2 The underlying concept**

The idea that language teachers have, or optimally should have, a certain set of qualities that make them successful in their work, is located at the heart of Borg's study. He did not focus on any particular aspect like for example teachers' personal abilities, their pedagogical abilities, teachers' knowledge and beliefs, or the subject matter itself. Borg (cf. 2006b: 8) aimed at applying a rather general concept in order to best capture the participants' reported mind-set on what particular features differentiates language teachers from their colleagues.

### **4.2.3 Research questions**

As mentioned before, Borg was interested in examining respondents' views on the specific characteristics of language teachers, also in comparison with traits of teachers of other subjects. He (cf. Borg 2006b: 9) explained that in order to comprehend the underlying principles, the broad research questions had to be divided into several, more specific ones:

- Which particular dimensions of teachers' characteristics are salient in the distinctiveness of language teachers as reported by the respondents?
- Do perceptions of distinctiveness seem related in any way to respondents' backgrounds, such as amount of teaching experience or educational context?
- To what extent do specialists outside language teaching feel that the distinctive characteristics of language teachers perceived by language teachers also apply to teachers in the specialist areas?

### **4.2.4 Selection of participants**

Borg (cf. 2006b: 9) states that his study included varied parameters of selecting the participants in order to guarantee the validity of his research. He purposely categorised five different groups of participants, including two groups of each, experienced in-service and pre-service teachers, as well as one group consisting of experts, not directly involved in the language learning or teaching process, but coming from the fields of "mathematics, history, science and chemistry" (Borg 2006b: 3). Borg explained that the step of incorporating the expert-group was taken in order to arrive at a more multi-layered perspective on specific characteristics of language teachers and secondly, to establish a kind of control group in order to test his findings.

### **4.2.5 Obstacles**

Borg (cf. 2006b: 27) offered his perspective on two aspects concerning methodology and one feature regarding conceptualisation of languages' distinctiveness which he believes to be pertinent to further research.



The former category includes the two issues of study participants and information collected by means of studies. Borg states that all three groups, the experienced in-service teachers, the prospective teachers and also the subject experts, played an important role in analysing the specific characteristics of language teachers. In addition, he suggests that it would be meaningful for continuing work to examine learners' perceptions of their language teachers' characteristics.

Referring to the data of his study that had been collected verbally and in writing, he proposes engaging in classroom observation of different subjects as a complementary research method for further research. Borg (2006b: 27) explains that “[s]uch work would enable the study of language teachers in any particular context to be grounded in an understanding of distinctive forms of practical action.”. Borg continues by describing that this understanding could also be furthered by examining the features that differentiate languages from other subjects with the goal of establishing a more elaborate concept of both, the languages and the language teachers. Improving our concept of languages in relation to other subjects would also further the understanding of teacher knowledge emerging from these other subjects and whether and to what extent these ideas could be used for teaching languages. Borg says that acknowledging that teaching languages is substantially different from teaching any other subject and exploring the distinct characteristics of that is also important for research on pedagogical content knowledge or teacher knowledge, says Borg. He draws on Freeman (referred to in Borg 2006b: 28), who explained that since the subject matter and the medium of teaching exhibit a unique connection in language teaching, Shulman's idea of pedagogical content knowledge that consists of a teacher's knowledge of the subject matter and how to teach it, can consequently not directly be applied. Admitting to that, Grossman and Shulman (1994: 6) write that “[m]uch of the research in teachers' know-ledge (sic) from the 1960s originated in the areas of science and math; (sic)” and explain that these findings cannot be directly applied to language teaching because of the paradigmatic nature of languages. Borg deducts that this presents another research interest regarding the distinctive features of language teachers.

#### **4.3 The process of the study**

The following paragraphs will introduce the five different groups of participants in more detail. Moreover, Borg's research methods and the results for each group will be presented in more detail. Thus, I will show that with each group, Borg establishes a more detailed collection of characteristics of language teachers.

### 4.3.1 Trialling the research interest - the first eight characterising statements

Testing whether his research interest was one worth conducting a full scale study on, he asked a group of 20 EFL teachers on a postgraduate MA course in TESOL to share their thoughts on the different characteristics of language teachers throughout the duration of the seminar. The participants were essentially non-native English speakers with a teaching experience of 3-14 years. The discussions on this question were conducted verbally in both, small groups and the course plenum, with Borg taking notes. By means of analysing these, he later established a list of eight specific features of language teachers and was also convinced that “[t]his initial analysis suggested that the topic was one worth exploring further.” (Borg 2006b: 10).

Analysing the respondents’ contributions to the discussions, Borg established a list of eight statements that the first group believed to describe language learning and teaching.

1) *Cognitively mature learners engage in conceptually undemanding activities* (Borg 2006b: 12). Borg’s first group of participants stated that language learners’ cognitive level often exceeds their ability to express themselves in the target language. In contrast to learning one’s first language, second or foreign language education starts at an advanced age and this incorporates the risk that the topics, stories and tasks of the language learning classroom do not match the general cognitive level of the learners.

2) *English language teaching methodology is more progressive than other subjects* (Borg 2006b: 13). The teachers on a postgraduate course in TESOL believed that English teaching and learning methods are more pioneering and forward-looking.

3) *Incorrect learner output in language teaching is more acceptable* (Borg 2006b: 13). The experienced EFL teachers felt that errors are a less negative concept within the language classroom than in comparison to other subjects.

4) *Language teachers are compared to native speakers* (Borg 2006b: 13). The results from the discussions with the first group of respondents indicated that language teachers are often compared to native speakers regarding language proficiency, which is additionally often understood to be part of their overall competence as teachers.

5) *Language teaching is a political activity* (Borg 2006b: 13). The 20 non-native English teachers thought that teaching a language introduces learners to a certain kind of mind-set and being because it comprises aspects of impact and authority.

6) *Oral production plays a central role* (Borg 2006b: 13). Borg’s pilot group stated that in no other subject, oral production was as essential as in learning and teaching a language.

7) *The subject and the medium for teaching it are one and the same.* (Borg 2006b: 13). Another result from the collection of statements made by the non-native language teachers was that in the language classroom, the language used for instruction and the content of teaching are one.

8) *The subject matter of language teaching is harder to define* (Borg 2006b: 13). The final aspect listed by Borg's first group of participants described that language is more multiplex and diverse than the content of any other subject.

Borg added that the subject matter was one of the most prominent factors that distinguished language teaching from other subjects. Also, he realised that by analysing the discussions with the pilot group he had not only established the first draft of a list of specific characteristics regarding language teachers, but had consequently also defined the particular features of language teaching. Consequently, he stated that "teachers are defined by the nature of their work and that articulating the distinctive features of the language teacher must also include reference to aspects of their work, such as methods, learners and learning processes, which may contribute to this distinctiveness." (Borg 2006b: 13). In other words, defining characteristics of language teachers and certain aspects of their work are often not distinguishable.

#### **4.3.2 Revising and editing**

Conducting a workshop built on Borg's general research question, 29 predominantly experienced EFL teachers were asked to review and complement the earlier established list of eight features from group one's initial ideas and statements about language teachers' specific traits. The participants of this group also verbally discussed this list. Additionally, Borg asked them to put their thoughts and comments in writing and analysed the results by converting the texts into two different grids. The first contained the teachers' remarks and criticism on every single item from the original list. The second grid comprised 25 added features, which the workshop participants believed to characterise language teachers in particular. After that, Borg (2006b: 11) conducted a "thematic analysis" of these 25 aspects which resulted in establishing more general categorisations like for example "subject matter" or "methodology". The final outcome of the second phase of Borg's study with the group of language teacher conference delegates was a revised and augmented list of 18 language teacher-specific characteristics. He additionally asked this group to only give their views on those aspects which they did not believe to solely specify language teachers.

Their responses concentrated around three particular characteristics. Concerning the claim that language learning often involves mentally more mature learners in cognitively rather unsophisticated tasks, the EFL teachers detected a number of points for criticism. They believed that subjects like crafts, technology and adult numeracy also incorporated a similar imbalance. Other delegates did not agree with the statement at all, explaining that, in any case, language learning was a cognitively challenging and demanding process.

Furthermore, the conference delegates criticised the pilot group's claim that ELT methodology is more innovative than other subjects. Borg (cf. 2006b: 14) recorded statements that described other subjects to be methodologically more progressive. He highlighted one comment that described ideas on methods for ELT as often poorly conceived and thus hindering, instead of advancing, innovation. On the other hand, several of the delegates commented on the uniqueness of ELT methodology, but felt that the word "progressive" was not appropriate in this regard.

Another item that triggered several critical responses described that communication and speaking was an essential part of the language learning process. Some respondents' statements pointed to the fact that contextual factors influence the perception of teachers' distinctiveness. Borg explained this by highlighting the statement of one delegate who claimed that "in many ELT contexts oral production is not essential. For example, in Brazil, reading in English is what matters." (Borg 2006b: 15).

As mentioned earlier, the 29 EFL teachers were also asked to add to the original list of language teachers' characteristics. Besides confirming some of the aspects like for example the, sometimes disadvantageous, comparison of language teachers to native-speakers, several statements added to the emphasis on the uniqueness of the subject matter of language teaching. Rather broad terms describing the skills that were believed to be taught in language classrooms like for example "social skills", "autonomy" or "holistic growth" (Borg 2006b: 15) were added by the delegates. That suggests that language teaching is not as limited to a certain content as other subjects might be. Beliefs about the specific features of language teachers were added, too. Some respondents believed that teaching a foreign language especially involves offering particularly practical skills. Moreover, some participants added the low prestige of the language teacher to the list of characteristics. Others stated that language teachers were required to have a more diverse knowledge. Also added to the list was the factor of foreign language learners already being equipped with the knowledge of their mother tongue.

One further aspect described the many different courses of education to and the extensive spectrum of qualifications for becoming an English language teacher and were believed to specifically describe this field of work. Completing his findings, Borg highlighted the great variety of features listed by the delegates and concluded it to be a consequence of their many different working environments.

#### **4.3.3 Including different perspectives**

As mentioned above, Borg decided to include teacher educators from his university of the different subjects of science, chemistry, mathematics and history in his study in order to verify the somewhat controversial findings established by analysing and reviewing the statements and ideas from the first two groups of participants. He said that while examining the collection of features, he came across several characteristics that he thought could not solely be claimed to specify language teachers. In order to obtain professional opinions on this matter and to test Borg's (cf. 2006b: 11) hypothesis, he asked four colleagues at the University of Leeds to review and comment on the list of 18 features in writing. Also, he stated that "[t]he data generated by this group did suggest that an interdisciplinary perspective can be a useful element in continuing studies of language teachers' distinctiveness." (Borg 2006b: 11). After analysing the data from the first two groups, Borg established a collection of 18 statements regarding the specific features of language teachers. Incorporated in this list were characteristics that both groups had agreed on, as well as features that had triggered some disagreement in the second group but nevertheless presented generally accepted opinions about language teaching. The specialists of the third group were then asked to state their opinions and beliefs regarding the list of features. In a next step, their answers were coded into three categories and transferred into a grid: "Yes" represents that the experts believed this particular aspect also to be found in their own subjects, "No" stood for the experts view that the phenomenon described in the statement showed no parallels with their own field and "Partly" described the belief that the presented characteristic were shared with teachers of the experts' subject matter to some extent. Coding the experts' statements in this particular manner enabled Borg to determine whether and to what extent a specific characteristic described language teachers by analysing the number of "No" answers. In other words, examining the number of "No" answers for a particular feature provides information on whether or not this issue is accepted to only describe language teachers.

Figure 7 displays the grid containing the statements and the coded answers of the four specialists. Three of the 18 statements were highlighted by Borg (cf. 2006b: 16), because with

each of them, all four experts felt that teachers of their own subject did not share this particular characteristic with language teachers. The differentiation between non-native language teachers and native speakers, foreign language learners' prior knowledge of their own mother tongue and its influence on their learning process were believed to be features exclusively characterising language teachers. Furthermore, the results of this group suggested that they also considered the many different educational programmes for becoming language teachers and the various kinds of competences necessary for language teaching to be specific to teaching languages.

**Table 1** Subject specialists' views on the relevance to their own subjects of statements about the distinctive characteristics of language teachers

Language teachers	Science	History	Chemistry	Maths
1. Whereas in most other subjects incorrect 'output' or 'products' by the learner are not acceptable, in language teaching 'errors' are seen as a natural and even desirable part of the learning process.	No	No	No	Yes
2. Language teaching is the only field where teachers may be teaching a subject they never formally learned at school.	Yes	No	Yes	No
3. Language teaching is the only field where a distinction between native and non-native teachers exists.	No	No	Partly	Partly
4. The range of competing methodologies and methodological shifts in language teaching over the years outweighs similar phenomena in other subject areas.	Partly	Partly	Partly	Yes
5. Professionally trained non-native language teachers are often compared unfavourably to native speakers, even when the latter are not professionally trained.	No	No	No	No
6. In language teaching, the subject and the medium for teaching it are one and the same, especially in multilingual groups where English is the only common language	No	No	No	Undecided
7. Driven by powerful commercial forces, language teaching is characterized by a proliferation of teaching and learning resources unparalleled in other subjects.	Partly	No	Yes	Undecided
8. Language teaching is the only subject where learners want to get internationally recognized qualifications, especially those which will enable them to study at universities in the UK and the USA.	Undecided	No	No	Yes

(continued)

**Table 1** (Continued)

Language teachers	Science	History	Chemistry	Maths
9. In other subjects, declarative knowledge about the subject is fundamental to effective teaching; in language teaching, knowing how to speak the language (procedural knowledge) is as important for teachers as knowing about the language.	Partly	Yes	No	Yes
10. All language learners have already learned their first language.	No	No	No	No
11. Language teaching is characterized by the existence of a huge private sector.	No	No	No	Partly
12. In many places in the world, the basic professional qualification for working in language teaching is a 4-week certificate course.	No	No	No	No
13. In subjects such as mathematics and science, learners are happy to learn and apply formulae without worrying about their underlying rationale; in language teaching, in contrast, teachers are under pressure from learners to explain the rationale for grammatical rules.	Yes	Yes	Yes	Undecided
14. Especially in the state sector, language teachers are seen as low-status, by learners and colleagues, compared with subjects such as science and mathematics.	No	Yes	No	No
15. The student body in language teaching consists of a much larger proportion of adults than other subjects.	No	Partly	No	No
16. Language teaching is characterized by a wide variety of specialized areas relating to the learners' goals – e.g. English for Specific Purposes, English for Science and Technology, English for Academic Purposes.	No	No	No	Partly

(continued)

**Figure 7:** (Borg 2006b: 17)

**Figure 7:** (Borg 2006b: 18) (continued)

**Table 1** (Continued)

Language teachers	Science	History	Chemistry	Maths
17. Language teaching is a subject with practical outcomes not characteristic of other subjects. As one teacher said, maths graduates will not apply Pythagoras when they go shopping.	No	No	No	Undecided
18. Language teachers must teach the target culture – i.e. British or American culture. This notion of a 'target culture' does not have parallels in other subjects.	Partly	Partly	Partly	Undecided

*Note:* No = similar phenomenon does not exist in specialist's area; Yes = similar phenomenon exists in specialist's area; Partly = phenomenon may have some parallels in specialist's area; Undecided = respondent did not or felt unable to provide an answer

### **Figure 7:** (Borg 2006b: 19) (continued)

Another seven statements Borg (2006b: 16) considered to be “largely distinct to language teachers.”. The characteristics described in 1, 6, 11, 14, 15, 16 and 17 were considered not to share any similarities with the subject of three out of four participants. Borg provides a more detailed analysis with three examples: The first statement describes whether and to what extent errors are accepted within the learning process. The specialist of mathematics felt that in his subject errors were just as acceptable as in teaching languages and because he believes in learning through making errors (cf. Borg 2006b: 19). The history expert felt that the subject shared the aspect of having a lower status with language teaching, but at the same time believed that the subject itself rather than the teacher was often being degraded (cf. Borg 2006b: 19). Statements 2, 3, and 8 were considered to specify language teachers only by three of the four specialists. Two experts' comments were coded as “No” answers for two statements (7 and 9). None of the participants believed that the statements 4, 13 and 18 described features that applied to teachers of their respective subject. Borg (cf. 2006b: 19) highlights the fact that the history, science and chemistry experts believed that their subjects shared some similarities regarding the characteristic of teaching culture with language teaching.

#### **4.3.4 Pre-service teachers' cognitions - Hungarian teacher trainees**

Contrasting the first two groups of in-service teachers with the first group of teacher trainees, the written responses of 151 Hungarian English pre-service teachers to the following question were analysed:

“Do you think there are any differences between a language a teacher and a teacher of any other subject? If YES, what differences are there?” (Borg 2006b: 11).

More than 82% of the Hungarian English teacher trainees answered in the affirmative and in a second step, explained that answer. Borg examined these answers and after transferring the responses into a grid, he qualitatively analysed it regarding its content in order to be able to categorise the results into broader groups. This produced six main categories that distinguished language teachers from teachers of other subjects: Methods, activities and materials; the content of teaching; the nature of language; non-native issues and language teachers' traits. (Borg 2006b: 20). It is important to note that the results of Borg's analysis of the fifth group, consisting of Slovene undergraduate students of English, were very similar (cf. Borg 2006: 20), which lead Borg to presenting them in one step. I believe it is meaningful to do so as well. But first, I will describe the characteristics of the fifth group of respondents.

#### **4.3.5 Pre-service teachers' cognitions - Slovene undergraduate English students**

Borg's last group of participants involved 24 undergraduate English students from Slovenia in a specific study programme that allowed them the option to qualify as English teachers later in the course of their studies. Asking them to state what features they believed would characterise language teachers in writing, Borg, again, qualitatively analysed essays with a length of 150-300 words. Differently from the preceding group, Borg explained that the responses were larger and required more substantial pieces of text to be transformed into a grid.

Regarding the first area in which language teachers are believed to be different from other teachers, the comments of both groups emphasised the great methodological variety available to language teachers and the general lack of that in other subjects. One possible explanation was given by a Slovene teacher trainee who believed that this was to be explained by "the rigidity and the static nature of these subjects" (Borg 2006b: 21).

Secondly, concerning the content of teaching, Hungarian and Slovene respondents stated that teaching a language additionally involved introducing learners to the target culture, educational, political, historical and linguistic aspects of the particular language and facilitating learners' communication skills. One of the participants argued that unlike other subjects, teaching a language did not exclusively involve conveying facts (cf. Borg 2006b: 21).

Referring to the nature of language both groups agreed on three main aspects that characterised language teachers. On the one hand, they claimed that language was ever-changing and permanently developing while other subjects relied on relatively stable rules like for example Physics or Mathematics. The respondents believed that it is consequently



more challenging for language teachers to keep themselves informed. Secondly, some participants argued that in comparison with other subjects, mastering a language takes up more time than achieving comparable abilities in any other subject (cf. Borg 2006b: 22).

The final key point suggested by the Hungarian and Slovene respondents was that learning a language offered both, “immediate and long-term practical relevance.” (Borg 2006b: 22).

Another major distinction of language teachers in comparison with teachers of other subjects mentioned by both groups of respondents, described the relationship between language teachers and their students as less formal, closer and more positive (cf. Borg 2006b: 22). Borg noted that participants of the two groups located the reasons for this in a generally increased communication between teachers and learners and the incorporation of topics that are personally involving and interesting for both sides of the learning process.

The Hungarian and Slovenian sets of data collected by Borg suggested that teachers who were not native speakers influenced the process of teaching a language in two ways. Firstly, this fact has an effect on the perception of language teachers’ status in comparison with native speakers of the specific language. Secondly, language teachers are required to use the subject matter as the medium of instruction. One response regarding this aspect was highlighted by Borg (2006b: 23): “I have to always think through what I say to not make any mistakes. It’s harder because it’s not my mother language and needs more concentration.”. Additionally, it was claimed that operating through a foreign language also required language teachers to spend more time on lesson preparation. Somewhat contrasting the already mentioned opinion on how language teaching furthered having closer relationships with their learners, some respondents feared that a foreign language could hinder the forming of such a relationship (cf. Borg 2006b: 23).

The last key distinctive characteristic of language teachers established from analysing the Hungarian respondents’ answers listed a number of traits. Although these traits can definitely be used in order to describe general requirements of teachers, the participants argued that these were particularly important for language teachers. Creativity, a sense of humour, flexibility, an acting talent, the ability to motivate learners, enthusiasm, being able to communicate freely and a positive attitude were considered to be required traits for language teachers.

### 4.3.6 Summarising the findings

In a final step, Borg established a comprehensive list of characteristics and it became clear that an unambiguous distinction between the specific aspects of language teachers and their subject itself could not be presented. Borg (2006b: 23, 24) admitted that “the value of this list is not that it provides a conclusive answer to the research question with which this work started, but that it highlights a range of perspectives from which language teachers’ distinctiveness may be perceived.”. Nevertheless, he claimed that this final list could be regarded as suggestion that teachers are considerably influenced by their subjects and the predominant teaching practices of that specific subject (cf. Borg 2006b: 24).

Figure 8 presents Borg’s summary of the distinctive characteristics of language teachers

Theme	Distinctiveness
The nature of the subject	Language is more dynamic than other subjects and has more practical relevance to real life.
The content of teaching	Unique in scope and complexity. Teaching a language extends beyond teaching grammar, vocabulary and the four skills and includes a wide range of other issues such as culture, communication skills and learning skills.
Methodology	The methodology of language teaching is more diverse and aimed at creating contexts for communication and maximizing student involvement.
Teacher–learner relationships	In language teaching there is more communication between teacher and learners and more scope for learners to work on themes which are of personal relevance.
Non-native issues	In language teaching, teachers and learners operate through a language other than their mother tongue. Teachers are also compared to native speakers of the language.
Teachers’ characteristics	For language teachers, characteristics such as creativity, flexibility and enthusiasm are essential.
Training	A wide diversity of recognized language teaching qualifications exist, some as short as four weeks in duration.
Status	Language and language teachers are often awarded lower status than subjects and teachers of other languages.
Errors	Incorrect output by language learners is more acceptable than in other subjects.
Student Body	Many more adults study languages than other subjects.
Commercialization	Language teaching is driven by commercial forces more than other subjects.

**Figure 8:** Distinctive characteristics of language teachers (Borg 2006b: 24).

### 4.4 Context as a defining variable of distinctiveness

One interesting point presented by Borg refers to the respondents’ comments on the characteristics of other subjects that clearly showed their lack of knowledge regarding the

work of, for example, history teachers. Several participants stated that subjects like this only focused on presenting facts. One might easily regard this as a clearly uninformed overgeneralisation, but Borg (cf. 2006b: 26) notes that these statements also serve as evidence for actual personal experiences. Understood as the latter, comments like these offer useful information about particular subjects in specific teaching and learning circumstances and environments. Borg (2006b: 26) emphasises that analysing the different characteristics of language teachers can only be meaningful “with reference to specific contexts and through the perceptions and experiences of individuals in particular educational settings.”. Thus he concludes that defining *the* language teacher by means of establishing general and global characteristics is impossible. Instead, he highlights the relatively similar results of the Hungarian and Slovene groups that might point to similarities between the educational systems of these countries.

Furthermore, Borg points out that comparing the more experienced in-service teachers with the less practised teacher trainees and English students, he was able to show the influence of teacher training programmes as well as the actual work of teachers on participants’ views. Although Borg found several similarities in the comments of these two groups, he also discovered that in-service teachers tended to focus on rather general characteristics of language teachers and teaching than more inexperienced respondents.

Borg (cf. 2006b: 27) believed that these findings carry significant value to the study of teacher education, since pre-service teachers are often trained with regard to the respective context of the educational institution. Borg (cf. 2006b: 27) concludes that considering prospective teachers’ perspectives on the key characteristics of language teachers would be beneficial to both, the programmes and teacher educators.

#### **4.5 Key characteristics**

Borg (cf. 2006b: 24, 25) explains that the varying numbers of respondents of the groups and the differences in collecting data reduced the possibility of forming definite conclusions, he notes that the first six characteristics exhibited the most comments by participants. He also adds that a detailed analysis of the various teaching contexts would be necessary in order to be able to make justified claims regarding the significance of the results. Having said that, he still believes that his findings provided advanced information about the specific tasks, challenges and work requirements of language teachers and also suggested that his results could be used as guidance for further research. In Borg’s discussion on his final list of distinctive characteristics of language teachers, he says that the first three items correspond to

Hammadou and Bernhardt's five differentiating factors, mentioned earlier: "unity of medium and content; interactive nature of language teaching; challenges to teachers of language change" (Borg 2006b: 25). Referring back to Grossman's work on the specific nature of the subject matter and the structure of the subject, that was part of the theoretical background of the study, Borg records similar results in his final list of language teachers' specific features. The work of Girard and Prodromou discussed earlier is also reflected by Borg's collection of respondents' depictions of a good language teacher, like for example the item on teacher-learner relationships. Apart from that, some of the statements concerning the acceptability of errors, student body, the status of the language teaching profession and the commercialisation, cannot be found in the discussion of literature at the beginning of Borg's study.

In conclusion, he (cf. Borg 2006b: 25) states that the final list of specifying key characteristics of language teachers emphasises the complexity of this conception and presents a variety of perspectives that might be a meaningful starting point for further research. Selected aspects of this list present the theoretical foundation for several statements included in my survey.

#### **4.6 Concluding words**

By asking experienced language teachers, prospective teachers and subject experts outside language teaching (their subjects being history, the sciences, chemistry and maths) for their comments and views on the distinctive characteristics of language teachers, Borg he established a list of central features including "the dynamic nature of language, the scope and complexity of the content of language teaching, the range of materials, methods and activities available to language teachers, the especially close relationships between language teachers and learners and issues relating to the status of native and non-native language teachers." (Borg 2006b: 29). These specific ways in which language teachers are seen to be different provide a directive for continuing investigation. However, the importance of the specific contexts of language teachers in order to meaningfully analyse the characterising aspects needs to be acknowledged. Furthermore, a due consideration of these contextual factors of language teaching could provide meaningful input for teacher education programmes. Besides studying beliefs and attitudes, continuing research should also include classroom observation of both, language teachers and teachers of other subjects. As a final point, he called for further examination of languages as subjects with an epistemological focus in order to better understand "what being a language teacher means, (sic)" (Borg 2006b: 29).

## 4.7 Criticism

At this juncture, it is necessary to point out the shortcomings of Borg's study. Borg did not distinguish explicitly between questions dealing with language teaching, foreign language teaching and items defining teaching English as a foreign language in the discussions with the different groups, or the statements presented to the participants. He only stated that

[t]his paper reports an exploratory study into the distinctive characteristics of language teachers, specifically of teachers of English as a foreign language. A basic assumption here is that it should be possible to distinguish teachers of different subjects from each other in ways which go beyond simple references to their diverse subject matters. A second assumption is that this is a key issue for teacher educators; language teacher education presupposes an understanding of what specifically it means to be a language teacher, and therefore insight into the distinctive characteristics of language teachers is central to the work of language teacher educators. (Borg 2006b: 3-4)

On the other hand, the majority of Borg's (2006b:10-12) participants were either prospective or practicing EFL or TESOL teachers, except for the group of subject specialists. Consequently, the presented views and comments on the different statements and discussion topics should be considered within that context. Borg's copious and in-depth analysis offers valid insights mainly into the minds of people engaged in EFL teaching and hence provides only a limited view of the distinctive characteristics of foreign language teachers. It is Borg's failure to explicitly raise awareness of the specific context and his rather partial perspective on foreign language teaching that formed the basis of my research interest. I intended to examine how Austrian teachers of various subjects believed English as a foreign language to be different regarding selected characteristics established by Borg (2006b: 24). Nevertheless, I also incorporated issues defining or describing language teaching and foreign language teaching in general, but I took greater care to distinctively position the statements regarding the particular focus.

## **5. The study – Teachers’ cognitions regarding distinctive characteristics of EFL teachers and teaching**

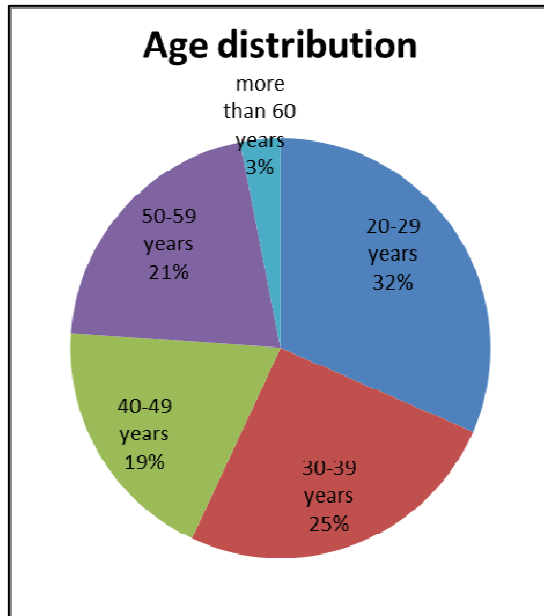
### **5.1 The parameters of the study**

My research interest focused on the personal attitudes and thoughts of Austrian teachers of all different kinds of subjects in connection to Borg’s established characteristics of foreign language teaching and teachers. I utilised Borg’s findings as ground work for my own survey but narrowed my research field to teachers’ perceptions and opinions concerning different aspects of teachers of English as a foreign language for most items. With this study, I wished to investigate whether EFL was perceived to be different from other languages in foreign language teaching. My interest in this endeavour was furthered by examining the research development of the twenty-first century; few studies have been undertaken in German-speaking countries.

In formulating my questionnaires, I drew extensively on Zoltan Dörnyei’s guide on *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies* (2007), while Simon Borg’s study (2006b) provides a useful outline of the underlying general practices and conventions. Moreover, some of Borg’s statements were translated into German for my survey. After developing the questionnaire, conducting a trial phase and revising each item, the study was finally published online and distributed via email and in teaching and education-related groups on Facebook. This method aimed at reaching a great number of possible participants within a relatively short period of time, as I decided to grant access to the study from 11.02.2014 until 04.03.2014. It has to be mentioned, however, that allowing an open access rather than restricting access by invitation or password included the risk of “self-selection”: participants could decide whether to take part in the survey or not (Dörnyei 2007: 101). In addition to this, other people not involved in teaching or educational institutions could fill out the questionnaire if they discovered the online link leading to the study. I nevertheless decided to apply this method, because I regarded the risks lower than the actual benefit of making it as easy as possible for participants to access the study. Out of an initial total of 160 completed interviews, 130 remained incomplete after the process of eliminating questionnaires (i.e. exhibiting unanswered questions).

## 5.2 The participants

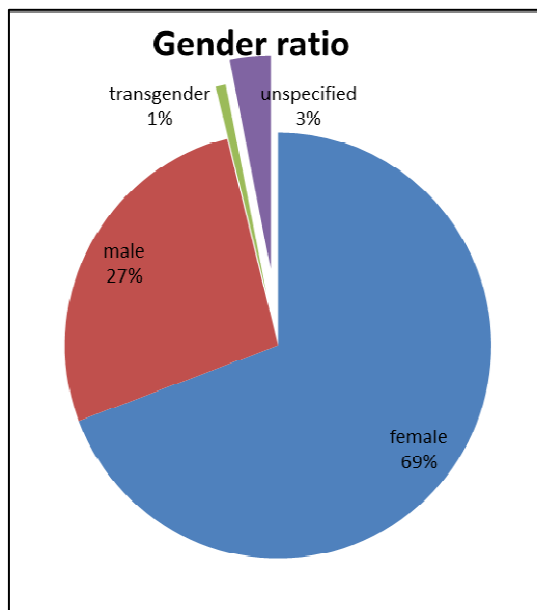
### 5.2.1 Age distribution



**Figure 8:** Age distribution

The study aimed at Austrian teachers of all subjects and ages. The participants were not offered any kind of rewards or expenses. Over 190 people entered the online study and after a process of eliminating unfinished or faulty surveys 130 questionnaires remained. The age distribution in figure 9 shows that about one third of the 130 participants were 20–29 years old. 33 participants were 30–39 years old when they were took part in the study. One fifth of participants fall into each of the categories of 40–49 and 50–59-year-olds. Only four out of the 130 participants were older than 60.

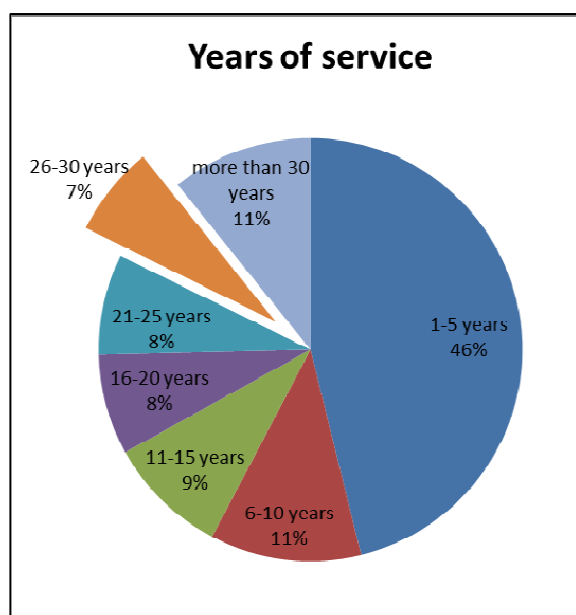
### 5.2.2 Gender ratio



**Figure 9:** Gender ratio

It can be seen in figure 9 that 90 of the 130 people, who took part in the survey, were women. One fifth of participants identified themselves as men. Four of all participants could not, or did not want to identify with any of the given gender specifications. One person identified themselves as transgender.

### 5.2.3 Years of service



**Figure 10:** Years of service

Almost half of all participants could be considered novice teachers judging from their teaching experiences of a maximum of 5 years. 15 of the people taking part in the study, roughly 11%, had been teaching 6–10 years, while 14 people taking part in the survey, also approximately 11%, indicated that they had been teaching more than 30 years. 12 of the 130 participants predicated teaching experience of 11 to 15 years. 10 of the participants stated that they had been teaching either 16–20 or 21–25 years. 26–30 years of service was given by 9 participants, which can be seen in figure 10.

It should be noted that the specific backgrounds and circumstances of the participants were not specifically recorded by the survey, because the survey was made available in Austria and the majority of all contacted teachers and educational institutions are located in as well. Also, the context in connection to national differences has not been examined. These aspects further differentiate my study from Borg's survey.

### 5.3 The items

I decided to conduct a quantitative study instead of replicating Borg's method of qualitatively analysing participants' views and attitudes. This approach was chosen in connection to the aim of my study, which was to examine what a certain number of Austrian teachers tend to believe concerning specific characteristics of teaching and teachers of English as a foreign language. The questionnaire consisted of 14 statements with which the participants had to **agree**, **disagree** or **partly agree** and was created by means of using the online program ScoSci survey (<https://www.soscisurvey.de/> 07.04.2014). In contrast to Borg's approach of encouraging several of his groups to critically comment, explain their views and/or suggest additional characteristics, I decided to only incorporate "closed-ended items" (Dörnyei 2007: 104), because I intended to compare Borg's findings with the cognitions of the participants of my study. In order to do so, I based the statements of my study on Borg's final list of "key distinctive characteristics" (Borg 2006: 23), mentioned in the first part of my thesis in figure 8 and used the following categories to organise the body of statements: The content of teaching,



methodology, teacher-learner relationships, the nature of language, non-native issues, perception of errors and teachers' characteristics. Moreover, the Hungarian and Slovene prospective teachers' comments on specific characteristics of foreign language teachers also served as foundation for the statements of my own survey. As I have already stated above, I reformulated several of the 18 statements Borg established by analysing the first two groups' responses and later presented to his group of subject specialists in order to obtain their comments. Comparing the participants' answers in my study with the views of the subject experts in Borg's research will be part of the focus of the analysis and interpretation. The survey was conducted in German and the statements were additionally translated into English.

## 6. Description and discussion of findings

The first part of this chapter will present the analysis of the participants' responses to the specific statements that do not correspond with Borg's statements for the group of subject specialists. Also, a comparison and discussion of both survey's results will be included.

In the second part of this section, I will compare and contrast selected results of Borg's analysis of his subject specialists' cognitions with a slightly altered but similar group of participants in my own study.

Finally, I will provide a summary of my findings and link them to the research field of teacher training.

### 6.1 General items

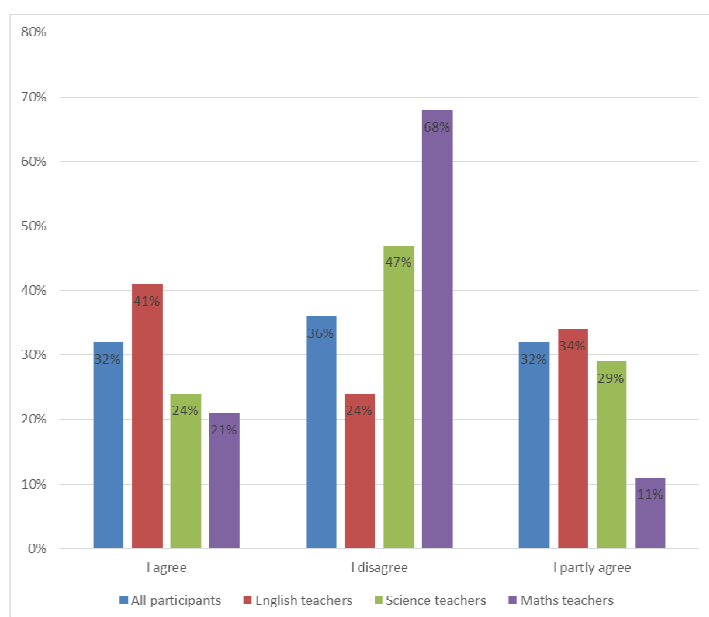
#### 6.1.1 While subjects like maths or physics are based on relatively consistent rules and circumstances, English is constantly evolving and developing. (SW01)

The first item belongs to the category of "the nature of the subject" included in Borg's "distinctive characteristics of language teachers" (Borg 2006b: 24), displayed in figure 8, and could be perceived as a rather controversial claim. It was derived from the following statement of a participant of Borg's group of Hungarian and Slovene students:

Other sciences like mathematics and physics have rules, which have been written in ancient times by mathematicians such as Pythagoras. These rules do not change; neither do the laws of physics [sic]. But language has a flux. It is constantly developing, changing, expanding. (Borg 2006b: 21).

Earlier in the presentation of his study, Borg (cf. 2006b: 14) displayed that one of the conference delegates critically remarked that language teaching was not more progressive than teaching other subjects, such as history. This attitude supported my own critical position towards this claim and therefore I decided to adapt and include this statement in the survey, since I believed that it would produce interesting results: "While subjects like maths or physics are based on relatively consistent rules and circumstances, English is constantly evolving and developing." (SW01). By additionally specifying language teaching as teaching English as a foreign language, I intended to establish whether Austrian teachers believed English teaching to be different from teaching other languages.

Figure 11 displays that one third of all participants agreed, one third of them disagreed and one third of all respondents partly agreed with the statement. 41% of the group of English teachers believed their subject to be constantly developing, while 24% disagreed with that. 34% of that group stated that they partly agreed with the statement. Almost half of all science



teachers did not consider English to be a subject evolving more than their own. 24% believed the opposite and 29% partly agreed with the statement. Two thirds of the maths teachers who took part in the survey did not see how English was developing and changing more than their own subject. 21% agreed and 11% partly agreed with the statement SW01.

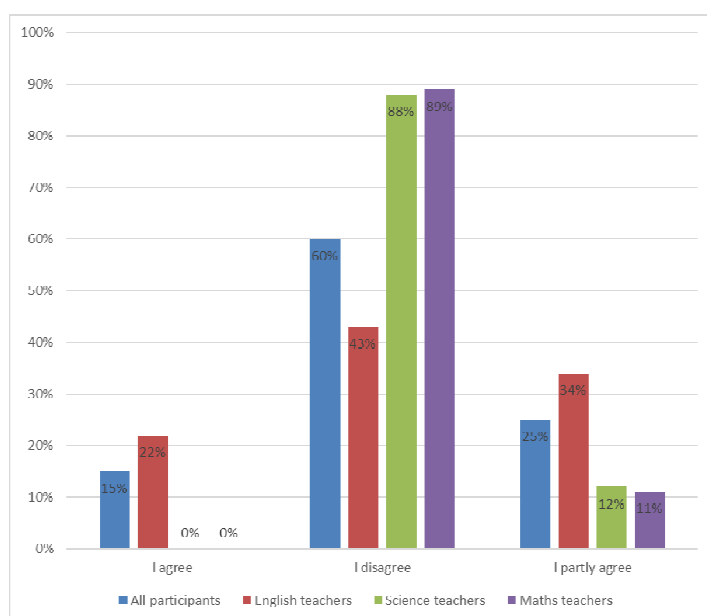
**Figure 11:** While subjects like maths or physics are based on relatively consistent rules and circumstances, English is constantly evolving and developing. (SW01)

The rather even distribution of all participants' answers could serve as evidence for the various underlying motivations for the teachers' cognitions. It would have been interesting to include "open-ended questions" (Dörnyei 2007: 107) in order to learn about the different reasons for the individual answers. Although I had expected the results for the group of participating English teachers to be more distinct, it can still be seen that more English teachers believe their subject to be constantly developing than do not. However, one third of them partly agreed and thus also disagreed. The rather strong disagreement of the science and maths teachers was anticipated, because the fields of research informing the teaching of these subjects also record new academic findings, knowledge and methodologies. Nevertheless, the results for the group of maths teachers clearly stand out in comparison with the answers of all participants and the recorded attitudes to any other subject and hence an interpretation should be attempted. Since it is known that what teachers think, know and believe is shaped by their own education and training, along with personal, even private, experiences and their social, geographical and economic contexts, it might also be possible that teaching a certain subject is an additional influencing factor. In other words, the results of the group of maths teachers can be used to support the idea that teaching a specific subject could set the pattern for certain attitudes and positions concerning the proposition in SW01. Also, it is possible that mentioning this specific subject, along with physics, could have resulted in participants teaching maths to feel particularly concerned and perhaps even criticised.

### 6.1.2 Compared to teachers of other subjects, being up-to-date is more difficult for English teachers because English is very dynamic. (SW02)

The second item was intended to follow SW01, since it uses the core meaning of the first statement in order to justify an additional feature: “Compared to teachers of other subjects, being up-to-date is more difficult for English teachers because English is very dynamic.” (SW02). It was also developed by means of utilising Borg’s investigation of the Hungarian and Slovenian students’ feedback, about which Borg (2006b: 21) reports that “[a]ccording to these respondents, the dynamic nature of their subject matter has unique implications for language teachers; in particular, it places ‘incessant demands’ for learning on them and thus makes it harder for them to remain up-to-date with their subject.”. Again, this statement was designed to engender critical responses.

The majority of all respondents (60%) disagreed that it was more difficult for English teachers to keep themselves informed about their subjects because of its dynamic nature. So did the majority of the science and maths teachers, with 88% and 89%. One fourth of all participating teachers believed that the statement was partly true. 12% of the science teachers who took part in the survey and 11% of the group of maths teachers partly agreed that, because English was constantly developing, it was less easy for teachers of that subject to be up-to-date. 19 out



of all 130 participants agreed, while none of the science or maths teachers did. Slightly less distinct, but still following the overall trend, 43% of the English teachers disagreed with the statement. 34% of them stated that they considered item SW02 to be partly accurate. 22% believed that their subject, English, was more dynamic and agreed that it was more complicated to stay informed. The outcomes are presented in figure 12.

**Figure 12:** Compared to teachers of other subjects, being up-to-date is more difficult for English teachers because English is very dynamic. (SW02)

The analysis of the overall and subject-specific findings shows that the participating Austrian teachers tend to disagree that it is more difficult for English teachers to stay informed about

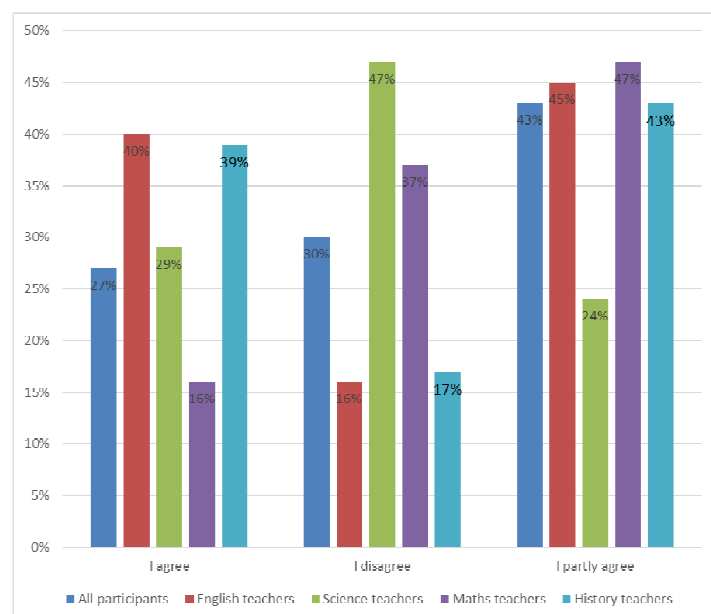
their subjects' latest developments because of its dynamic nature. Indeed, a substantial number of teachers of English as a foreign language tended to disagree with the claim. However, one third of the group partly agreed with the statement. This outcome partially correlates with the conclusion established regarding statement SW01, stating that a substantial number of English teaching participants characterised their subject as more evolving than other subjects, or partly agreed with this proposition. Moreover, comparing English teachers with science and maths teachers, my personal proposition mentioned above is once more supported by the outcomes that suggest that the particular subject influences teachers' attitudes and beliefs about their own and also about other subjects. While English teachers did not distinctively reject and some of them even partly supported the claim that it was harder for them to stay up to date because of the subject's greater increased dynamics and development, teachers of the sciences or maths were rather explicitly opposed to this idea. Nevertheless, I believe it is rather unlikely that representatives of a certain occupational category felt offended or criticised by the statement, since no other subject than English was mentioned specifically.

### **6.1.3 English is more dynamic than other subjects, because it has a higher practical relevance regarding real-life challenges. (SW03)**

Another, but distinct, follow-up statement to SW01 stated that the explanation for the claim of English being more dynamic than other subjects was to be found in the subject's applicability: "English is more dynamic than other subjects, because it has a higher practical relevance regarding real-life challenges." (SW03). Just like the preceding item, this statement was constructed by means of adapting Borg's (cf. 2006b: 22) discussion of the Hungarian and Slovene students' responses regarding the specific nature of language. Borg (2006b: 22) presented one of the comments: "You use a foreign language even after you leave school but when do you use the chemistry formulas in your everyday life?", which displays the participants cognition regarding direct and sustainable practical relevance. Following this claim, I believed that, since social, cultural and economic conventions, ways of living and communication are always developing, language must consequently change, too. I thereby added another idea and incorporated it in SW03, with surprising results.

The bar chart in figure 13 shows the comparison of the overall responses with the answers of English, science, maths and history teachers. I decided on including a number of different subject-groups because of the varying outcomes. Of all 130 participating teachers, 27% agreed that the reason why English was constantly changing was its applicability in real life.

30%, however, stated that they disagreed with the statement. 43% of all teachers could neither fully agree nor disagree with the claim presented in SW03. 40% of the group of English teachers approved of the statement, while 45% only partly agreed with it. 16% of all participating EFL teachers did not believe that English was more dynamic because teaching this subject includes practically relevant skills. An equal percentage of the group of maths teachers believed the statement to be true. 37% of them objected to it and 47% stated that they could not fully disagree or agree with item SW03. Slightly confronted to these results, 29% of



all science teachers who took part in the survey agreed with the statement. 47% disagreed with it and almost one fourth of the group partly agreed with it. Similar to the English teachers, 39% of the History teachers said that they agreed with English being more dynamic because of its increased immediate and long-term practical relevance. 17% of that group disagreed and 43% partly agreed with the statement.

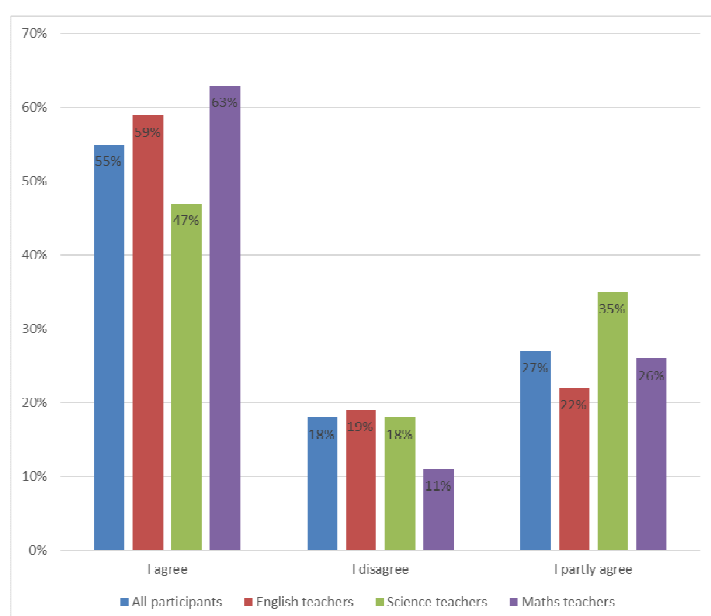
**Figure 13:** English is more dynamic than other subjects, because it has a higher practical relevance regarding real-life challenges. (SW03)

Interestingly, the outcomes for this follow-up item are rather varied. Especially the science teachers who partly agreed with the statement deserve attention, because their cognitions create a stark contrast when compared to the attitudes of all participants, as well as the other groups. It can thus be argued that teachers of subjects like biology, physics and chemistry have more distinct cognitions regarding this specific issue. Also, almost half of this group disagreed that English is more dynamic than other subjects, because of its higher practical relevance regarding real-life challenges. These results can be interpreted as showing that teacher cognition is highly dependent on personal and contextual factors, as stated in the first part of this study in figure 5. The claim presented above, namely that teachers' subjects might influence their cognitions, could be supported by the distinctiveness of the science teachers' responses in comparison with all participants and any other group. Another striking result is the concordance of English and History teachers' attitudes in connection to this item. In this case, I must refrain from offering any kind of interpretation; comparable to SW01, the

inconclusive results of collecting teachers' cognitions with regard to this statement might produce a great variety of underlying reasons.

#### **6.1.4 While teachers of subjects like History, Religion or Physical Education normally do not have to focus extensively on their pronunciation, this aspect is particularly important in the English classroom. (SW06)**

The following feature taken from Borg's summarising list of the discussion with the teachers on a postgraduate course in TESOL was used to establish the statement SW06: "More than in any other subject, speaking is fundamental to language teaching." (Borg 2006b: 13). Moreover, one of the non-native issues addressed by Hungarian and Slovene language teacher students described that only language teachers have to concentrate on their pronunciation and language production as well as the content of what they are saying (cf. Borg 2006b: 23). Although I agree that focussing on pronunciation is a specific characteristic of language teachers, I do however believe that it is generally important to use correct language for teaching any subject. This belief finally led me to forming the following statement: "While teachers of subjects like History, Religion or Physical Education normally do not have to focus extensively on their pronunciation, this aspect is particularly important in the English classroom." (SW06).



Analysing the participants' answers, I was able to determine that each subject-specific group's attitudes closely resembled the outcomes of all participants, presented in figure 14, which is why I decided on closely investigating only the overall results.

**Figure 14:** While teachers of subjects like History, Religion or Physical Education normally do not have to focus extensively on their pronunciation, this aspect is particularly important in the English classroom. (SW06)

More than half of all participants (55%) agreed that EFL teaching is different from other subjects because teachers have to particularly focus on their pronunciation. 27% of all 130 participating teachers partly agreed with the statement. 18% of all respondents did not believe that the presented feature exclusively characterised EFL teaching.

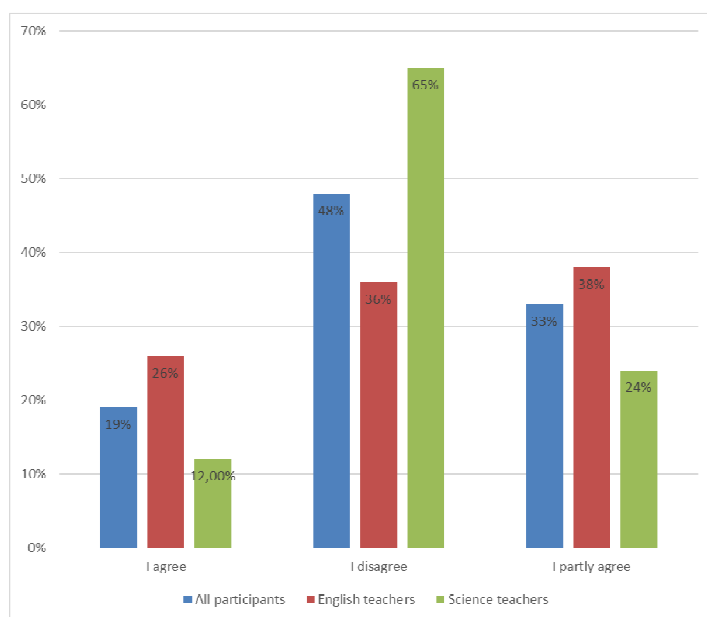
Summarising the results, it can be said that the clear majority of teachers agreeing with the claim presented in statement SW06 could serve as evidence that the majority of teachers believed that pronunciation is a highly important aspect of teaching English as a foreign language. As with the preceding item, I believe it would be highly interesting to invest in further research in order to determine why teachers felt that pronunciation is not as important in other foreign languages or language teaching in general. According to the cognitions presented here, teaching English seems to be perceived as distinct from teaching any other language, a claim that would definitely require additional research in order for it to be investigated in more detail.

#### **6.1.5 Activities and exercises used for teaching English promote student participation more extensively than the teaching methods of others school subjects. (SW14)**

Only mentioned briefly in Borg's discussion on his findings is the claim that foreign language teaching methodology involves learners more actively than methods of other subjects (cf. Borg 2006b: 24), but this aspect is, nevertheless, part of Borg's summary of the key characteristics of language teachers. Developing this thought one step further and trying to examine whether educators believed that EFL teaching was different from teaching other languages, I established the following statement for the survey: "Activities and exercises used for teaching English promote student participation more extensively than the teaching methods of others school subjects." (SW14).

Besides investigating the overall reactions towards the statement, I chose to analyse the cognitions of English and science teachers, because I experienced these groups' results to be the most noticeable. 12% of the group of English teachers stated that they believed the statement SW14 to be true. 19% of the 130 participating teachers agreed that methods used for teaching English as a foreign language promoted student participation more intensively than the methodology of other subjects. Of all participating science teachers, 26% agreed with the statement. 36% of the group of English teachers responded with "I disagree" and so did 48% of all teachers. More than half of this group (65%) disagreed with the claim that methods for teaching English prompt students to actively take part in class more than in other subjects. 24% of the respondents who teach science stated that they partly agreed. 33% of all people





taking part in the survey concurred with statement SW14. 5% more of the group of English teachers could neither fully agree nor disagree with the presented claim. This can be seen in figure 15.

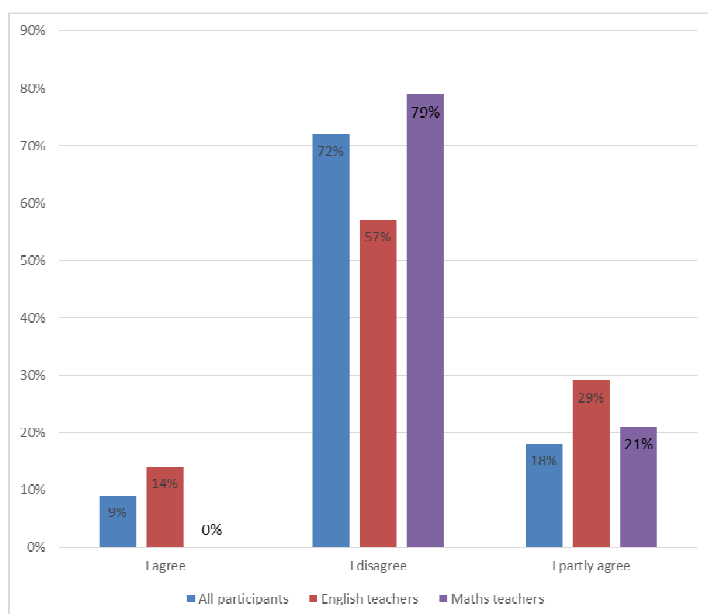
**Figure 15:** Activities and exercises used for teaching English promote student participation more extensively than the teaching methods of others school subjects. (SW14)

Although the overall result might not be entirely definite, the general trend however is that many participating teachers did not believe that methods for teaching English require students to participate more actively than the teaching techniques of other subjects. These results could suggest that many respondents had experienced motivating teaching methods in various different subjects other than English which influenced their attitudes and thoughts accordingly. On the other hand, a notable number of teachers expressed that they could at least partly agree with this statement. This could be interpreted as evidence for some respondents' conflicting experiences during their own education, or within their classroom practice. A qualitative inquiry regarding participants' reasons for their answers could offer interesting explanations. Another prominent outcome was that teachers of subjects like physics, chemistry or biology seemed to disagree more distinctively. On the one hand, their cognitions could be built on disproving personal experiences. It is also possible that teachers of this group felt criticised in their teaching profession and thus thought that they were obliged to defend their methods. These potential interpretations of the results again support the theory that teachers' cognitions could be additionally influenced by their subject. Without the respondents' underlying motivations, all these theories must remain speculations. However, this particular uncertainty serves as evidence for the complexity of teachers' cognitions. Moreover, the analysis of English teachers' attitudes regarding this specific claim on methods of EFL teaching yielded relatively inconclusive findings. While I expected that, compared to the overall group of participants, more English teachers would agree with the

statement, I did not anticipate that the percentage of English teachers who partly agreed would almost match the percentage of those who disagreed with SW14.

#### **6.1.6 English teachers tend to have closer and more personal relationships with their students than teachers of other subjects. (SW17)**

The common belief of the Hungarian and Slovene student group taking part in Borg's (cf. 2006b: 22) study described that language teachers tend to have closer and more relaxed relationships with their learners. Borg (2006b: 22) presented one comment of a Hungarian respondent in order to explain the underlying reasons for this claim: "during language classes students often have to talk about their own experiences, their life". Another Slovene student reported that English teachers tended to be more prone to establishing personal relationships with their learners and that they also shared more personal information themselves (cf. Borg 2006b: 22). As a practicing novice English teacher myself, I liked to approve of this position at first. Nevertheless, as a consequence of experiencing how fellow teachers of other subjects worked and interacted with their students, my initial attitude became more critical and reflective. By including this statement in my survey, I hoped to gather a more scientific understanding of other teachers' cognitions.



The bar chart in figure 16 compares the outcomes of all participants' answers with the groups of English and science teachers. The majority of all participants (72%) objected to the proposition that relationships between teachers and learners of English were closer and more personal. 18% partly agreed with the statement and half as many participating teachers (9%) stated that they agreed with the assertion presented.

**Figure 16:** English teachers tend to have closer and more personal relationships with their students than teachers of other subjects. (SW17)

Equally, the majority of all participating English teachers (57%) did not believe that the statement SW17 was true. Almost 30% stated that they agreed with parts of the statement and 14% fully agreed with it. Also, most respondents of the group of science teachers (79%)

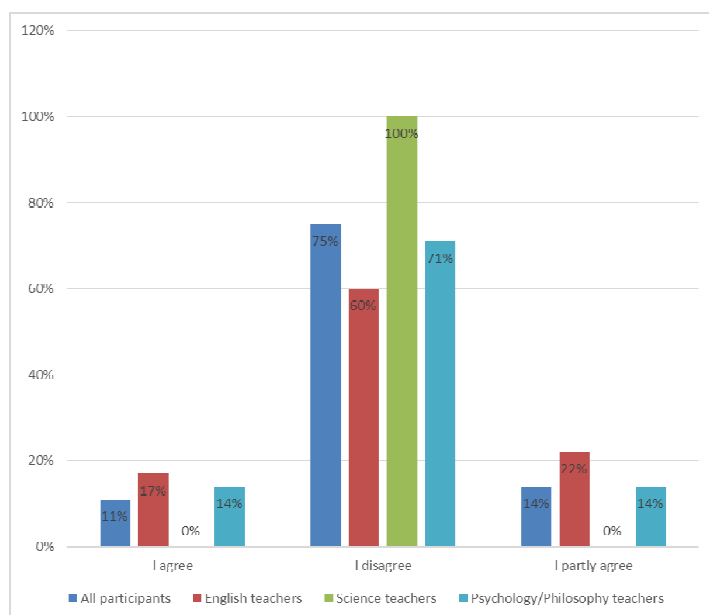
stated that they did not believe that English teachers had more personal relationships with their learners. 21% stated that they agreed with that claim to some extent. No respondent of that group approved of the statement.

As mentioned by Borg (cf. 2006b: 26), the Hungarian and Slovene students' comments stating that English teachers were prone to establish closer relationships with their learners could be regarded as naïve over-generalisations. Contrastingly, these claims could also be seen as presentations of personal experiences.

#### **6.1.7 Characteristics such as creativity, flexibility and enthusiasm are more important for language teachers than for teachers of other subjects. (SW30)**

The last statement to be analysed in this part of my thesis was also established by reformulating and adapting Borg's (cf. 2006b: 23) findings regarding the responses of Hungarian and Slovene students. Creativity, flexibility and enthusiasm were among the language teacher traits mentioned by the respondents. Borg (2006b: 23) explained that "[t]here was no suggestion that other teachers did not require such qualities; the argument, though, was that these were almost essential for language teachers compared to perhaps desirable for other teachers". Since I nevertheless found the students' claim tenuous, I aimed to examine the attitudes and opinions of other teachers by formulating the following statement: "Characteristics such as creativity, flexibility and enthusiasm are more important for language teachers than for teachers of other subjects." (SW30). Since I did not consider these aspects to be particularly necessary for language teachers in the first place, I decided against additionally shifting the focus regarding EFL teaching.

The results of the specific groups correlate with the overall outcome, which can be seen in figure 17. Nevertheless, the results of some groups vary considerably and will thus be analysed here. Three quarters of all participants did not believe that characteristics such as creativity, flexibility or enthusiasm were more important for language teachers than for teachers of other subjects. All 17 science teachers stated that they opposed statement SW30. 71% of all psychology/philosophy teachers also disagreed with the presented proposition. Slightly fewer participants of the group of English teachers, 60%, stated that they did not believe the listed features to be more important for teachers of their own subject than for colleagues of any other subject. 22% of them partly agreed with the statement. 14% of both, all participating teachers and the group of psychology/philosophy teachers stated that their attitudes partially matched the position presented in SW30. 17% of the participating English teachers expressed their approval with the item, as did 14% of the group of psychology/philosophy teachers. 11%



of all respondents also presented the opinion that aspects like flexibility, creativity and enthusiasm were more important for language teachers than for teachers of other subjects.

**Figure 17:** Characteristics such as creativity, flexibility and enthusiasm are more important for language teachers than for teachers of other subjects. (SW30)

Comparable to the outcome of the preceding item, the results present an opposition to the cognitions of the Hungarian and Slovene students. Again, as mentioned before, this cannot be interpreted as falsification, but as suggestion that opposing cognitions can be equally true and valid. The justification and explanation of differing knowledge can be found in people's personal experiences and specific contextual circumstances, as, for example, established by Clandinin & Connelly (1992: 125). Nevertheless, I had anticipated the percentage of English teachers agreeing or partly approving to be higher than any other group. I was, however, surprised by the distribution of the participating psychology/philosophy teachers' responses. Although the outcome for this group clearly shows that the majority disagrees with the claim that traits such as flexibility, creativity or enthusiasm were specifically necessary for teaching languages, the percentage of psychology/philosophy teachers agreeing or partly agreeing was higher than I had expected. Given the unambiguous results for the science teachers, it would be interesting to conduct further research on subjacent reasons for the teachers' cognitions.

## 6.2 Subject specialists' views

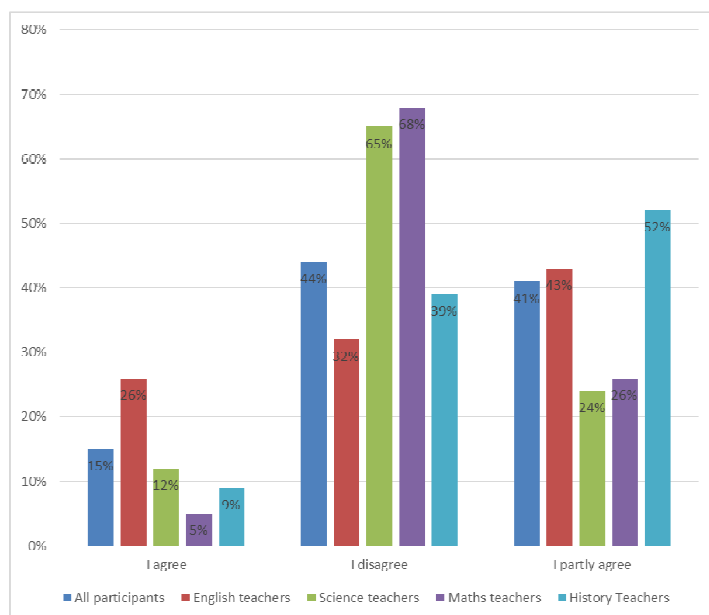
In the following part of my thesis, I will compare the views on certain statements of the subject specialists of Borg's (2006b: 15 ff.) study to those of the teachers of the same or similar subjects taking part in my survey. It must be mentioned that Borg (2006b: 11) investigated the attitudes of four subject specialist teacher trainers, but it cannot be determined how many of my study's participants have undergone teacher training. This difference has to be kept in mind when comparing and contrasting the results. Furthermore, I

must critically add that Borg differentiated between experts of science and specialists on chemistry. One could argue that the former could be used as an umbrella term for the latter subject, which is why I decided to group the subjects of chemistry, biology and physics under the category of sciences or natural sciences, labelled *Naturwissenschaften* in the survey. I also analysed English, as well as psychology and philosophy teachers' views and attitudes and will include them where relevant.

### **6.2.1 Incorrect output of language learners is more acceptable than in other subjects. (SW27)**

The first statement in Borg's (2006b: 17) list was transformed into an item for my own study: "Whereas in most other subjects incorrect 'output' or 'products' by the learner are not acceptable, in language teaching 'errors' are seen as a natural and even desirable part of the learning process". Following Dörnyei's advice (cf. 2007: 108), I simplified the language and rephrased the statement in order to avoid the negative form: "Incorrect output of language learners is more acceptable than it is in other subjects" (SW27). Three out of four subject specialist teacher trainers in Borg's survey agreed that errors were less acceptable in their own subjects than in foreign language subjects. Only the expert on maths claimed that making errors was perceived to be a rather positive part of learning (cf. Borg 2006b: 17).

Contrastingly, figure 18 shows that 11 out of the 17 science teachers (65%) that took part in my survey disagreed with the statement. They did not think that errors had a more positive status in language classes than in their own. However, four of the science teachers (24%) partly agreed with Borg's experts, as did half of the history teachers. Nevertheless, nine of them (39%) also disagreed that errors were less acceptable in their subjects. The distribution of maths teachers resembled that of the science teachers in my study. The majority of them (68%) disagreed with the statement, five maths teachers (26%) at least partly agreed and only one out of 19 maths teachers (5%) believed the statement in SW27 to be true. Almost as many English teachers agreed with the statement as disagreed, with 15 out of a total of 58 (26%) stating they believed that their subject offered a more positive approach towards errors, while 18 participants (31%) expressed their disagreement. 25 of all English teachers (43%) stated that they partly agreed with the statement.



**Figure 18:** Incorrect output of language learners is more acceptable than in other subjects. (SW27)

Summarising these results and comparing them to the assessment of the answers of all participants it can be seen that it is not possible to formulate a clear conclusion. Nevertheless, it can generally be said that the participating teachers rather disagree that errors are more accepted within (foreign) language classes than in other subjects, although a substantial number of them partly agree with that statement. Fewer participating teachers believed that incorrect output of language learners is more acceptable than it is in other subjects. Interestingly, the groups of science and maths teachers seemed to have comparable opinions on this statement, while the history teachers' views stand somewhat opposed to the results of the former two groups. Interpretations regarding the reasons for these trends could only be offered by conducting further investigation of the respondents' motives.

### **6.2.2 English teachers are equipped with a greater diversity of exercises such as games, songs, listening and speaking/communication activities than other teachers. (SW10)**

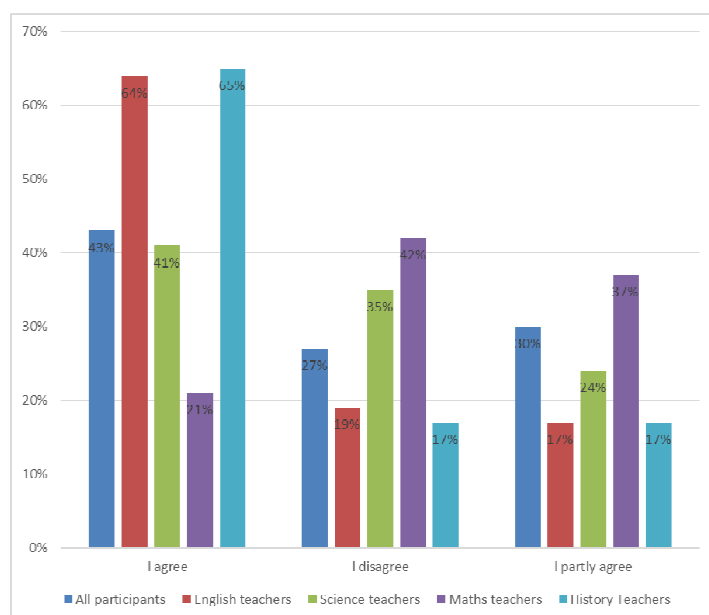
As mentioned above, by analysing the discussion with teachers on a postgraduate course in TESOL and examining the comments of a group of conference delegates, Borg (2006b: 17) established another characteristic regarding methodology. His results suggested that the number of varying methods in teaching foreign languages exceeded that of other subjects: "The range of competing methodologies and methodological shifts in language teaching over the years outweighs similar phenomena in other subject areas." (Borg 2006b: 17). The teacher trainers of science, history and chemistry in Borg's survey stated that they would partly agree with this statement, but nevertheless also recognised this particular feature in their own

subjects. Only the maths specialists' response indicated that the methodological situation is more varied and changeable in foreign language teaching than in maths (cf. Borg 2006b: 17). The results are presented in figure 19.

Language teachers	Science	History	Chemistry	Maths
4. The range of competing methodologies and methodological shifts in language teaching over the years outweighs similar phenomena in other subject areas.	Partly	Partly	Partly	Yes

**Figure 19:** Subject specialists' views on statement 4. (Borg 2006b: 17).

Adapting Borg's original statement, I concentrated on English teachers in connection to the aspect of methodology: "English teachers are equipped with a greater diversity of exercises such as games, songs, listening and speaking/communication activities than other teachers." (SW10). The aim was to test whether the participants of my study believed that teaching English was different from other subjects, even from teaching other foreign languages. The results were almost as I had anticipated. 64% of all English teachers thought that in comparison with other subjects, their own subjects' teaching methods were more diverse. Surprisingly, 65% of the participating history teachers also agreed with this statement. The analysis of the science teachers' attitudes towards this statement produced less definite results, as can be seen in figure 20. Seven of all science 17 teachers (41%) thought that their subjects' methodology was less diverse, six participants disagreed with the statement and 4 stated that they only partly agreed that methods for teaching English were richer in variety. The analysis



of maths teachers' views who took part in the survey was less inconclusive. Only four of 19 participants (21%) agreed with the statement. 42% of all maths teachers did not believe that their own teaching methods were less diverse than methods for teaching English and seven (37%) stated that they partly agreed with the statement.

**Figure 20:** English teachers are equipped with a greater diversity of exercises such as games, songs, listening and speaking/communication activities than other teachers. (SW10)

Comparing the results of each group of subject teachers, it can be concluded that the teachers taking part in my study thought that the diversity of methods for teaching English is not explicitly different from other language subjects' methodology. It would be interesting to investigate the results for the group of maths teachers as to why their cognitions supporting the statement differ from all other groups' results. Equally, asking the respondents teaching science why they stated that they partly agreed with item SW10 could provide interesting perspectives.

### 6.2.3 Professionally trained non-native language teachers are often perceived as less able than their sometimes not professionally educated native colleagues. (SW22)

All four of Borg's subject specialist teacher trainers did not differentiate between professionally educated native and potentially non-professional non-native teachers in their own subject, as can be seen in figure....

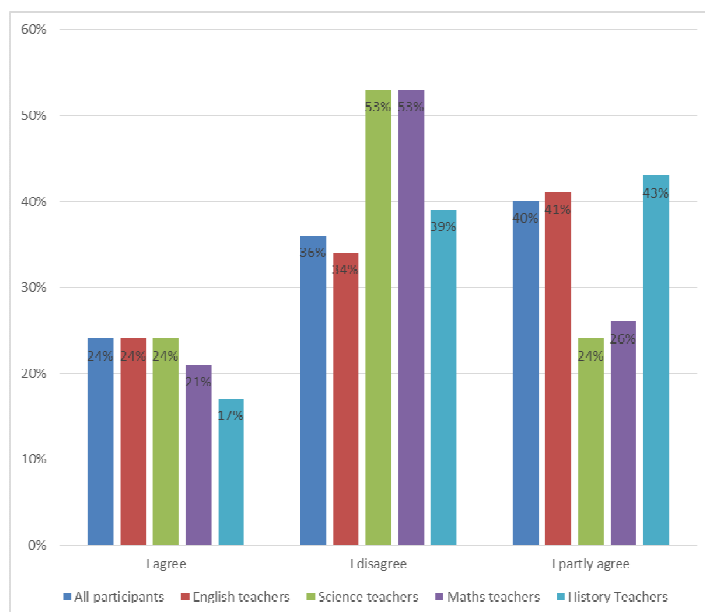
Language teachers	Science	History	Chemistry	Maths
5. Professionally trained non-native language teachers are often compared unfavourably to native speakers, even when the latter are not professionally trained.	No	No	No	No

**Figure 21:** Subject specialists' views on statement 5 (Borg 2006b: 17).

In the case of this item, I did not include the focus on English teaching and teachers in particular, because it was not clear what kind of experience EFL teachers could have regarding this aspect in comparison with teachers of other languages: the statement "Professionally trained non-native language teachers are often perceived as less able than their sometimes not professionally educated native colleagues" (SW22) generated most interesting results.

Figure 22 shows that 24% of English teachers (14 out of 58) felt this to be true, while 35% (20) stated their disagreement. 41% (24) partly thought that professionally trained non-native language teachers were perceived to be less competent than native teachers, even if they might not have the same qualifications. The distribution of science and maths teachers was relatively even, with 53% of each group believing the statement to be inaccurate. One fourth of each two groups was undecided. Only four out of all science and maths teachers thought that the statement to be true. 40% of all participants partly agreed that native speakers were often believed to be more competent than their non-native teacher colleagues, even if they were not professionally trained. 36% did not believe that such a differentiation existed and only 24% agreed with item SW22.





Although no clear conclusion can be made regarding the respondents' cognitions regarding this specific item, once more, this outcome does not contradict Borg's (2006b: 17) findings.

**Figure 22:** Professionally trained non-native language teachers are often perceived as less able than their sometimes not professionally educated native colleagues. (SW22)

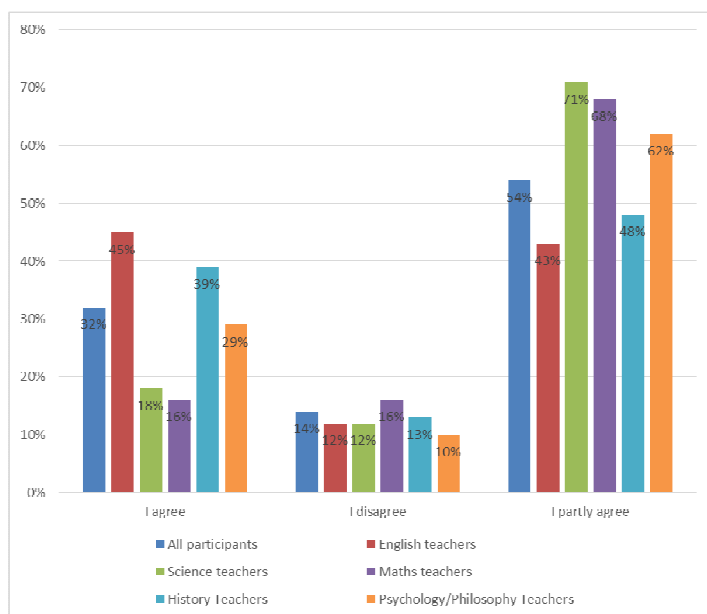
Apart from the fact that the teachers who took part in my study did not exhibit any clear opinions concerning the statement, the difference between these and Borg's results merely proves that varying groups of people have distinct, differently developed and thus valid attitudes. Again, asking respondents to explain their stated attitudes would offer useful insights. In particular, it would be interesting to analyse the explanations and reasons behind the cognitions of the group of history teachers in a further qualitative study, since their answers stand out compared to the other groups.

#### **6.2.4 The subject and medium of teaching are one and the same within the English lesson. This aspect distinguishes English from other school subjects. (SW24)**

In order to fit the context of my study and for the purpose of simplification, the following original statement in Borg's (2006b: 17) survey was altered: "In language teaching, the subject and the medium for teaching are one and the same, especially in multilingual groups where English is the only common language". Except for the maths teacher trainer, who was unable or unwilling to respond to this item, all other subject specialists stated that this issue was not part of their subjects (cf. Borg 2006b: 17).

Again, for my survey, the focus was shifted from the general interest in specific characteristics of foreign language teaching towards English. Furthermore, I perceived that Borg's (2006b: 17) statement implied two aspects at once and reduced it to its essence: "The subject and medium of teaching are one and the same within the English lesson. This aspect distinguishes English from other school subjects" (SW24).

Interestingly, figure 23 shows that 70% of all science teachers (12 out of 17) were not completely sure whether to agree or disagree. Only two of them stated that they believed that this feature was not exclusive to EFL teaching. Similar results were registered with the group of psychology/philosophy teachers. 62% chose to partly agree with the statement; again, only



two psychology/philosophy teachers disagreed and 6 (29%) participants of this group agreed. 45% of the group of English teachers (26 out of 58) believed this statement to be true and 43% (25) of them partly agreed. Also, only 13% of the history teachers (3 out of a total of 23) stated that this feature did not differentiate English from other subjects, with almost half of the group partly agreeing.

**Figure 23:** The subject and medium of teaching are one and the same within the English lesson. This aspect distinguishes English from other school subjects. (SW24)

I had expected the majority of all participants to clearly disagree with the statement, but since the results for this particular item are not completely conclusive, it is difficult to state a clear inference. As with several of the preceding items, the groups of science and maths teachers show distinct results in comparison with all other groups or the overall outcome of all participants. Again, since their results are so prominent, further investigation of the motivating factors behind these two subject groups' answers would be interesting.

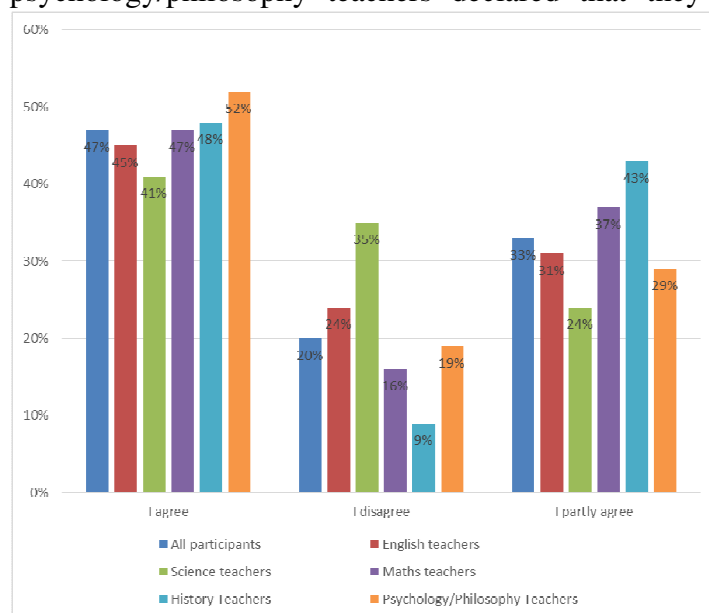
### 6.2.5 Teaching a language depends in equal measure on knowledge of how to speak and write a language (procedural knowledge) and knowledge of the language itself (declarative knowledge). (SW05)

The following statement from the original study by Simon Borg connects the nature of language to the practical work of language teachers:

“In other subjects, declarative knowledge about the subject is fundamental to effective teaching; in language teaching, knowing how to speak the language (procedural knowledge) is as important for teachers as knowing about the language.” (Borg 2006b: 18)

The subject specialists' answers were relatively varied, with the history and the maths teacher trainers stating that this aspect could also be found in their own subjects. The science expert believed that this feature could at least partly be used to characterise the subject. Only the chemistry specialist could not find corresponding features of the statement in his/her own subject (cf. Borg 2006b: 18). Slightly changed and again reduced to its core meaning, my survey included the following sentence: "Teaching a language depends in equal measure on knowledge of how to speak and write a language (procedural knowledge) and knowledge of the language itself (declarative knowledge)" (SW05). I did not specify the focus on EFL teaching with this statement, but investigated this particular characteristic in connection to language teaching in general.

For this item, the results were less varied with almost half of each group agreeing with the statement. 41% of all science teachers, 48% of the history teachers, 47% of the group of maths teachers, 45% of the participants who teach English and 52% of all psychology/philosophy teachers declared that they believed this feature to characterise



language teaching exclusively. However, 35% of the science teachers disagreed, while 43% of all history teachers were undecided. 7 of the 19 (37%) maths teachers taking part in the survey also partly agreed and 31% of the group of English teachers did not think that the statement was true. All results are presented as percentages in 24.

**Figure 24:** Teaching a language depends in equal measure on knowledge of how to speak and write a language (procedural knowledge) and knowledge of the language itself (declarative knowledge). (SW05)

I believe it can be concluded that the teachers of the different subjects mostly agreed that this feature specifically characterises language teaching. This generalisation of the single results additionally corresponds with the collected responses of all participants. For this statement as for various other items analysed above, further qualitative investigations of single subject-groups' underlying reasons could support research on teachers' cognitions and how these are

developed, influenced and defined. Moreover, since a substantial percentage of respondents stated that they partly believed that declarative and procedural knowledge were equally important for language teachers, I think it would be interesting to collect and analyse participants' explanations for their choice.

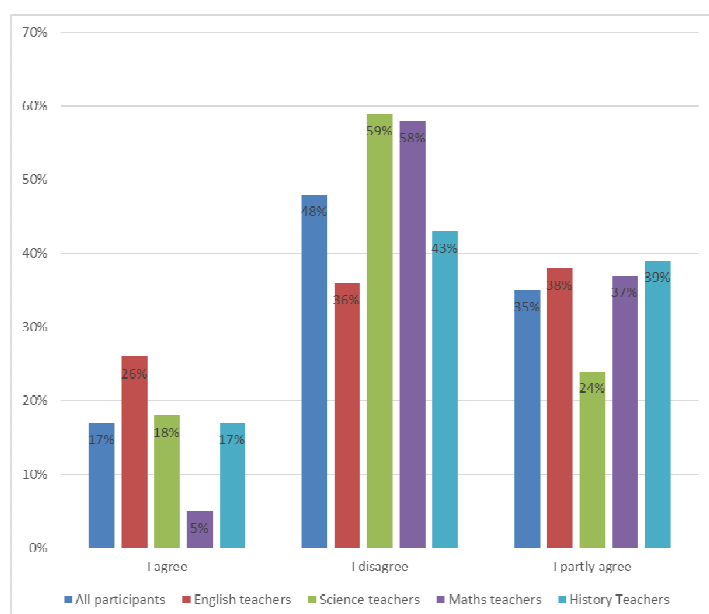
#### **6.2.6 In comparison with other subjects, English offers more applicable skills to students. (SW04)**

Except for the maths teacher trainer, who was undecided, none of the other subject experts identified in their own subjects this particular feature captured in the following statement:

“Language teaching is a subject with practical outcomes not characteristic of other subjects. As one teacher said, maths graduates will not apply Pythagoras when they go shopping.” (Borg 2006b: 19).

Reducing the suggestiveness of this statement and following Dörnyei's guideline on avoiding negative structures (cf. Dörnyei 2007: 108), my study included the following item: “In comparison with other subjects, English offers more applicable skills to students.” (SW04). Furthermore, it can be seen that I hoped to be able to distinguish English from teaching other languages.

Figure 25 displays that more than half of all science and maths teachers disagreed that English offers more applicable skills to students than other subjects. Furthermore, only 18% of the science teachers and even fewer maths teachers (5%) agreed with the statement. 36% of all English teachers did not believe that teaching English involves abilities that are more practical. 26% of the participating English teachers, however, thought that their subject offered more practically applicable skills to learners and 38% of all English teachers partly agreed. Looking at the overall distribution of teachers' cognitions regarding this aspect shows that 48% of all participating teachers thought that skills acquired in the English classroom were of no greater practical use than abilities acquired in other subjects. 35% partly agreed with statement SW04 while only half as many believed it to be true. The distribution of history teachers' views resembled that of all participants.



**Figure 25:** In comparison with other subjects, English offers more applicable skills to students. (SW04)

Summarising my results and comparing them to Borg’s findings, the outcomes seem to contradict each other at first. However, since different cognitions imply varying experiences, reasons, emotions and, in this case teacher identities, neither my nor Borg’s results can be regarded as correct or incorrect, but have to be understood and appreciated concerning their specific contexts. Further research aiming at the individual underlying explanations of my study’s participants would further the understanding of teachers’ cognitions.

### **6.2.7 National curricula obligate English teachers to incorporate contents on the culture of English speaking countries in their teaching. The notion of a ‘target culture’ does not exist in other subjects in the same way. (SW07)**

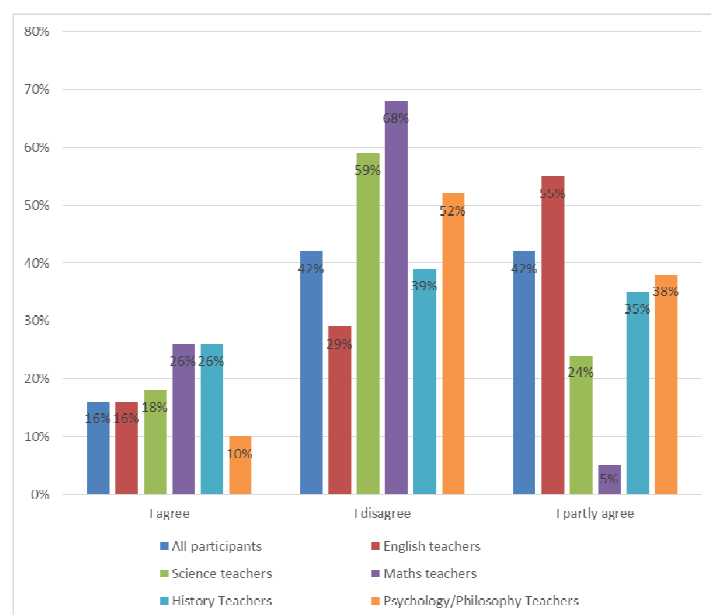
For the next and final item in this chapter, Borg’s (cf. 2006b: 19) distinction between foreign language and EFL teaching seems particularly unclear. While the core of his statement targets language teaching in general, the examples he uses refer to EFL teaching:

“Language teachers must teach the target culture – i.e. British or American culture. This notion of a ‘target culture’ does not have parallels in other subjects.” (Borg 2006b: 19).

With my specific research interest in English as a foreign language, I reformulated this statement in the following way: “National curricula obligate English teachers to incorporate content on the culture of English speaking countries in their teaching. The notion of a ‘target culture’ does not exist in other subjects in the same way” (SW07). The subject specialist group of Borg’s survey provided him with the following results: The science, history and chemistry experts claimed that their subjects did incorporate the issue of a target culture,

while the maths teacher trainer could or would not decide. Borg (2006b: 19) states that “[b]oth the science and chemistry specialists, for example, wrote about science education as induction into a culture and science as a culture”. Austrian teachers’ cognitions concerning this issue were also controversial and thought-provoking.

The majority of maths, science and psychology/philosophy teachers disagreed with the statement, as can be seen in figure 26. However, 38% of all psychology/philosophy teachers (8 out of 28) agreed at least partly. So did the majority (55%) of the participating English teachers. 21 out of all 130 participants believed that no other subject included education on



foreign cultures besides English, topped by 26% of maths and history teachers. Interestingly, 54 of the whole group of respondents chose to partly agree with the statement and 55 people disagreed. 42% of all participants either partly agreed or disagreed with the statement. Only 39% of all History teachers (9 of 23) disagreed with the statement in SW07 and 35% (8 of 23) partly agreed with it.

**Figure 26:** National curricula oblige English teachers to incorporate contents on the culture of English speaking countries in their teaching. The notion of a ‘target culture’ does not exist in other subjects in the same way. (SW07)

It can be seen that teaching about a target culture was not believed to be specifically characteristic of foreign language or EFL teaching by Borg’s subject specialists. Such a clear conclusion cannot be drawn from the data of my survey, although I think it can be argued that the respondents of my survey showed a general tendency to either partly agree or disagree that the concept of a target culture does not exist in subjects other than English. I had anticipated rather significant results regarding the group of History teachers and I was surprised that the results for this group were not clearer. My expectations were rooted in the fact that the Austrian curriculum requires History teachers to teach, for example, on the early advanced cultures and introduce students to different cultures of the Middle Ages (cf. AHS Lehrplan Geschichte und Sozialkunde/Politische Bildung“: 2). Additionally, I did not expect the

majority of the group of participating psychology/philosophy teachers to disagree with the statement. Finally, as with the majority of all survey items, the results for SW07 prove that the study of teachers' cognitions would benefit from qualitative in-depth analyses of teachers' underlying experiences, emotions and reasons.

### **6.3 Summary of findings and the connection to teacher training**

Employing a more nuanced perspective, the present study builds on Borg's findings and also partly compares and contrasts selected features. The results of Borg's study (cf. 2006b: 21) suggested that languages are more dynamic than other subjects. The outcomes of my survey regarding this feature were not as straightforward, with almost an equal number of participants either agreeing, disagreeing, or partly agreeing with the statement. Almost half the group of English teachers, however, believed that their subject was indeed more dynamic. It was also interesting regarding this item that a significant number of those who disagreed were Maths teachers. The reason for this might be found within the formulation of the statement, but it could also be rooted in subject-specific experiences that influenced the group's cognitions regarding this item.

Although a significant number of English teachers taking part in my survey stated that they believed their own subject to be more dynamic, they did not think that this fact made it harder for them to stay up-to-date. This means that the outcome for the participants' cognition on this item of my study suggests that keeping themselves informed is not different for English teachers in comparison to teachers of other subjects. Linking these findings to research on teacher training, it can be argued that language teachers face specific challenges because of the dynamic nature of their subject, as found by Borg (cf. 2006b: 21), but that English teachers do not experience a distinct situation because of their subject. In other words, this means that teacher training programmes aiming at supporting language teachers in their task of staying up-to-date do not have to be subject specific. The final statement connecting the claim that English is more dynamic than other subjects to the theory that this specific subject also has more practical relevance in real life did not offer clear results. A substantial number of participants partly agreed with it but the numbers of teachers agreeing and disagreeing were rather similar. In order to be able to use teachers' cognitions concerning this issue for training programmes, more detailed further research would be necessary. I would argue that teachers' performance could benefit from their being conscious about whether they think their subject has a high practical relevance outside of educational institutions. This item shows that

pursuing this particular research focus would be meaningful and could offer useful insights into teachers' knowledge, attitudes and beliefs.

Specifying Borg's (cf. 2006b: 13) item concerning the increased focus on pronunciation in language teaching towards a distinct focus on teaching English, I established interesting results. More than half of all respondents believed that it was more important to produce correct pronunciation for English teachers than for teachers of other subjects. These results could be used to suggest that it is particularly important to train pre-service English teachers in establishing solid pronunciation skills and to support experienced teachers in maintaining them.

Whereas Borg's (cf. 2006b: 24), series of studies presented showed that methods used for teaching (foreign) languages are believed to promote student participation, the teachers taking part in my survey did not think that EFL teaching methodology motivated learners to participate more than other subjects' methods. In connection to learning to teach, these outcomes could be used in order to argue that productive teaching methods can be introduced to students as well as experienced teachers of any foreign language if adapted accordingly.

The group of Hungarian students taking part in Borg's (cf. 2006b: 22) survey stated that language teachers had closer and more personal relationships with their learners. I wondered whether compared to other languages and other subjects, English teachers' relationships to their students were distinct. The results suggest that the clear majority of respondents taking part in my survey did not believe that English teachers are more associated or closely connected to their students. These outcomes suggest that teacher training programmes for prospective or in-service EFL teachers can draw on findings from throughout the discipline of research on teaching foreign languages in terms of establishing meaningful and supportive relationships with learners, since English is not perceived to be different from other foreign languages with regard to this matter. Nevertheless, compared to the overall results, a slightly higher number of English teachers believed that their relationships with their learners were in fact closer and more personal. I think that raising awareness of their own cognitions and finding the underlying reasons for their thoughts and beliefs and additionally learning about other teachers' contrasting thoughts would further the process of reflection of English teachers. This process could improve EFL teachers' understanding and expectations regarding their relationships with their learners and help them to develop a more realistic idea and concept.



While Borg's (cf. 2006b: 23) participants found that characteristics like creativity, flexibility and enthusiasm were more important for language teachers, the majority of all responding teachers in my survey did not believe this statement to be true. I have already stated that my findings add to the scientific picture regarding this aspect and do not necessarily falsify Borg's findings. Nevertheless, it has to be said that since my study involved a great variety of teachers of many different subjects, these recorded attitudes might offer a broader perspective than Borg's outcome. The majority of his respondents were either prospective or in-service foreign language teachers (cf. Borg 2006b:10-12), which I believe resulted in a rather one-sided perspective on cognitions regarding the specific characteristics of language teachers. Findings concerning the specific qualities of foreign language teachers could be used for informing the earlier mentioned acceptance tests for candidates who wish to enter the university's teacher training programme leading to secondary teacher accreditation (cf. <http://aufnahmeverfahren.univie.ac.at/>, 12.2.2014).

The outcomes for the rather direct comparison of Borg's findings for cognitions of his group of subject specialists to the thoughts of teachers of the same or similar subjects in my study offered interesting results. Borg's (cf. 2006b: 17) group of participants believed that errors produced by learners were more acceptable in language teaching than compared to their own subjects. In contrast, teachers participating in my survey tended to either disagree with the statement, or could only partly agree with it. Insights like these could be used in teacher education to raise awareness about foreign language teachers' cognitions regarding this issue, which in turn might improve their ways of dealing with their learners' errors.

Since Borg's (cf. 2006b: 17) subject specialists did not regard the constantly developing number of competing methodologies as specifically characteristic of teaching foreign languages, I expected that shifting the focus towards English in my statement would produce similar outcomes. Interestingly, many participants stated however that they partly agreed that English teachers were equipped with a greater range of methods. This outcome could be considered to show that many teachers perceive a lack of variety concerning their subject's methodology. In order to improve teacher training programmes in non-language subjects, appropriately adapted language-teaching methods could be introduced.

While the subject specialists could not detect a similar aspect within their own subjects (cf. Borg 2006b: 17), the participants of my study mostly either disagreed or partly agreed that native speakers, even without professional teacher training, compared more favourably to their non-native colleagues in teaching languages. Learning about other teachers' cognitions

regarding this issue might encourage non-native teacher trainees and practicing teachers to value their own language skills and, in a broader sense, appreciate their teacher training.

Whereas it seems reasonable that foreign language teaching unites the subject and the medium for teaching, as suggested by Borg's findings (cf. 2006b: 17), I was surprised that a significant number of participants partly believed this aspect to specifically characterise teaching EFL. It would be interesting to compare the underlying reasons for these cognitions with those of the groups of science and maths teachers, since the clear majority of them disagreed with the item.

Borg (cf. 2006b: 18) found that being equipped with procedural and declarative knowledge was also believed to be vital for teaching subjects like science, history or chemistry. The present study, however, demonstrates that the participating teachers agreed that language teaching in particular depends on knowledge of how to speak and write a language and knowledge of the language itself, which contrasts with Borg's results.

Borg's study suggested that the skills taught in foreign language classes are more practically applicable and that this characteristic could not be found in subjects like science, history or chemistry (cf. Borg 2006b: 19). Again, my study's analysis somewhat contrasts with Borg's results, with almost half of all participating teachers stating that they disagree with the statement. Nevertheless, a significant group of respondents partly agreed. Educational courses for pre-service and in-service teachers could use these findings in order to motivate participants to reflect upon their own and other teachers' cognitions regarding the practical applicability of skills. I believe this would help teachers to build a realistic mental concept of their subject and counteract impossible expectations.

Finally, the aspect of being obligated to teach about the target culture was only partly found to be a distinct characteristic of teaching a foreign language by Borg's (cf. 2006b: 19) subject specialists. The majority of this group's participants stated that they believed their own subject to incorporate this feature to at least some extent. Focussing on English as a foreign language, the statement of my survey produced similar responses. Although it should be stressed that a substantial number of teachers did not regard the notion of a target culture to be specifically characteristic of teaching English as a foreign language, an equally high number of respondents stated that they partly agreed with the item. Moreover, the majority of English teachers only partly agreed with this statement. Raising awareness of the fact that teachers of all kinds of subjects do not seem to believe that teaching about foreign cultures is exclusively limited to foreign language classes might offer an interesting opportunity for interdisciplinary

cooperation. Realising that other subjects also include this aspect might motivate language teachers to share their own experiences and teaching methods with teachers of other subjects and thus also benefit. It might be useful to broaden language teachers' horizons by incorporating this issue in teacher training programmes.

## **7. CONCLUSION**

### **7.1 Literature review**

The initial primary research interest of the study of teacher cognition focussed on information-processing and decision-making of teachers with the goal of enhancing teachers' performances in a prescriptive way (cf. Borg 2006a: 5). As the study of cognitive psychology pointed to the importance of thought processes on people's behaviour, the role of teachers' mental lives in connection to their decisions also became more and more relevant (cf. Borg 2006a: 6). Thereby, the scientific concept of teachers themselves developed towards appreciating them as important active and influencing authorities in the classroom (cf. Borg 2006a: 7). Another essential insight was provided by Green (cf. 1971), who found that some beliefs are based on others.

In the early 1980s researchers realised that findings concerning the investigation of teachers' cognitions in relation to their actions in the classroom would be beneficial for teachers training programmes (cf. Shavelson & Stern 1981: 8). The strong connection between the study of teacher cognition and teacher education remains to this day. Nevertheless, striving for normative guidelines that could be used for teacher education (cf. Borg 2006a: 9) is now outdated. Moreover, during the 1980s a more elaborate and detailed model of how teachers processed thoughts, new information and finally made decisions regarding classroom situations was developed. Researchers not only included aspects regarding students, but also acknowledged issues concerning the teaching and learning environment, the teacher's state of mind, the suitability of the specific teaching strategy (cf. Clark & Peterson 1984: 75) and the aspect of teachers' knowledge of a given subject (cf. Shavelson & Stern 1981: 59). The initial focus on how teachers made decisions and processed information was increasingly challenged by the realisation that teachers' beliefs and their different ways of understanding had been neglected by the academic discussion of teacher cognition (cf. Munby 1982: 202). Adding these rather individual and personal concepts represents an essential step towards the current definition of the study of teacher cognition (cf. Borg 2006a: 13). Furthermore, the understanding of a reflective and thoughtful teacher and the appreciation of teachers' cognitive processes and decisions within authentic teaching and

learning environments became more and more important for researchers (cf. Clark 1986: 11). Another important development in research on teacher cognition was the inclusion of novice teachers in longitudinal studies (cf. Clark 1986: 268). It showed that beliefs may be irrevocable, even if evidence clearly falsifies the beliefs (cf. Borg 2006a: 13).

Additionally, the study of teachers' knowledge was furthered during the 1980s by researchers such as Lee Shulman (1987). He established the understanding of "teachers' knowledge base" (1987: 8), which comprises aspects such as content, pedagogical content knowledge, general pedagogical knowledge, knowledge about the curriculum, the learners and their characteristics and the educational contexts, and knowledge of educational ends, purposes and values and their backgrounds. The notion of teachers' knowledge remains at the centre of scientific interest of research on teacher cognition to this day (cf. Borg 2006a: 20). Also, teachers themselves continued to be recognised as central to the processes of teaching and learning and a more holistic approach that included a person's individual history was introduced (cf. Clandinin & Connelly 1987: 499). This developmental step also furthered the study of teacher education and the close connection of these two disciplines was reinforced once more (cf. Clark & Connelly in Fenstermacher 1990: 12).

Donald Schön's (cf. 1983: 68) findings in connection to how teachers reflected on the eclectic processes and situations in classrooms became a fixed part of research on teacher cognition (cf. Fenstermacher 1994) and thus represented a challenge to the prescriptive tradition of establishing prefabricated knowledge (cf. Mitchell & Marland cf. 1989: 117).

Since teacher cognition did not become a popular field of study until the 1980s, from the 1990s onwards, no comprehensive reviews were published and research continued to focus on specific aspects of teacher cognition (cf. Borg 2006a: 23). Nevertheless, the initial aim of developing prescriptions and instructions for effective teaching behaviour had not yet made way for a more supportive approach towards improving teacher education by means of studying teachers' thoughts, knowledge and beliefs (cf. Borg 2006: 24). Including specific contexts and the circumstances of teaching and learning in studying teachers' mental lives paved the way for an increased diversity of research foci (cf. Pajares 1992: 316). Also, generally defining beliefs as people's personal decision whether a proposition is true or false on the basis of a common convention regarding the actions, intentions and statements of human beings was a vital development in studying teachers' cognitions (cf. Pajares 1992: 316). Refining Green's concept of a closely linked system of beliefs, Thompson (cf. 1992: 140) established a dialectical system of beliefs. At the same time, various kinds of knowledge,

such as practical knowledge, or formal knowledge, were included in the definition of what comprises teacher cognition (cf. Fenstermacher 1994: 31). Moreover, it was discovered that experiences made within personal as well as educational contexts influence teachers' thought processes and their beliefs (cf. Borg 2006a: 30). Another important scientific development was made when shared aspects of teachers' cognitive processes were investigated for the first time (cf. Borg 2006a: 34).

The earlytwenty-first century has seen growing interest in the connection between teachers' cognitions and their practical work (cf. Basturkmen 2012). One additional aspect that was found to play a role in influencing teachers' cognitions is the individual's culture (cf. Van Canh in Barnard & Burns 2012: 98). Furthermore, the connection between teachers' and their students' cognitions has been demonstrated (cf. Polat 2009). Another example of important recent developments in the understanding of teacher cognition would be Sanchez's (cf. 2013: 55) work suggesting that consciously reflecting on how cognitions influence teaching methods provides teachers the opportunity to better understand their own conceptions of language teaching.

## **7.2 Teacher cognition – a definition**

Summarising the findings collected in my literature review, teacher cognition is defined as teachers' thoughts, beliefs, knowledge, emotions, along with their attitudes, assumptions, conceptions and perspectives about teaching and learning, other teachers, their own learners and learners in general, subject matter, methodology and materials, curricula, tasks and activities, their identities and their selves. These aspects depend on their experiences made in personal and educational contexts, as well as the social, economic and cultural context teachers live and work in (cf. figure 5). Understanding the manifold concepts of teachers' cognitions and realising their importance regarding their influence on teachers' practical work, their behaviour and their decision-making processes can significantly further research on teacher education and thus enhance educational systems in general.

## **7.3 Knowing what teachers know**

This thesis also emphasised the close connection between research on teacher cognition and the study on learning to teach. Findings regarding what teachers think, know, believe and feel can and should inform teacher training programmes and are thus useful for the education system as a whole. Fenstermacher (1994: 53) explains “that the critical objective of teacher knowledge research is not for researchers to know what teachers know, but for teachers to know what they know.” In other words, for researchers to understand teachers' cognitions is

only the first step in achieving meaningful developments within the education system as a whole. Teachers themselves need to be confronted with their cognitions about all aspects regarding education and made aware of their thoughts' significance in relation to their actions. Thereby teachers can be enabled to actively reflect on their thoughts and attitudes and thus shape their own decisions more consciously. Pre-service, as well as in-service teacher training can be enhanced by learning about participants' prior experiences and their established beliefs, particularly if the trainees monitor the development of their attitudes throughout their training. Further, by analysing beliefs regarding individual and shared aspects, teacher training programmes can support participants more effectively.

#### **7.4 Criticism**

Analysing Borg's methods of conducting his series of studies on teachers' cognitions regarding "The distinctive characteristics of foreign language teachers" (2006b), I detected a certain inaccuracy. Borg failed to explicitly distinguish between the instances where he examined issues connected to teaching foreign languages in general and where he analysed EFL teaching in particular. Additionally, since most of the survey's participants were in some way involved in teaching English as a foreign language, Borg's findings on their cognitions should be viewed with this specific context in mind. This somewhat one-sided perspective on what distinguishes EFL and foreign language teaching from teaching other subjects, together with the absence of a clear research focus on either of these two areas represent the foundations of my research interest.

#### **7.5 Findings**

Comparing and contrasting the findings of my study to Borg's outcomes (cf. 2006b) produced a series of interesting findings that could be used for research and developments regarding teacher education programmes. In further consequence, by better understanding what teachers know, think, believe and feel and by raising their awareness of their own and their colleagues' cognitions, pre- and in-service teacher education programmes can more efficiently prepare students for the reality of their chosen school subject and support experienced teachers in their practical work. This would ultimately also improve educational systems in general. Moreover, as mentioned above, my survey included teachers of various different subjects, which consequently offers a more diverse sample of teachers' cognitions on the specific aspects of English teachers than Borg's survey. Most of his study's participants were either prospective or practicing teachers. Several of Borg's findings were contrasted by the results of my study, which emphasises the importance to view teachers' cognitions within their specific context.

This claim by Pajares (cf. 1992: 316) for example, has been presented earlier in this thesis. Furthermore, teacher groups of specific subjects presented significant or contrasting results in comparison with the overall outcome regarding an issue. These findings led me to developing the theory that teachers' specific subject might play a significant role in shaping their knowledge, thoughts, beliefs and emotions. Further research on the underlying reasons and motivations of the participants' reactions to the statements would offer useful explanations for their cognitions. Moreover, some results of my survey suggested that productive teaching methods could be used throughout the various school subjects if adapted accordingly and do not necessarily have to be seen as limited to one specific subject. This could increase interdisciplinary collaboration of research on methodology and the cooperation between teachers. Thus, learners of many different subjects and the educational system in general would benefit. What is more, the contrast between Borg's participants' cognitions and the teachers' thoughts and beliefs of my study shows that being introduced to other teachers' attitudes regarding specific aspects about teaching and learning might encourage a more realistic mental concept and idea of certain subjects' characteristics. This might decrease unrealistic expectations about what teachers and students have to achieve.

In general, the analysis of my findings and the comparison to the results of Borg's study (2006b) suggested that teachers of various different subjects consider teaching English not to be specifically different from teaching other foreign languages. Interestingly, the participating teachers of my study also disagreed with most of Borg's established aspects differentiating foreign language teaching from teaching other subjects in general. The findings also suggest that it is important to view teachers' cognitions with regard to the specific context and keep in mind, that cognitions regarding teaching and learning any subject are highly complex individual concepts shaped and formed by personal experiences in and outside of educational contexts (cf. figure 5). Appreciating and understanding teachers' thoughts, beliefs, knowledge and emotions about characteristics of certain subjects, as well as teaching and learning in general, and raising teachers' awareness for their own cognitions can help develop teacher training programmes and thus teachers' practical work. Ultimately, such improvements would also be beneficial for educational systems.

## 8. References

- Abell**, Sandra K. 2010. "Research in Science Teacher Knowledge". In Abell, Sandra K.; Lederman, Norman G. (eds.). *The Handbook of Research on Science Education*. First published in 2007 by Lawrence Erlbaum Associates, New Jersey. Reprinted in New York: Routledge, 1067-1104.
- Barnard**, Roger; **Burns**, Anne. (eds.). 2012. *Researching language teacher cognition and practice: international case studies*. Bristol: Multilingual Matters.
- Basturkmen**, Helen. 2012. "Review of research into the correspondence between language teachers' stated beliefs and practices". *System* 40, 282-295.
- Borg**, Simon. 2003. "Teacher cognition in language teaching: a review of research on what language teachers think, know, believe and do". *Language teaching* 39, 81-109.
- Borg**, Simon. 2006a. *Teacher cognition and language education: research and practice*. London: Continuum.
- Borg**, Simon. 2006b. "The distinctive characteristics of foreign language teachers". *Language Teaching Research* 10, 3-31.
- Borg**, Simon. 2009. "Language Teacher Cognition". In Burns, Anne; Richards, Jack C. (eds.). *The Cambridge Guide to Second Language Teacher Education*. Cambridge University Press: 163-171.
- Borg**, Simon; Al-Busaidi, Saleh. 2012. "Teachers' beliefs and practices regarding learner autonomy", *ELT Journal*, (advanced access). doi:10.1093/elt/ccr065.
- Brosh**, Hezi. 1996. "Perceived characteristics of the effective language teacher". *Foreign Language Annals* 29, 125-136.
- Bundeskanzleramt für Musik, Kunst und Kultur**. [www.bmukk.gv.at](http://www.bmukk.gv.at). „AHS Lehrplan Geschichte und Sozialkunde/Politische Bildung“. *Lehrpläne*.  
[http://www.bmukk.gv.at/medienpool/7445/AHS-Lehrplan\\_Geschichte\\_Sozia.pdf](http://www.bmukk.gv.at/medienpool/7445/AHS-Lehrplan_Geschichte_Sozia.pdf)  
(22.04.2014).
- Burns**, Anne; Richards, Jack C. (eds.). 2009. *The Cambridge Guide to Second Language Teacher Education*. Cambridge University Press.
- Calderhead**, James (ed.). 1987. *Teachers' Thinking*. London: Cassell.



- Calderhead, James.** 1991. "Representations of Teachers' Knowledge". In Goodyear, Peter (ed.). *Teaching Knowledge and Intelligent Tutoring*. Gloucester: Intellect Books, 269-278.
- Calderhead, James.** 1996. "Teachers: Beliefs and knowledge". In Berliner, David C.; Calfee, Robert C. (eds.). *Handbook of Educational Psychology* (709-725). New York: Macmillan.
- Calderhead, James.** 1996. *Teachers: Beliefs and Knowledge*. In Berliner, David; Calfee, Robert C. (eds.), *Handbook of educational psychology*. New York: Macmillan, 709-725.
- Cantu, Antonio D.; Warren, Wilson J.** 2003. *Teaching History in the Digital Classroom*. New York: M.E. Sharpe.
- Carter, Kathy.** 1990. "Teachers' Knowledge and learning to teach". In Houston, Robert W. (ed.). *Handbook of research on teacher education*. New York: Macmillan, 291-310.
- Chiang, Min-Hsun.** 2008. "Effects of fieldwork experience on empowering prospective foreign language teachers". *Teaching and Teacher Education* 24, 1270-1287.
- Clandinin, Jean D.** 1992. "Narrative and story in teacher education". In Russell, Tom; Munby, Hugh. (eds.). *Teachers and teaching: From classroom to reflection*. London: Falmer Press, 124-137.
- Clandinin, Jean. D.; Connelly, Michael F.** 1987. "Teachers' personal knowledge: What counts as personal in studies of the personal". *Journal of Curriculum Studies* 19, 487-500.
- Clark, Christopher M.** 2003 "Ten Years of Conceptual Developments in Research on Teacher Thinking. In Denicolo, Pam M., Kompf, Michael. (eds.) *Teacher Thinking Twenty Years on: Revisiting persisting problems and advances in education*. Lisse, The Netherlands: Swets & Zeitlinger B.V., 211-224.
- Clark, Christopher M.; Peterson, Penelope L.** 1986. "Teachers' thought processes". In Wittrock, Merlin. C. (ed.), *Handbook of Research on Teaching*, Third Edition. New York: Mcmillan, 255-295.
- Clark, Christopher M.; Yinger, Robert.** 1977. "Research on teacher thinking." *Curriculum Inquiry* 7, 279-304.
- Clark, Christopher M.; Yinger, Robert.** 1979. "Teachers' Thinking." In Peterson, Penelope L.; Walberg, Herbert J. (eds.). *Research on Teaching and Learning: concepts, Findings and Implications*. Berkeley: McCutchen, 231-63.

- Clark**, Christopher. M. 1986. "Ten years of conceptual development in research on teacher thinking. In Ben-Peretz, Miriam; Bromme, Rainer; Halkes, Rob. (eds.). *Advances of Research on Teacher Thinking*. Lisse: Swets and Zeitlinger, 7-20.
- Connelly**, Michael F.; Clandinin, Jean D. 1990. "Stories of experience and narrative inquiry." *Educational Researcher* 19, 2-14.
- Diab**, Rula L. (2005). "Teachers' and students' beliefs about responding to ESL writing: A case study". *Tesl Canada Journal* 23, 28-43.
- Dörnyei**, Zoltán. 2007. *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford: Oxford University Press.
- Elbaz**, Freema. 1981. "The Teacher's "practical knowledge": Report of a case study". *Curriculum* 11, 43-71.
- Fenstermacher**, Gary D. 1994. "The knower and the known: The nature of knowledge in research on teaching". *Review of Research in Education* 20, 3-56.
- Freeman**, Donald. 2002: The hidden side of the work: teacher knowledge and learning to teach. *Language Teaching* 35: 1-13.
- Gao**, Xuesong; Ma, Qing. (2011). Vocabulary learning and teaching beliefs of pre-service and in-service teachers in Hong Kong and mainland China. *Language Awareness* 20, 327-342.
- Gatbonton**, Elizabeth. 2008. "Looking beyond teachers' classroom behaviour: Novice and experienced ESL teachers' pedagogical knowledge". *Language Teaching Research* 12, 161-182.
- Girard**, Denis. 1977. "Motivation: the responsibility of the teacher". *ELT Journal* 31. 97-102.
- Green**, Thomas F. 1971. *The Activities of Teaching*. New York: McGraw-Hill.
- Griffiths**, Carol. 2007. "Language learning strategies: Students' and teachers' perceptions". *ELT Journal* 61, 91-99.
- Grossman**, Pamela L. 1994. "Teacher knowledge". In Husen, Torsten; Postlethwaite, Neville T. (eds.). *The International Encyclopedia of Education* 2, 6117-6112.

- Grossman**, Pamela L.; Shulman, Lee. 1994. "Knowing, Believing, and the Teaching of English". In Shanahan, Timothy. (ed.). *Teachers Thinking, Teachers Knowing. Reflection on Literacy and Language Education*. Urbana, Illinois: National Council of Teachers of English, 3-22.
- Halkes**, Rob; Olson, John K. (eds.). 1984. *Teacher Thinking: A New Perspective on Persisting Problems in Thinking*. Lisse, Holland: Swets & Zeitlinger.
- Hammadou**, JoAnn.; Bernhardt, Elizabeth B. 1987. "On being and becoming a foreign language teacher". *Theory into Practice* 26, 301-306.
- Harper**, Helen; **Rennie**, Jennifer. 2009. "I Had to Go out and Get Myself a Book on Grammar': A Study of Pre-Service Teachers' Knowledge about Language". *Australian Journal Of Language And Literacy* 32, 22-37.
- Hawkey**, Roger. 2006. Teacher and learner perceptions of language learning activity *ELT Journal* 60, 242-252.
- Hotolean**, Daniela. "International Study Association on Teachers and Teaching". *Institutions*. Moret, Jacque (publ. dir.). Paragraph 2. <http://www.nesse.fr/nesse/activities/research-mapping/teachers-and-teaching/institutions/international-study-association-on-teachers-and-teaching> (23.02.2014).
- Leshem**, S. (2008). Novices and veterans journeying into real-world teaching: How a veteran learns from novices. *Teaching and Teacher Education*, 24(1), 204-215.
- Liaw**, E.-C. (2009). Teacher efficacy of pre-service teachers in Taiwan: The influence of classroom teaching and group discussions. *Teaching and Teacher Education*, 25(1), 176-180.
- Munby**, Hugh; 1982. "The Place of Teachers' Beliefs in Research on Teacher Thinking and Decision Making and an Alternative Methodology". *Instructional Science* 11, 201-225.
- Munby**, Hugh; Russel, Tom.; Martin, Aandrea K. 2001. "Theachers' knowledge and how it develops". In Richardson, Virginia. (ed.) *Handbook of Research on Teaching* 4, 877-904.
- NCATE**, the National Council for Accreditation of Teacher Education. 1987, 37
- Nishino**, Takako. 2008. "Japanese secondary school teachers' beliefs and practices regarding communicative language teaching: An exploratory survey". *JALT Journal* 30, 27-50.

- Nishino**, Takako. 2011. "Japanese high school teachers' beliefs and practices regarding communicative language teaching: An exploratory survey". *JALT Journal* 33, 131-155.
- Nishino**, Takako. 2012. "Modelling teacher beliefs and practices in context: A multimethods approach". *Modern Language Journal* 96, 380-399.
- Pajares**, Frank M. 1992. "Teachers' beliefs and educational research: Cleaning up a messy construct". *Review of Educational Research* 62, 307-332.
- Phipps**, Simon. 2006. "The relationship between teacher education, teacher cognition and classroom practice in language teaching". Unpublished PhD thesis. University of Leeds: Leeds, UK.
- Phipps**, Simon. 2010. *Language Teacher Education, Beliefs and Classroom Practices*. Saarbrücken: Lambert Academic Publishing.
- Phipps**, Simon; Borg, Simon. (2009a). "Exploring tensions between teachers' grammar teaching beliefs and practices". *System* 37, 380-390.
- Phipps**, Simon; Borg, Simon. 2007. "Exploring the relationship between teachers' beliefs and their classroom practice". *The Teacher Trainer* 21, 17-19.
- Polat**, Nihat. 2009. "Matches in beliefs between teachers and students, and success in 12 attainment: The Georgian example". *Foreign Language Annals* 42, 229-249.
- Polat**, Nihat. 2010. "A comparative analysis of pre-and in-service teacher beliefs about readiness and self-competency: Revisiting teacher education for ELLS". *System* 38, 228-244.
- Polat**, Nihat; Mahalingappa, Laura. 2013. "Pre- and in-service teachers' beliefs about ELLS in content area classes: A case for inclusion, responsibility, and instructional support". *Teaching Education* 24, 58-83.
- Prodromou**, Luke. 1991. "The good language teacher". *English Teaching Forum* 29, 2-7.
- Richards**, Jack C. 2008. "Second language teacher education today". *RELC Journal* 39, 158-177.
- Richardson**, Virginia. 1996. "The role of attitudes and beliefs in learning to teach". In Sikula, J.; Butter, T. J.; and Guyton, E. (eds.). 2<sup>nd</sup> edition. *The Handbook of Research on Teacher Education*. New York: Macmillan, 102-119.

- Sanchez, Hugo S.** 2013. "A cognitive perspective on pre-service and in-service language teaching". *Babylonia* 21, 51-56
- Schön, Donald.** 1983. *The Reflective Practitioner: How Professionals Think in Action*. United States of America: Basic Books.
- Shaker, Paul.** 1989. *Knowledge Base for the beginning Teacher*. Oxford: Pergamon Press.
- Shavelson, Richard J.; Stern, Paula.** 1981. "Research on Teachers' Pedagogical Thoughts Judgments, Decisions and Behavior". *Review of Educational Research* 51, 455-498. (Increased Access).
- Shulman, Lee S.; Shulman, Judith. H.** 2004. "How and what teachers learn: A shifting perspective". In *Journal of Curriculum Studies* 36, 257-271.
- Shulman, Lee.** "Biography". *A little history about Dr. Lee Shulman*.  
<http://www.leeshulman.net/biography/> (16.02.2014).
- Shulman, Lee.** 1987. "Knowledge and Teaching: Foundations of the New Reform". *Harward Educational Review* 57, 1-22.
- Shulman, Lee. S.; Elstein, Arthur. S.** 1975. "Studies of problem solving, judgment and decision-making: Implications for educational research." In Kerlinger Fred N. (ed.), *Review of research in education III*.
- Tavakoli, Parvaneh.** 2009. "Investigating task difficulty: Learners' and teachers' perceptions". *International Journal of Applied Linguistics* 19, 1-25.
- Thompson, Alba G.** 1992. "Teachers' beliefs and conceptions: A synthesis of the research". In Grouws, Douglas A. (ed.). *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan: 127-146.
- Universität Wien.** „Aufnahmen-/Eignungsverfahren im Studienjahr 2014/15“. DLE Studienservice und Lehrwesen, Universitätsring 1, A-1010 Wien.  
<http://aufnahmeverfahren.univie.ac.at/> (12.02.2014).
- Van Canh, Le.** 2011. *Form-Focused Instruction: A Case Study of Vietnamese Teachers*. Saarbrücken, Germany: Lambert Academic Publishing.
- Woodgate-Jones, Alexandra.** 2008. "Training confident primary modern foreign language teachers in England: An investigation into preservice teachers' perceptions of their subject knowledge". *Teaching and Teacher Education* 24, 1-13.

- Wu, Jessica.** 2008. "Views of Taiwanese students and teachers on English language testing". *Research Notes*, 34, 6-9.
- Yoshida, Reiko.** 2010. "How do teachers and learners perceive corrective feedback in the Japanese language classroom?". *Modern Language Journal* 94, 293-314.
- You, Zhuran.; Jia, Fenran.** 2008. "Do they learn differently? An investigation of the pre-service teachers from us and China". *Teaching and Teacher Education*, 24(4), 836-845.
- Zacharias, Nugrahenny. T.** 2007. "Teacher and student attitudes toward teacher feedback". *Relc Journal* 38, 38-52.

## **APPENDIX**

### **A Abstract**

This diploma thesis presents my research on the history and development of the study of teacher cognition and understanding its meaning for the improvement of teacher training and consequently the overall educational system. Furthermore, the second part of the paper includes studying the background, contents and results of Borg's 2006 survey on *The distinctive characteristics of foreign language teachers* and analysing the findings from my own study in order to finally compare and contrast both surveys' outcomes. My work resulted in a great range of academic insights and realisations. Confronting both studies' outcomes resulted in a number of interesting findings. These could be used to inform teacher training programmes and thus support prospective and experienced teachers in their professional development. Learning about their own as well as other teachers' cognitions regarding the characteristics of a certain subject could help to establish more realistic expectations on themselves and improve their concept of their own subject. Consequently, this would also be beneficial for the overall educational system.

### **B Zusammenfassung in deutscher Sprache**

Die vorliegende Arbeit präsentiert einen zusammenfassenden Einblick in die historische Entwicklung des Konzepts und der Forschung über *teacher cognition*. Außerdem wird dargestellt, wie Forschungsergebnisse aus diesem Bereich zur Innovation von Ausbildungs- und Fortbildungsprogrammen für LehrerInnen und in weiterer Folge zur Verbesserung des Bildungssystems im Allgemeinen beitragen können. Des Weiteren behandelt der zweite Teil der Diplomarbeit die Analyse des Forschungshintergrunds, der Methoden und der Ergebnisse der Studie von Borg (2006b), mit der er die spezifischen Charakteristika von Fremdsprachenunterricht festzustellen suchte. Auf der Basis von Borgs Ergebnissen wurde eine quantitative Studie erstellt, welche die Gedanken, Einstellungen und Meinungen von LehrerInnen verschiedener Fächer bezüglich besonderer Eigenschaften des Unterrichtsgegenstands Englisch als Fremdsprache, sowie der Lehrkräfte dieses Fachs, untersucht. Die daraus gewonnen Erkenntnisse wurden mit Borgs Resultaten verglichen und ihnen gegenübergestellt und brachten zahlreiche interessante Schlussfolgerungen zu Tage. Diese wiederum könnten genutzt werden, um zukünftige, sowie bereits ausübende LehrerInnen in deren professionellen Ausbildung und Entwicklung zu unterstützen. Zusätzlich wurde beschrieben, dass Lehrkräfte im Rahmen ihrer Aus- und Weiterbildung dabei unterstützt werden könnten, ihr Unterrichtsfach sowie ihre Aufgaben in einem

realistischeren Licht zu betrachten, wenn ihnen ihre eigenen Gedanken, Gefühle und Meinungen, und die Kognitionen ihrer KollegInnen bewusst vor Augen geführt würden. Lehrkräfte könnten dadurch ein sachlicheres und praxisnahes Bild ihrer Tätigkeit erlangen und sich besser auf ihre zukünftige oder bereits bestehende Arbeit vorbereiten und einstellen. Davon würde in weiterer Folge auch das gesamte Bildungssystem profitieren.



## **C Survey Statements**

This part of the thesis presents the statements used for my online survey in their original German form with an English translation directly underneath each item.

### **Eigenschaften des Unterrichtsgegenstandes/The nature of the subject**

**SW01** Unterrichtsfächer wie Mathematik oder Physik basieren auf relativ konstanten Regeln und Gegebenheiten, während sich Englisch ständig verändert und weiterentwickelt.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

While subjects like Maths or Physics are based on relatively consistent rules and circumstances, English is constantly evolving and developing.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW02** Am aktuellen Stand zu sein stellt für EnglischlehrerInnen eine schwierigere Aufgabe dar als für Lehrkräfte von anderen Unterrichtsfächern, weil Englisch ein sehr dynamischer Gegenstand ist.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Compared to teachers of other subjects, being up-to-date is more difficult for English teachers because English is very dynamic.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW03** Englisch ist dynamischer als andere Unterrichtsgegenstände, weil es eine höhere praktische Relevanz im Bezug auf das reale Leben aufweist.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

English is more dynamic than other subjects, because it has a higher practical relevance regarding real-life challenges.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Inhalte des Unterrichtsgegenstands/The content of teaching**

**SW04** Im Sprachunterricht werden mehr anwendbare Fähigkeiten an die SchülerInnen vermittelt als in anderen Unterrichtsfächern.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

In comparison with other subjects, English offers more applicable skills to students.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW05** Sprachunterricht ist in ebenso großem Maß abhängig vom Wissen, wie die Sprache zu sprechen und zu schreiben ist (prozedurales Wissen), als vom Wissen über die Sprache (deklaratives Wissen).

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Teaching a language depends in equal measure on knowledge of how to speak and write a language (procedural knowledge) and knowledge of the language itself (declarative knowledge).

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW06** Während LehrerInnen von Fächern wie zum Beispiel Geschichte, Religion oder Bewegung und Sport im Regelfall nicht so sehr auf ihre Aussprache achten müssen, stellt dieser Aspekt einen wichtigen Teil des Englischunterrichts dar.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

While teachers of subjects like History, Religion or Physical Education normally do not have to focus extensively on their pronunciation, this aspect is particularly important in the English classroom.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW07** EnglischlehrerInnen sind laut nationalen Lehrplänen dazu verpflichtet, Inhalte über die Kultur englischsprachiger Länder im Unterricht einzubauen. Das Verständnis einer „Zielkultur“ ('target culture') existiert in anderen Unterrichtsgegenständen nicht.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

National curricula obligate English teachers to incorporate contents on the culture of English-speaking countries in their teaching. The notion of a 'target culture' does not exist in other subjects in the same way.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Methodologie/Methodology**

**SW10** EnglischlehrerInnen können auf eine größere Vielfalt von Übungen wie Spiele, Lieder oder Hör- und Sprech-/Kommunikationsübungen zurückgreifen als LehrerInnen anderer Fächer.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

English teachers are equipped with a greater diversity of exercises such as games, songs, listening and speaking/communication activities than other teachers.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW14** Aktivitäten und Übungen, die im Englischunterricht zur Anwendung kommen, fördern die SchülerInnenbeteiligung in größerem Ausmaß als Methodiken anderer Fächer.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Activities and exercises used for teaching English promote student participation more extensively than the teaching methods of other school subjects.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **LehrerInnen-Schülerinnen-Beziehung/Teacher-learner relationships**

**SW17** EnglischlehrerInnen tendieren dazu, engere und persönlichere Beziehungen mit ihren SchülerInnen aufzubauen als Unterrichtende anderer Gegenstände.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

English teachers tend to have closer and more personal relationships with their students than teachers of other subjects.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

**SW18** Der Englischunterricht schafft mehr Raum für Gespräche über das Leben und die Interessen von SchülerInnen und bietet auch Lehrenden die Möglichkeit, vermehrt persönlich in den Unterricht involviert zu sein, als das im Vergleich mit anderen Fächern der Fall ist.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Compared to other subjects, the English classroom enables learners to talk about their lives and interests and also provides teachers with more opportunities to be personally involved in their teaching.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Nicht-muttersprachliche Aspekte/Non-native issues**

**SW22** Professionell ausgebildete nicht-muttersprachliche SprachlehrerInnen werden oft als weniger kompetent wahrgenommen als SprachlehrerInnen mit der Zielsprache als Muttersprache, auch, wenn diese nicht dieselben Qualifikationen haben.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Professionally trained non-native language teachers are often perceived as less able than their sometimes not professionally educated native colleagues.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Sprachliche Aspekte/ the nature of language**

**SW24** Im Englischunterricht sind Gegenstand und Unterrichtsmedium ein und dasselbe. Dieser Faktor unterscheidet Englisch von anderen Unterrichtsfächern.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

The subject and medium of teaching are one and the same within the English lesson. This aspect distinguishes English from other school subjects.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Fehlerkultur/Perception of errors**

**SW27** Im Englischunterricht wird fehlerhafte Mitarbeit von Lernenden eher geduldet als in anderen Gegenständen.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Incorrect output of language learners is more acceptable than in other subjects.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

### **Lehrerinnen Eigenschaften/Teachers' characteristics**

**SW30** Eigenschaften wie Kreativität, Flexibilität und Enthusiasmus sind für SprachlehrerInnen wichtiger als für LehrerInnen anderer Unterrichtsfächer.

- ☐ Ich stimme zu.
- ☐ Ich stimme nicht zu.
- ☐ Ich stimme teilweise zu.

Characteristics such as creativity, flexibility and enthusiasm are more important for language teachers than for teachers of other subjects.

- ☐ I agree.
- ☐ I disagree.
- ☐ I partly agree.

## D Curriculum Vitae

### Amelie - Anna Jungwirth

#### Persönliche Daten

Familienstand ledig  
Staatsangehörigkeit Österreich  
Alter 25 (12.06.1988)  
Adresse Greiseneckergasse 7-9,  
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Eltern Max Josef und Helene Anna Jungwirth



#### Ausbildung

2014	Diplomabschluss des Lehramtstudiums Englisch und Psychologie/Philosophie
SS 2013	ERASMUS Aufenthalt, University of Aberdeen, Scotland, UK
7.10.2010	1. Diplomprüfung Lehramt Englisch, Psychologie/Philosophie bestanden
seit 2008	Lehramt; Englisch, Psychologie/Philosophie UNI Wien
2007-2008	Soziologie, JKU Linz
2003-2007	BORG Linz, Honauerstraße, Populärmusikzweig
1999-2003	Wirtschaftskundliches Realgymnasium der Franziskanerinnen Wels
1994-1995	Vorschule Bad Schallerbach
1995-1999	VS Wallern

#### Sprachkenntnisse

Deutsch	(Muttersprache)
Englisch	(Ausgezeichnet, C1)
Latein	(großes Latinum)



**Besondere Kenntnisse  
und Fähigkeiten**

10 Jahre Violine an der LMS Wels

11 Jahre Klavier an der LMS Wels

13 Jahre Percussion an der LMS Grieskirchen

4 Jahre Gesangsausbildung (Populärmusik) am BORG Linz

Percussionistin und Sängerin bei der Marktmusikkapelle Wallern

1 Jahr Schulsprecherin am BORG Linz (2006)

2 Jahre Mitglied des Schulgemeinschaftsausschusses

(Schulsprecherin 2006, Stellvertreterin 2007) am BORG Linz

Führerschein Klasse B

Leitung von mehreren Percussionkursen (Erwachsenen-  
und Jugendbildung) an der LMS Altmünster