Exploring two cases of Piano Teacher Education in Finland and Germany

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Abstract

Research about music instrument teacher education is scattered and fairly recent, especially in the European context. The purpose of this study was to explore two cases of piano teacher education programs at higher music education institutions, one in Finland, and one in Germany, to gain insights into the preparation of piano teachers for their professional working life. The aim was to identify issues for consideration in curriculum development of piano teacher education to enhance the teaching and learning of piano playing, and to ultimately increase musical practice and engagement among young learners.

Nine semi-structured interviews with piano teacher educators, heads of program, other lecturers within the program, and student piano teachers in both cases were analyzed using applied thematic analysis. Three main themes with subcategories emerged: (1) the organization of the piano teacher education program, such as the structure, the content, the learning environments provided, and the development mechanisms of the program; (2) the views on the piano teacher profession, the working environment and resulting requirements, including further education during professional life; and (3) the professional skills and teacher identity development of student teachers.

While the supposed working environments and requirements of future piano teachers, the student teachers' development characteristics, and the content were found reasonably concurrent in both cases, the structure of the teacher education program, and the organization of learning environments presented notable differences. While the complete teacher qualification in the Finnish case was offered as option in the Bachelor and Master of Music program within the piano department, the German case offered a separate program for music instrument educators. Other main differences concerned the organizations of practical teaching experiences, and the linking of practical with theoretical pedagogy.

Conviction and enthusiasm for improving piano and other music instrument teacher education seemed remarkable. These improvements could include the development of a comprehensive teacher education pedagogy for music instrument teacher educators, intensified cross-linking within and of higher music education institutions in local contexts, and the expansion of professional development opportunities.

Keywords

music instrument teacher education, instrumental music, teacher education, higher education curriculum development, performer-teacher identity, further education

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1. Introduction

For participation and engagement in music activities such as playing, creating, or exploring music, which in the following is called musical practice, already young learners need to demonstrate a substantial foundation of musical and instrument specific skills and knowledge. Scores of hours of regular practice, the quality of this practice, and certain supportive characteristics of the environment such as parental involvement are all factors that have an impact on the expertise development of musicians (Hallam, 2001). Growing concerns about a disaccord between the instrumental music practice among learners in formal education and their environments accounted for the present inquiry. When young instrumental learners cannot relate their play and practice to their social context and everyday world, conflicts may arise that suffocate any ambitions to make music. Common musical experiences of today's world are most likely the consumption of perfectly sound-engineered music, available anywhere at any time, which is maybe even multimedial inflated and promoted. The easiness of enjoying music with a few clicks and swipes stands in stark contrast to the effort involved in becoming a skillful musician. Attempts of playing a musical instrument inhere to disappoint expectations that are mainly built on superficial experiences with music. Furthermore, if the learning environment lacks formal and informal support and is unaware of the learners needs within his or her social context, the development of active musicianship might not be very successful. The professionals of instrumental music teaching need to consider much more than the instrument and the student, for example, parental involvement, peer groups, and cultural-political developments. It seems that it becomes increasingly demanding for music instrument teachers to guide their students towards appreciation for and enjoyment of musical practice, towards a deeper understanding of the musical world, and towards qualified judgments in musical consumption.

Research studies around learning to play a musical instrument abound. There has been considerable research on instrumental music practice and the process of acquiring expertise (for example: Christensen, 2010; Hallam, 2001; Nielsen, 2001; Pitts & Davidson, 2000; Schatt, 2011; Stambaugh, 2011). Some recent research also focuses on the development of self-regulated learning strategies in young instrumental music beginners, which is important for becoming an independent learner (Hallam et al., 2012; McPherson & Renwick, 2001; Miksza, 2012). The role of parents in this process has been diversely studied; their attitudes and practices seem to significantly influence

young music learners' achievement (McPherson, 2009; McPherson & Davidson, 2002). Furthermore, the triangular relationship between parents, instrumental teachers and students has been investigated (Creech & Hallam, 2003, 2011).

Less studies can be found about instrumental music teaching, many concentrating on teaching on tertiary level (for example: Bauer & Berg, 2001; Daniel & Parkes, 2015; Fitzpatrick, 2011; Mills & Smith, 2003; Purser, 2005), which motivated Triantafyllaki (2005) to invite researchers to investigate the influences of specific institutional, social and cultural contexts in which particular teacher-student interactions are situated, and "how instrumental music teachers construct the various contexts in which they work" (p.386). Recent developments of shifting the focus to informal and collaborative learning communities in music learning contexts are reflected for example in a Finnish case study of Partti, Westerlund and Björk (2013). They pointed out that the bridging between formal and informal learning environments need to come into the view of music teachers. Their own lesson planning and content knowledge often does not reach the environment of learners. In order to expand the sphere of activity for teachers, it is important that they open their view to the social environment of learners and include it in the creation of learning environments. This seems equivalent valid for music instrument teachers.

However, to the author's knowledge, no research can be found about whether and how the wealth of relevant empirical findings in music instrument learning and teaching is incorporated into teacher education offers. There seem to be only scattered and recent investigations that address the specific topic of music instrument teacher preparation (Elgersma, 2012; Ferm Thorgersen, Johansen & Juntunen, 2015; Fernández González, 2012; Göktürk, 2010; Haddon, 2009; Haston & Russell, 2012; Juntunen 2014; Lennon & Reed, 2012; Maccarelli Slawsky, 2011). Further studies of music instrument teacher education, and how instrumental music teachers are prepared for their working life still contribute substantially to the academic research in the field.

The following firstly reports from recent relevant policy documents in music education that include implications for music teacher education. Secondly, it takes a closer look at higher music education students, who might be working as music instrument teachers, and outlines briefly the role of higher music education institutions in regard to preparation of graduates for their working life. Thirdly, it presents some major aspects from research in general teacher education, fourthly, describes the differences between

classroom music and music instrument teaching, and finally, highlights research in music instrument teacher education.

1.1. Relevant policies in music education

Music as a vital part of education seems to gain more attention through recent policy developments, which affect national curricula and funding decisions. The main goals for these policies are to uphold the human right to education and cultural participation, to develop individual capabilities, to improve the quality of education, and to promote the expression of cultural diversity (UNESCO, 2006). With the Road Map for Arts Education (UNESCO, 2006), the outcomes of the first World Conference on Arts Education, a theoretical and practical framework was created that provided guidance to strengthen arts education worldwide. Recommendations were directed towards several levels to reach regional, national and local stakeholders. Intergovernmental and nongovernmental organizations were addressed, governments and policy makers, as well as educators, parents, artists, and directors of schools and educational institutions (Dudt, 2012). The Seoul Agenda (UNESCO, 2010), the outcome of the second World Conference on Arts Education, was based on the Road Map and formulated three goals, of which one is of special interest in the context of the present study:

Goal 2: Assure that arts education activities and programmes are of high quality in conception and delivery.(p.5)

For this goal, five strategies with each three action items were defined, of which several are relevant for music instrument teacher educators. These strategies and action items address the quality, availability, and continuity of qualification for educators and artists, as well as the collaboration between them in formal and informal settings (see UNESCO, 2010, 2.a, 2.a(ii), 2.b, 2.b(i), 2.d). The European Music Council intended with its Bonn Declaration (EMC, 2011) to adapt the Seoul Agenda to the European context of music education, addressing all three main goals. The resulting recommendations are directed to both, music education institutions and practitioners, and policy makers. Practitioners and providers of music education could use the framework for self-reflection and revision of their goals, and policy makers are reminded to review and apply existing policies. Listed under the recommendations referring to the second goal of the Seoul Agenda, again several recommendations can be found that are highly relevant for music instrument teacher education. These recommendations formulate the need for pedagogical training of all musicians who

work in education. Preferably, "the necessary academic, practical and social foundations" (p.3) for pedagogical work should be a compulsory part of their professional training. Furthermore, the recommendations address the modernization and development of music teacher training; the availability of continuous professional development offers for music education practitioners; the encouragement for collaborations between musicians and educators, as well as between formal music education institutions and non-formal music educational settings; and the reinforcement of exchange of best practices at local, national and international level. (EMC, 2011)

In the course of these policy developments in the European context, a working group was formed as part of the Erasmus Network for Music 'Polifonia' (for more information see www.polifonia-tn.org). This working group was assembled to investigate the status of teacher education for instrumental and vocal music, as research about instrumental and vocal teacher education was scarce compared to research about instrumental and vocal teaching (Lennon & Reed 2012). The results of this investigation are published in a handbook about instrumental and vocal teacher education in Europe (AEC, 2010), and some of these results will be presented below with the research in music instrument teacher education

1.2. From higher music education institution into professional life

Most commonly, those who become music instrument teachers are primarily musicians, who concentrate their efforts on music instrument proficiency (see for example: Bennett, 2009a; 2009b; Garnett, 2014; Mark, 1998). However, through their studies at higher education institutions these young musicians should become aware of their responsibility to support instrumental music practice in a way that very likely exceeds their own experience and maybe even initial intention. Pure performing careers are rare, and in order to ensure sustainable careers, musicians need to acquire "a portfolio of income-generating activities" (Carey & Lebler, 2012, p.2). One of these activities is teaching (Bennett, 2009a; 2009b; Bennet & Stanberg, 2006; Garnett, 2014; Lennon & Reed, 2012; Mark, 1998), especially for non-orchestra instrumentalists like pianists. Several studies looked at the transition from music student to professional and focused on the performer-teacher identity development (for example: Bennett, 2009b; Isbell, 2008; Mills, 2004; Schmidt, 2013). One of the suggestions for music teacher education was to consider that most performance students are "'unintended teachers'" (Bennett, 2009b, p.11), and would still need to think about teaching as part of their career. Consequently, institutions that prepare future music instrument teachers would need to

offer an education that gives opportunities to develop a teacher identity, and to acquire all necessary teaching skills for helping students in learning to play a music instrument.

Carey and Lebler (2012) described the process of reforming a Bachelor of Music program to prepare higher education students for their likely future as working professionals. According to the authors, higher music education institutions struggle to balance between educating skilled performers and preparing graduates for real working life, as the employability of degree holders is of growing concern, and maybe even related to funding. Challenging economic situations raise the need for skills that increase chances for employment, besides the absence of distinct career pathways for musicians anyway. Carey and Lebler used the term "protean musician" (p.2) based on the term of "protean career" (Bennet, 2009a) for the ideal graduate, a musician who will make a living under changing circumstances. Barnett (2009) discussed the dilemma of higher education institutions of supporting knowledge acquisition versus skills acquisition. He suggested ten points for consideration in curricula design to provide opportunities for tertiary students to develop dispositions and qualities that support the "coming to know" (p.429). These dispositions and qualities, such as a will to engage, a preparedness to explore, or a determination to keep going forward, seem to be necessary for graduates to embrace the uncertainty of the future in their working life; dispositions that are also necessary for higher music education graduates to find fulfillment in a protean career.

1.3. Teacher education

These considerations about how to learn for an unknown future, and how to prepare graduates for dealing with work in situations they were not prepared for, is highly relevant for teacher education. "Teacher education is inevitably inadequate (Northfield & Gunstone, 1997) and cannot prepare teachers fully for their entire careers." (Korthagen, Loughran & Russell, 2006. p.1025). Music instrument teacher education could benefit from the large body of academic research that exists in teacher education. Already Shulman's works on teacher competencies and teacher education (Shulman, 1987; Shulman, 1998; Shulman & Shulman, 2004) described the different kinds of knowledge, such as "content knowledge", "general pedagogical knowledge", context knowledge, and "curriculum knowledge" (Shulman, 1987, p.8) that should form the knowledge base of teachers. He further suggested a Model of Pedagogical Reasoning and Action (Shulman, 1987, p.15), and promoted reflective practice for teachers by combining theory and practice already early in teacher training, as well as professional

learning within communities of professionals (Shulman, 1998; Shulman & Shulman, 2004). Activating a teacher's lifelong learning process seems essential for teacher preparation, and goes far beyond any amount of knowledge that can be acquired during a teacher education program.

Darling-Hammond (2000) promoted considerable evidence that teachers who had "more preparation are more confident and successful with students than those who had little or none" (p.166). Furthermore, preparation programs with a higher share of integrated practical training produced more effective teachers, who were more likely to work and stay in their profession. Korthagen, Kessels, Koster, Lagerwerf and Wubbels (2001) focused once more on the linking of theory and practice in the pedagogy of "realistic teacher education", and described a model for systematic reflection of practice, promoting "theory from practice" rather than "theory-into-practice" to break through traditional teaching patterns. Korthagen, Loughran and Russell (2006) raised the question whether it is possible to "arrive at a pedagogy of teacher education that is both empirically based and practically oriented" (p.1022). They suggested seven fundamental principles for teacher education programs and practices for development, drawing from successful characteristics of programs in Australia, Canada, and the Netherlands. These principles included that "learning about teaching requires meaningful relationships between schools, universities and student teachers" (p.1034), and that advocated teaching and learning approaches are modeled by the teacher educators in the program.

Within the scientific discourse about teacher education, the education of music teachers received some attention, too (see for example: Ballantyne, 2007; Schmidt, 2005; 2013). However, in many studies the focus was on classroom music teaching, and the particularities of music instrument teaching seem only sporadically investigated. At this point, it is necessary to distinguish between classroom and music instrument teachers. The following describes these differences between classroom music and music instrument teaching, before presenting existing research in music instrument teacher education.

1.4. Classroom music and music instrument teaching

While traditional structures in Europe separate clearly between teacher education for classroom music and instrumental music, research in music and instrumental music teacher education in Anglo-American and Australian contexts suggest a less clear separation. One reason might be that learning a music instrument is widely organized in

school contexts, and traditions of band playing or string classes prevail. Individual tuition might be part of this organizational structure, but also is organized in private studios. In many European countries, music education within the school context is traditionally not related to the learning of music instruments. This instrumental music learning is primarily organized in local music schools or conservatoires, which often get funded by governments or municipalities. The main differences between classroom and music instrument teaching are the learning environments, and the special expertise level of learning content. Classroom music learning aims at general musicianship knowledge in large inclusive groups, music instrument learning aims at special skills development and profound musicianship, traditionally in master-apprentice-relationships and one-toone learning environments. The relationship between student and teacher in music instrument learning might be much closer, and lasts probably much longer than the relationship between the class music teacher and one student of the class. This more intense relationship comes with a higher level of responsibilities for the holistic development of the student, which should include considerations of the student's social environment. However, although a closer relationship might develop, music instrument teachers in traditional learning environments, such as music schools or private studios, still spent very limited time (30 to 45 minutes per week) with their students (see also: Maccarelli Slawsky, 2011, p.243). This amount of time accounts for less than one percent of a student's daytime. In order to have successful impact on the learner's development, teachers must profit from this precious time. In other words, teachers must be very well-equipped to plan, create, manage, develop, and support the learning of their students. Thus, their preparation and training should deliver all needed tools for successful teaching.

1.5. Research in music instrument teacher education

Existing research about music instrument teacher education is still scattered, incoherent, and fairly recent. Some of these studies investigated how higher music education students become teachers, and formulated suggestions for teacher education (Fernández González, 2012; Haddon, 2009; Haston & Russell, 2012; Maccarelli Slawsky, 2011). Haddon's interview study (2009) of final-year music students was located in Britain. There, no such a tradition like in other European countries existed, where formal pedagogical training was required from music instrument teachers when seeking formal employment. Haddon found, although British music students know that teaching will be part of their professional working life, they are lacking formal learning opportunities in

teacher qualification, or have insufficient knowledge about the possibilities for it. She therefore suggested that higher music education institutions could provide improved preparation. Fernández González (2012) studied the pedagogical know-how of music students at a Latvian higher music education institution before entering formal teacher training to inform teacher education development based on the needs of student teachers. The observational study of four cases suggested that formal teacher training should consider the student teacher's individual experiences and preconceptions of teaching, which could be best developed in peer group discussions, and in teacher educators' direct observations and discussions of student teachers' teaching.

Haston and Russell (2012) explored in a multiple case study in the United States the impact of authentic context learning (ACL) experiences on occupational identity development of five undergraduate music education majors in instrumental class music settings. Their findings concluded that a higher amount of quality field experiences with "supervised opportunities to practice thinking, feeling and acting like teachers" (p.371) had the strongest influence on teacher identity development. Peer discussions and exchange were beneficial in terms of provoking ideas and thoughts, and the extended time of field experiences over a one-year period increased teacher confidence, improved planning and flexibility, combined with creative production on the spot. Additionally, it supported "the development of a realistic understanding of their personal responsibility for student learning" (p.380). Although from an instrumental class music context, these findings could easily be transferred to the individual tuition context. Haston and Russell's findings also suggested that it might be sensible for teacher educators to advise students with minimal initial music teacher identity into other more suitable career paths. Nevertheless, the researchers also identified an impact of participants' teaching experiences on their performer identity development. This symbiotic outcome supposed that performer and teacher identity development could nurture each other.

Focusing in her retrospective interview study on piano teachers with less than 15 years of teaching experience, Maccarelli Slawsky (2011) devoted her dissertation to the transition from student to teacher in the Master-Apprentice Model of piano pedagogy. She described four developmental aspects that her participating piano teachers mentioned: the development of teaching style, teaching confidence, teaching identity and reflective practice. Additionally, she identified four means of transitioning into the teaching role and learning to teach, namely the Master-Apprentice Model, experiential learning, cognitive apprenticeship, and apprenticeship (p.258). Her suggestions for

piano teacher preparation included: formal learning experiences in combination with observations of experts and hands-on teaching experiences in inauthentic and authentic contexts; pedagogical coursework that trains to teach from "cradle-to grave" (p.267); identity construction of the teaching role; the development of reflective practice; and an entrepreneurial outlook to achieve full earning potential. Because Maccarelli Slawsky's findings correlated much with the literature on applied music teachers (Haddon, 2009; Mills, 2004; Mills & Smith, 2003), she even suggested that some of this course work for these areas could be organized for instrumentalists and vocalists together.

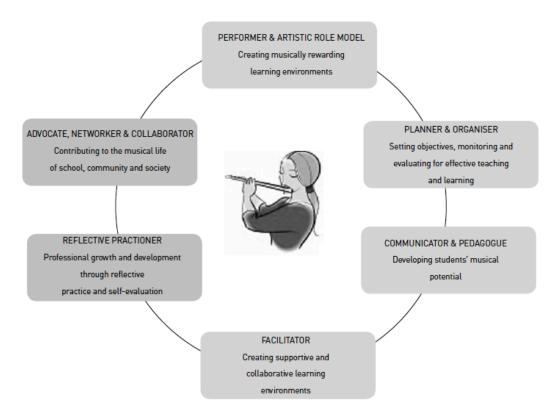
Elgersma (2012) reported from her experiences as piano teacher educator, and concluded her self-reflection study as a first year piano pedagogy teacher of first year students at the University of Idaho with some recommendations on how to support the development of student teachers. She also referred to Korthagen et al. (2006), and the ultimate goal to stimulate students' abilities to learn on their own. The recommendations for her very own context included (1) to care for less quantity, but more quality in teaching experiences (fewer self-reflection papers, but longer narratives, and more group exchange), (2) to model the major goal of best teaching practice, meaning that teachers support their students to become independent learners, and (3) to develop a more structured model of how to assess student teachers to support their development.

Growing interest in music instrument teacher education in the European context is observable in a study of string teacher education in Turkish undergraduate music teacher training schools. Göktürk's (2010) literature review and questionnaire based study compiled a list of recommendations for reforming and modernizing string teacher education at undergraduate level in Turkey, and presented a new model of string teacher training curriculum.

Lennon and Reed (2012), both members of the Polifonia Working Group on Instrumental and Vocal Teacher education (2007-2010), reported the outcomes of the project, describing the rational behind the found set of competences for instrumental and vocal music teachers in a general view of the profession (see Figure 1). These competences were identified as necessary for working in a fast changing environment, and for adopting the various roles a music instrument teacher may be required to fulfill. Six teacher roles were identified and connected to inherent competences: (1) the teacher as performer and artistic role model is a source of musical inspiration for his or her students, and creates and facilitates musically rewarding learning environments; (2) the teacher as planner and organizer sets objectives, monitors and evaluates effective

teaching and learning; (3) the teacher as communicator and pedagogue communicates effectively with students and develops students' musical potential; (4) the teacher as facilitator creates supportive and collaborative learning environments based on the understanding of their students' development needs within their social contexts; (5) the teacher as reflective practitioner takes continuously the responsibility for his or her own professional growth and development through reflective practice and self-evaluation; (6) the teacher as advocate, networker and collaborator contributes to the musical life of school, community and society. This list was intended as suggested framework for discussion, further analysis, and development, as a tool for music educators, institutions, and within music instrument teacher education to support curriculum development processes.

Fig. 1. The roles of the instrumental/vocal teacher (AEC, 2010, p.43)



Juntunen (2014) extended a sub-study of a larger Nordic research project (Ferm Thorgersen, Johansen & Juntunen, 2015), and investigated more closely instrumental and vocal teacher educators' visions of pedagogical training within higher education in a Finnish case. She found that the teacher development process was mainly "understood as acquiring a package of skills and knowledge that are partly instrument specific, partly generic, and strongly influenced by the labour market" (p.157). Teacher educators also highlighted the importance of connecting theory with practical application during

teaching practice in training. In the related larger research project, Ferm Thorgersen, Johansen, and Juntunen (2015) studied teacher educators' visions of music teacher preparation in Finland, Norway and Sweden. Although they could not find clear distinctions between visions of classroom music and instrumental music teacher educators, they identified differences between visions of instrumental teacher educators depending on the music instrument. Visions of music instrument teacher educators stayed close to the tradition of the instrument, nevertheless, aimed for preparation to work in a fast changing and pluralistic world. However, teacher educators felt limitations in organizing field experiences such as teaching experiences in hospitals or studios, or for including content such as starting and marketing a business. Therefore, Ferm Thorgersen et al. suggested that teacher educators of higher music institutions should work collectively on clear program visions. Moreover, they recommended the development of a vision in student teachers, "a vision of what music teachers do, what good music teaching is, and what the goals of music teaching should be like" (p.12). Such a vision could support the student teacher's identity development, and guide them through reflective practice during professional life, continuously improving their teaching and the learning of their students.

All in all, existing research in music instrument teacher education indicates the significance to allocate increased attention to this topic, still leaving ample room for further investigations. Some studies investigated the development of music students into teachers from different perspectives, focusing on study participants before (Fernández González, 2012), during (Haddon, 2009; Haston & Russell, 2012), or after formal teacher education (Maccarelli Slawsky, 2011). Other studies focused on the teacher education program (Göktürk, 2010), the desired program outcome (Lennon & Reed, 2012), how teacher educators work (Elgersma, 2012), or teacher educators' visions (Ferm Thorgersen et al., 2015; Juntunen, 2014). The following sections report the exploration of two specific cases of piano teacher education in different cultural contexts.

2. Research Questions

Literature about music instrument teacher education is scattered, and only a recently emerging field of study, especially in the European context. Due to the important role of music instrument teachers in regard to the quality of musical practice, it is interesting to see, what kind of structures, views, and understandings exist in this specialist teacher training. This study focused on piano teacher education, justified by the strong presence of piano in European music education, and the high probability of pianists to pursue a teaching career, supported by the authors own experience and knowledge in the field. Both Finland and Germany, have long standing reputations of high level musicianship and musical culture, therefore provide an interesting research context for comparison. The purpose of the present study was therefore to explore how piano teacher education is offered at higher music education institutions in two cases, one in Finland and one in Germany. A closer look at two cases in different cultural contexts and their comparison promised findings about views on the piano teacher profession and the respective piano teacher education. Two main research questions guided the present study: The first question focused on the conception of piano teacher education; subsequent questions covered three aspects that influence teacher education: (a) what kind of learning opportunities are offered, and how are they organized by the higher music education institutions, (b) what does the working environment require from the piano teacher, and (c) how do student piano teachers acquire the necessary professional skills. The second question was concerned with the comparison of the two cases.

- 1. How are student piano teachers prepared for professional working life in two cases, one in Finland and one in Germany?
 - a. How is piano teacher education provided?
 - b. What do piano teacher education agents identify as requirements for professional life?
 - c. How do student piano teachers develop their professional expertise and identity?
- 2. What are the commonalities and differences of the two cases in Finland and Germany?

3. Methods

Interviews with knowledgeable agents in the field of piano teacher education had the potential to reveal understanding and interpretation of the program from different perspectives, and therefore constituted a reasonable approach to answer the research questions. Knowledgeable agents who could easily be reached through higher music education institutions were considered to be piano teacher educators, individuals in charge of the teacher education program, other lecturers in the program, and student teachers. Based on the researcher's own experience of studying to become a piano teacher and of working as a piano teacher in different countries, it was possible to realize élite interviews (Gillham, 2005; Kvale & Brinkmann, 2009) to receive information about underlying assumptions of the program, the understanding of the piano teacher profession, the motivation for a certain way of teacher education, and its tendencies of development.

3.1. Research context

The present study focused on two major higher music education institutions, one in Finland, and one in Germany, with similarities in size, location, study program range, academic function, and importance for the local cultural life. Both institutions cater for about 1400 international students, are located in the heart of a major city of over 500.000 inhabitants, and offer high-level artistic and pedagogic education programs, not only in music. Contact information derived from the institution's websites was used in order to ask for the willingness to participate in the study, and to get in touch with potential interviewees. Through these procedures altogether nine individuals agreed to schedule interviews, four participants in Finland, and five participants in Germany.

3.2. Participants

All participants read an information letter about the research project and applied research ethics, and signed a consent form to participate, with the possibility to withdraw from the study at any time. It was discussed together with the participants that utter anonymity could not be guaranteed, because most positions at the few existing higher music education institutions are unshared. However, several measures were undertaken to make identification difficult, such as standardizing the names of the institutions, positions and programs, and summarizing the descriptions of institutions

and participants. Waiving the use of official names and terms, and refraining from clear identification of quotes should be understood as attempts to increase anonymity.

In both participant groups, the different agents in the field of piano teacher education were represented reasonably similar, and included the heads of music instrument pedagogy program, student piano teachers in advanced years of their Bachelor program, piano pedagogy lecturers, lecturers of other courses in the program, piano teachers in higher music education (HME) institutions, piano and other music instrument teachers also working at a music school, and one music school principal. Table 1 outlines both participant groups and compares the representation of the different agents. Except of the Bachelor students, all participants have or had been working at a music school for at least ten years, and the work experience in the current position at the time of the interview ranged from one and a half to 25 years. The age of the participants ranged presumably between 22 to 52 years, and five out of nine participants were female.

Table 1: Participant groups

Finland (3 female, 1 male)	Germany (2 female, 3 male)	
Head of music instrument pedagogy	Head of music instrument pedagogy	
program	program	
Lecturer of courses	Lecturer of courses	
Bachelor student	Bachelor student	
Piano pedagogy lecturer	Piano pedagogy lecturer	
Piano teacher at HME institution and music school	Piano teacher at HME institution and music school	
Piano pedagogy lecturer Piano teacher at music school	Piano teacher at HME institution	
	Lecturer of courses Music school principal	

HME: higher music education

3.3. Data collection procedures

In order to obtain interview texts that could be used for content analyses, all interview questions were carefully planned and organized, the actual interviews were recorded, and these interview recordings then transcribed. The following describes in more detail the instrument development, the interviewing procedure, and the transcription process.

Instrument development. The interview questions were formulated in a semi-structured way to take account for the different perspectives of participants, but also to

provide a guide to cover the same aspects with every interviewee. This interview guide was designed in English and German by the researcher, who is native in German and proficient in English. Eight questions and additional prompts addressed the interviewee's relevant background, the teacher education program they were acting in, and their expectations, impressions, experiences and vision of the program and the piano teacher's profession (see APPENDIX A and B). Two pilot interviews were conducted for each language. The German pilot interviews took place over Skype with two former study colleagues, who are now working as piano teachers, one selfemployed, and one at a music university, but who are not involved in piano teacher education. One of the English pilot interviews took place with a former Australian piano teaching colleague over Skype, and the other one face-to-face with a piano teacher educator at a non-participating higher music education institution in Finland. These pilot interviews constituted valuable interviewing practice and feedback on the understanding of the questions, but did not lead to an iterative development of interview questions based on an analytical approach (Guest, McQueen, & Namey, 2012a) because of time restrictions.

Interview procedure. All nine face-to-face interviews could be scheduled on four days within a ten-days-long period in the beginning of 2015, with a maximum of three interviews per day. To meet the convenience of the participants, most interviews took place in the facilities of the respective higher music education institution, only two of them were held at other workplace facilities of the participants. The program 'Audacity' on a laptop computer was used to audio record the interviews. In addition, short notes were taken during and after each conversation. The interviews were scheduled for 45 minutes to one hour. The actual recording time of the interviews ranged from 33 to 66 minutes, and compiled to more than seven hours audio material, which was an interview length of 47 minutes on average. All interviews were stimulating conversations about a topic all participants felt closely committed to.

Transcription. To obtain verbatim transcriptions for content analyses, a simplified pattern similar to Poland (1995) was used. These transcripts were edited by omitting few details for better readability, and were then sent to the participants for approval (Holstein & Gubrium, 2003). The participants made very different use of the offer to comment, complement, or modify the transcripts. Almost half of the interviewees did not reply to the first request, some made just little changes, and others edited the text very thoroughly. Based on this feedback of participants, the transcripts

were formatted in documents with line numbers to be used for the first analyses and codebook development, including the inter-rater coding process. On a second request to obtain the permission of using the transcripts for analyses, all except one participant responded. Nonetheless, the particular interview transcript was included in the analyses procedures. The formatted interview transcripts used for final analyses ranged from 13 to 25 pages, compiled to 154 pages, with an average of 17 pages per interview.

3.4. Analysis Procedures

The objective of the research design was to collect descriptive data for exploratory purposes, deeper understanding and comparison. The interview transcripts would bring up themes and topics for discussion. For credibility purposes, the researcher developed a codebook that would serve as a tool for inter-rater coding (Guest, MacQueen, & Namey, 2012b). Based on several times listening to the recordings, reading repeatedly carefully through the transcripts, coding the text, and ultimately conceptualizing the categories, such a codebook was developed. The inter-rater coding process provoked a thorough revision of the codebook and resulted in organizing the categories under three main themes. These three themes will be presented in the following section, structuring the report of the findings. The remainder of this section describes the codebook development and the inter-rater coding process in more detail, discusses briefly some methodological issues, and provides a table with an overview of the main themes and categories.

Codebook development. During the transcription process, notes were taken of upcoming topics, collected in a list detached from the interviews, to have a starting point for code development. Before reading carefully through the transcripts, the author listened again to the whole interviews within two days, making mind maps. This procedure gave an overview and helped to discern the main themes of the study. During the first reading through all transcripts, the topics of the text were identified and linked with colors. The text of one color was then collected to find a suitable code name. Following the example of DeCuir-Gunby, Marshall and McCulloch (2011), a preliminary codebook listed 21 codes with definition, and both inclusion and exclusion criteria. This preliminary codebook was revised in two steps by merging, renaming, and redefining codes, after one half of the transcripts was coded, and then the other half with the revised version. The emerging codebook defined 17 codes, described inclusion and exclusion criteria, and stated a short example. Codes like "structure" or "vision" referred to the program offer and its design, "work" or "further education" referred to the

professional working life, and "student" or "growing" to the development process of becoming a teacher. This codebook served as tool in the inter-rater coding process.

Inter-rater coding. The researcher coded again all transcripts after a seven weeks long time interval with the developed codebook. For credibility purposes, two complete interviews, one in English and one in German, were coded by two inter-raters. These two transcripts constituted 19% of all transcript material. The English transcript was coded by a proficient English speaking study colleague and PhD candidate, knowledgeable in qualitative research methods but unfamiliar with the field of music instrument education. The German transcript was coded by a native former study colleague from the researcher's piano teacher education program at higher music education institution, fluent in English, but unfamiliar with qualitative research methods. Both inter-rater coders received the codebook about one week before the task instructions and coding material were handed out, to provide the opportunity for familiarization. They were both instructed to code the transcripts by identifying adequate codes for text parts, and copying this text into a coding sheet under the respective code name together with line numbers. The line numbers facilitated the comparison between the researcher's and the inter-raters' coding sheets, however, the substantial amount of differences between the coding results needed clarification. The researcher's own experience of working with the codebook, and discussions with the inter-raters strongly suggested to define the codes more clearly to avoid misunderstanding. This could be achieved through encapsulating codes and reducing the number of categories. All text, which had been coded with the first codebook by the researcher, was collected for each code and carefully examined. For each code, central phrases in statements were identified, the content was summarized, key terms assigned, and connections with other codes found. Through this procedure three main themes emerged with altogether nine categories, which are presented in Table 2.

3.5. Methodological issues

Several issues should be mentioned in regard to the methods employed in this study. First, the interviews were held, transcribed and analyzed in two different languages. Only the used quotes from German interviews, while translated by the researcher, were validated by a native English speaking colleague. As almost all steps in the process were done by the researcher alone, it raises less issues for credibility than the fact that the interviews in Germany were held in the participants' and researcher's mother tongue, whereas the interviews in Finland were held in English, a second language to all

participants and the researcher. As the main purpose was to identify themes, the issue with the different languages could be managed through cyclical reading and analyzing processes in time-intervals. Additionally, participants were given the opportunity to comment on the transcripts, to ensure that participants felt themselves correctly expressed.

Second, the pilot interview process was incomplete due to time limitations, and consisted of no more than interview procedures with several knowledgeable volunteers and subsequent discussion. Lacking pilot analysis procedures, the piloting did not result in interview questions that could have induced a clearer structure for analyses from the start. However, although the analyses procedures might have been facilitated, the findings of this study presumably would not deviate significantly.

Third, the coding of text parts in the inter-rater coding process was impractical for quantifying differences. Through allocating codes to each sentence, the inter-rater coding process could have resulted in a clear percentage of concordance. Repeated inter-rater coding with the final coding frame could have shown, whether the amount of concordances in coding could have been increased. Nevertheless, the discussions with the inter-raters initiated a thorough review and reorganization of the coding frame, and resulted in a clear definition of the research perspective. This refinement of conceptualization contributed to carefulness and conscientiousness of the study, despite the mentioned methodological limitations.

3.6. Three main themes – the final coding frame

The final coding frame defined three main themes and altogether nine categories. The themes covered the three aspects that influence teacher education, which were asked with the research questions: (a) what kind of learning opportunities are provided, and how are they organized by the higher music education institutions, (b) what does the working environment require from a piano teacher, and (c) how do student teachers acquire the necessary professional skills. The categories for the first theme addressed the program structure, the program content, learning environments, and the development mechanisms of the program. The categories of the second theme differentiated between the working environment and the working requirements, and included as emerging category further education during professional life. The third theme distinguished between professional skills development and teacher identity development, examining the interplay with the teacher education program. Table 2

presents these three themes and the corresponding categories, states the number of transcripts that supplied the specific category, and includes a short example, one of each participant.

Table 2: Main themes and categories

Main theme	Categories	Number out of 9 transcripts	Example of quotes
	program structure	9	The pedagogy in Finland is inside the solo department.
How piano teacher education is	program content	9	Adult instruction is an important topic.
designed at higher music education institution	learning environments	8	It's like in a workshop.
	program development	9	I'm also in the student board of the faculty.
W	working environment	9	There are maybe not enough music school work places for everybody.
What professional life requires from a piano teacher	working requirements	9	You need to want to work with children, teenagers, adults and nowadays also senior citizens.
teacher	further education	6	some students will attend the music school congress
How student teachers acquire the	professional expertise development	9	for me it is substantial to serve as a role model.
necessary professional skills	professional identity development	9	the start for your own growing as a teacher.

4. Findings

In order to find answers to the question of how piano teacher students are prepared for their working life, this section is structured according to three major themes. The first theme focuses on the factual features of piano teacher education programs. The findings concentrate on the organizational structure, the content of relevant courses, the learning environments, and the mechanisms of program development. The second theme is concerned with aspects of the professional working life that influence the program design. Working requirements determine, directly or indirectly, the subject matters and preferred learning outcomes of teacher training. Therefore, the findings of this theme focus on the anticipated working environment, the assumed working requirements, and include considerations about further education during working life. The third theme centers around the student teachers' learning process and the professional skills and teacher identity development. These three themes thus help to organize the findings, and to identify the quality of relations between teacher education program, professional world, and student teacher learning. This identification might provide starting points for discussion for overall amelioration of music instrument teacher education, student teacher learning, and professional practice.

4.1. The piano teacher education programs

This chapter provides descriptions on how piano teacher training is structurally organized in the two cases of Finland and Germany. The focus of the study was on courses that were meant for piano teacher preparation, thus courses of artistic and musicianship training were not investigated, although they might have an influence on the overall teacher preparation, and were incidentally mentioned in some interviews. It follows a description of the learning content in courses of teacher education, and a contemplation of the existing learning environments. The chapter concludes with a presentation of mechanisms in use for piano teacher education program development, and the main tendencies of possible future changes in the two cases.

4.1.1. Program structure. The two cases of Finland and Germany showed clear differences in providing piano teacher education. Each case is first outlined by indicating the main features of how the training was structurally integrated in the study programs at the time of the interviews. Then the two cases are briefly compared to highlight the salient differences.

The Finnish case. Piano teacher training in the Finnish case was integrated in the Bachelor and Master of Music studies within the piano department. The first year of the Bachelor was almost free of pedagogical studies, with just one short general introduction to music teaching and some observations. For pianists it was then compulsory to take one course of piano pedagogy that ran for a year, and included the responsibility to teach a piano student under supervision in a practice school parallel to the course. Most pianists then continued with a second piano pedagogy course in the third year of the Bachelor. For those with the intention to teach at a music school, the option existed to apply for a teacher qualification program within the two and a half years Master of Music degree program, which comprised the pedagogical courses from the Bachelor, and further intensive theoretical and practical studies. These teacher qualification courses were given in cooperation with another higher education institution that can give teacher accreditations, and some of the courses were combined with student teachers of other higher arts education institutions. The thesis could be a practical pedagogical project in combination with research. All piano pedagogy courses were offered in Finnish and English, and it was planned that the whole teacher qualification would soon also be offered in the English language.

The German case. In Germany, aspiring pianists could apply for two different Bachelor study lines, one concentrated on artistic performance studies, the other had an additional focus on instrumental music education. The interviews were focused on the latter study line, as this program was designed for those who intend to work principally as piano teachers in their professional life, unlike the other study line, which also included minimal teacher training, though aimed for an artistic career. When applicants auditioned for the performance and education study line, they were selected based on their performance on the piano, and their demonstrated behavior in a pedagogical discussion. The following is a participant's description of this procedure and its intentions:

The applicants are shown a short video, where a child or teenager is playing piano, and this is in some way deficient. We talk about this with the applicants, we first ask standardized questions, and this develops into a conversation. This usually gives very valid information about the applicant. [...] We want to select people who can really imagine to work in this profession, who demonstrate relationship competency and diagnostic abilities.

In the four-year Bachelor program student teachers first studied theoretical basics in general music pedagogy, and learning and developmental psychology. From the fourth semester onwards they attended piano pedagogy courses that dealt in more detail with piano specific themes, and included some teaching practice. The general idea of the program was, as it was described by one participant: "to combine the artistic excellence with pedagogical professionalism, an excellence that comprises theory and practice, and also has scientific elements, but contains of course mainly the theory for practice". In the beginning, the courses were more general and provided the standard basics. Later on, student teachers chose within modules in what way they wanted to specialize, and were thus supported to develop an individual profile. It also was possible to graduate with a practical Bachelors thesis: for example, in the preparation, realization and documentation of a performance project with a group of piano students. Furthermore, it was possible to continue with a Master program in the same study line, which allowed for more specialized studies and individual profile development. All courses were held in the German language, with no current intentions to also offer the courses in English, because it was seen as an additional asset for international students to have access to German scientific specialist literature, when they had acquired the necessary linguistic skills.

Comparison of the two cases. To compare the structure of the two cases in a simplified way, the following lists only the contrasting elements of how piano teacher education was organized. First, the lengths were slightly different; the German Bachelor's degree program took four, and the German Master's degree program two years, whilst the Finnish Bachelor degree program took three, and the Finnish Master's degree program two and a half years. Second, while in Germany all necessary teacher training was during the Bachelor degree, student teachers in Finland got their teacher qualification through courses that spanned over the Bachelor's and Master's degree program together. Third, in a rough description, German student teachers went from general to more specialized courses, whereas Finnish student teachers started with piano specific courses and attended more general and intensive music educational courses later. Fourth, the German student teachers were first equipped with a theoretical foundation before they had some guided practical experiences, while Finnish student teachers started with guided and supervised teaching practice, and then embedded these practical experiences within a wider theoretical context.

4.1.2. Program content. Regarding the content of the programs, the two cases presented many concurrencies. Nevertheless, when looking at the content topics of the programs, it is important to make a distinction between the content of the whole program and the content of the piano teacher education courses. Overall, the participants presented very similar topics that were addressed during the programs. However, these topics were not all necessarily in the pedagogical courses, but in courses that improve the student teachers' own abilities in that area. For example, jazz-rock-pop music might not have been explored in the teaching context with children, but student teachers themselves had the opportunity to develop their own skills in this area. Based on the collected data, it was not always clear what topics are handled in which context, thus this report remains fairly general.

Basics in general pedagogy, music pedagogy, and developmental psychology formed in both cases the theoretical foundation in piano teacher education. Other broader approaches included human philosophical and physiological basics, and the professional career outline. More specifically in context with the instrument piano, methodical approaches of teaching beginners, intermediate and advanced students seemed to structure the training. An emphasis was on teaching young children, but also teenagers and adults seemed to get attention, particularly the teaching of adult beginners was gaining importance. Repertoire and methods studies supported the material exploration. Different music styles, piano technique, sight reading, and improvisation were all considered necessary skills for well-rounded musicians. Some attention was also given to special needs education and group teaching, and in relation with thesis writing, basic scientific research methods were imparted. To highlight one specialty for each case: the Finnish program included keyboard harmony and free accompaniment for children, while student teachers in the German program also investigated the instrument mechanics, to the extent of removing a pencil that has fallen into the piano. Another point worth mentioning is that piano group teaching in Finland was a relatively new field, whilst in Germany group teaching already had a much longer presence, and has been ever since subject to controversy.

4.1.3. Learning environments. Teacher education, especially the practical training, made in both cases use of a variety of learning environments: observations, seminars and workshops, teaching simulations, teaching demonstrations with subsequent group discussion, individually supervised teaching with subsequent discussion and feedback,

encouragement to teach informal piano students, and teaching in group projects. The following describes each of these environments and how it was employed in each case.

Observations. Formally organized observations were taking place in various arrangements. In Finland, student teachers observed some teaching during the first year based on their own arrangement, possibly within the higher music education institution or at a local music school. In Germany, observations were the major aspect of the *Praktikum* at a music school of their choice for two weeks between the third and fourth semester. The main idea of this *Praktikum* was to experience everyday life at a music school and its organization. Observations self-evidently also formed part of seminars, for example when following teaching demonstrations of student teacher colleagues. What seemed crucial was the way the observations were prepared, reflected upon and discussed.

Seminars and workshops. In most of the interviews, participants called piano pedagogy courses lectures, but described the studying and working atmosphere similar to seminars or workshops. Teacher educators in both cases seemed to find it important that student teachers activate and share their existing knowledge in group work, to determine the course content according to the student teachers' needs and interests. Thus, group discussions, reflection, and exchange also directed the content of the courses, then becoming relevant for the student teachers.

Teaching simulations and demonstrations. One element of piano pedagogy seminars were teaching simulations and demonstrations. In simulations or role-plays of situations, such as piano student exams or competitions, student teachers could experiment with specific teaching methods or ways of giving feedback. How to react on presentations, so that the presenter would benefit from it, needs to be practiced. This is valid for commenting on piano student presentations and for student teacher presentations alike. Simulations and demonstrations could be with peers, with "borrowed" students from a music school, with piano students of the teacher educator, or with a student teacher's own private piano students. In Germany, these teaching demonstrations in the group setting seemed to be the main arena for formal teaching practice. In Finland, student teachers were teaching their own student from the practice school in front of their peers only later in the course, after getting to know each other better. One Finnish teacher educator explained:

... to put yourself in this kind of little bit vulnerable situation ... that you feel that you don't master something completely and you should do it publicly in front of your classmates, psychologically, I don't like to do that too early.

However, a secure study atmosphere usually developed during the course, which allowed for extending feedback practice and reflective abstraction of practical teaching demonstrations also in more realistic settings.

[T]hen I can start to introduce those teaching methods like them commenting on each other when they are teaching, or following each other and then having a discussion together, or me taking them on video, and then we watch it together, and then we all discuss what happened there to their opinion.

Individually supervised teaching. In Finland, most practical teacher training was happening through weekly individual teaching of practice students, which were organized in the practice school of the higher music education institution, and which were fortnightly supervised. Each student was responsible for one student for the duration of the course. The practice students for the first course were young beginners, for the second one intermediate piano students, and for a third piano pedagogy course, which started in the academic year after the interviews, it was planned to recruit peer piano students from the higher music education institution, and piano students from the music institute for gifted children. The teaching of these practice students was supervised by the teacher educator, who also taught the piano pedagogy course. Every second week, the teaching was discussed and the student teacher got feedback on what to improve, every other week, the student teacher was alone with the practice student. Recent considerations about how to facilitate the learning of teaching opened the possibility for student teachers to start with teaching more advanced piano students. It was believed that working with more challenging literature and more skillful students could guide some higher music education students better to the art of teaching, because the subject matter would be more closely related to their own daily activities with the piano.

In Germany, there was at the time of the interviews not such regular supervised teaching compulsory. The teacher educator, however, organized block seminars, where all student teachers were teaching his music school piano students on a weekend under his supervision. In other words, the student teachers got the experience to teach several students in a row, which is very close to the real life situation of a piano teacher on a working day. The piano teacher educator also offered individual sessions in addition to

the course, however, this offer did not seem to be taken a lot of advantage of yet. It also was possible to opt for a teaching practicum within extended module studies, where student teachers needed to find a mentor at a music school to observe and practice teaching under supervision for a longer period of time.

Informal piano students. All teacher educators mentioned the benefits of having own informal students to gain more practical experience than the higher music education institution was able to formally organize. These private piano students would provide an informal learning environment, where student teachers could practice and improve their teaching skills. The German teacher educators expressed regret that they noticed a decrease of student teachers with own private students. During their own teacher education it had been common to have students parallel to pedagogy studies, additionally, like one teacher educator recounts: "it was actually a comfortable, practical and welcomed source of income." Nowadays, student teachers seemed either economically secure, for example through parental support, or they eschewed the responsibilities of having own piano students.

Group teaching projects. It seemed that higher music education institutions nowadays try to organize experiences for student teachers in teaching of large groups, and teaching within groups. These experiences are particularly for student piano teachers very special, because piano tuition in groups is usually organized only with a small number of participants. In Germany, student piano teachers experienced the difference of class teaching to individual teaching during a course that thematized cooperations with schools and kindergartens. The student teacher told:

As pianist I had been teaching maximum two students at the same time. And then I was suddenly in this classroom with, I don't know, maybe 25 kids. This was indeed a very special experience. [...] Somehow a great experience, to teach a really big group, and for the length of a whole lesson.

In Finland, student teachers could participate in courses, where they taught a group of children together with interdisciplinary study colleagues. Additionally, part of the pedagogical studies during the Master's was a course, where student teachers were in charge to plan, create, organize, and realize a group project, which was supervised by one teacher educator, and reflected in group sessions and through written essays.

4.1.4. Development of piano teacher education programs. The account of the development of piano teacher education programs addresses two aspects. The first

aspect describes the existing development mechanisms of both cases, which include formal and informal elements, and could be individually or collectively initiated. The second aspect briefly presents the main tendencies of program development in both cases.

Program development mechanisms. In both cases, participants mentioned that the development of piano teacher education offers was a continuous process. This continuous development was on one hand result of regular program revision procedures, such as yearly reviews of study plans or reaccreditation processes, on the other hand it resulted from feedback based on a combination of various communication channels. The character of this communication ranged from formal to informal, and included different kinds of board meetings, exchange with colleagues in arranged settings or coincidental situations, discussions with stakeholders, such as piano teachers and music school directors, feedback questionnaires for students or among teaching staff, and discussions with administration staff. Self-evidently, development discussions also were influenced and limited by structural and financial frameworks. The Finnish participants described the program development process as rather informal, whilst in Germany it was described as longer and rather formal. One German participant summarized the complex communication behind development responsibilities as follows:

The further development of the study program is the responsibility of the head of study program, and also of the study commission and the corresponding dean. It is important to also have discussions with the student board, with alumni, or with representatives of professional practice, music school directors, teachers or the like.

It appeared that student teachers in Finland were less integrated in the development process then student teachers in Germany. In Finland, higher music education students had the possibility to give feedback on individual courses in anonymous online questionnaires. German student teachers had a student representative board that met regularly to discuss issues in relation to the studies and built the connecting link between student teachers and teaching staff. The consideration of alumni in the development process also was only mentioned in Germany.

The Bachelor's and Master's degree programs in Germany were relatively new with only about eight years since the establishment, as they were developed in the course of the Bologna process that started about 15 years ago. One teacher educator recounted how he was part of this development process, and explained how planning and practicing

within a program are different, and thus makes continuous program development necessary:

[T]his took one and a half years [...], we spent a lot of time on it, but still we did not carry off our ideal study program, because it is just not possible to work out all bugs until the program is up and running.

One additional factor arose in the context with program development: the teacher educators of the pedagogy courses found it inevitable to continuously improve their own work through own professional development, such as productive reflection, and attendance at relevant conferences and meetings. They also stated that there was still room for improving the offers within the present program organization. A German teacher educator explained after being asked about how to improve the program:

I think, there is certain potential that still can be fully used under the current conditions. [...] I myself need to improve my seminars, and I need to think about what do the student teachers need, what went wrong the last time, and how can I do it better now.

A Finnish teacher educator also pointed out the possibilities, but also the responsibilities under existing conditions:

Well, a lazy person could have a lot of free time, just to dream (laughs) on things, and if one want, one can go to numerous meetings, but there is a lot of autonomy, and there is a lot of space, at least I think so, there is a lot of space to innovate.

Most participants expressed in one way or the other that the quality of courses was highly dependent on the teacher's engagement. This might be a reason why in both cases the heads of pedagogical studies were trying to standardize some of the content of instrument pedagogy courses within the higher music education institution, although the instrument culture and the teaching values of individual teachers might differ greatly.

One other aspect was mentioned by the Finnish head of program, suggesting that teacher educators of one institution could benefit from each other through sharing their knowledge and best practices in, for example, staff seminars. This kind of professional development activities could strengthen the community and the overall standard of the institution.

Program development ideas. Disregarding financial and other limitations, the main emerging ideas for development were in Germany more practical teaching

experiences, which could start earlier in the program, and could be linked with more obligations. Suggestions ranged from more block seminars in teaching, over compulsory regularly supervised teaching at a music school for a longer time, individually supervised teaching tuition, cooperation with a music school, to the foundation of a teacher training music school affiliated with the higher music education institution, where student teachers would have to teach one day per week. Other suggestions were concerned with the variety of offers in the complementary choice modules, more exchange about teaching experiences, better networking of the higher music education institution on local, national and international level, and also intensified connections to real working life, such as getting familiar with and discussing cultural-political developments.

Emerging development ideas for piano teacher education in Finland were concerned with having more time for the practical teacher training, more flexibility in when to take theoretical courses of the teacher qualification program, better networking especially on national level, and even more concrete preparation for and connection to real working life. As one interesting aspect occurred the abolishment of grading, but instead the establishment of more organized pedagogical portfolio building.

4.1.5. Summary of the piano teacher education programs. The piano teacher education programs in the two cases presented clear differences in structural organization. While the teacher training in Finland was embedded in the Bachelor and Master of Music program within the piano department and was only partly compulsory, the higher music education institution in Germany offered a separate study program for music instrument teacher education with a pedagogical discussion as part of the admission test. Most topics that were dealt with during the complete programs concurred in both cases. However, differences existed in the organization of learning environments, especially for practical teaching experiences, and in the linking of practice and theory. In the Finnish case, student teachers started with early regular and individually supervised teaching practice, and studied theoretical subjects later when opting for the teacher qualification. In the German case, student teachers built first theoretical foundations before increased practical experiences were organized. Both teacher education offers seemed to be under continuous development through reviews, evaluations, communication with colleagues and stakeholders. Finnish participants described the development process as fairly informal, and envisaged foremost an intensified preparation for working life and the introduction of portfolio assessment as

development tendencies. German participants described the development process as more complex, and strove predominantly for organizing more teaching practice for student teachers.

4.2. Professional working life

The presentation of the professional working life theme is subdivided into three parts. The first part outlines aspects in the expected working environment of piano teachers in both cases, and some current developments. The second part presents what the participants of this study identified as working requirements, which were partly influenced by the anticipated working environment, but also partly generic, and specific for piano teachers. The third part goes into more detail about further education as important aspect during professional life, a topic that was included in two thirds of the interviews, in part initiated by the interviewees, and in some subsequent interviews by the researcher.

4.2.1. Developments in the working environment. Aspects of the professional world influence what should be dealt with during teacher education. One Finnish participant stated: "There are many things going on right now, and during the last 20 years so many things have changed, so the education of a piano teacher must change quite a lot, too." In Finland, teacher students were predominantly prepared to work at public music schools, which operate within a long and strong tradition. Therefore they needed to know the requirements of the national music education curriculum. This curriculum undergoes changes and developments, which then need to be considered for teacher education. In the past, there has been for example the introduction of free accompaniment in the exam requirements, which was one of the topics in the current piano pedagogy courses. Educational systems or curriculum developers usually respond to cultural-political considerations and programs. For example, the tendency towards a broader music education, or arts education for all, might incline Finnish music schools to abolish entrance exams, and instead establish group lessons on specific instruments for the time in-between music kindergarten and individual lessons. Consequently, teacher education would have to include training for group teaching, too. One teacher educator formulated his experiences and thoughts to this development as follows:

I think, what will be important in the future are the groups for kids, between music kindergarten and the solo studies, instead of having entrance tests. I think

the music schools will change the system, so that there will be small groups of kids and then they see who is motivated and wants to go on to the solo studies.

Demographic and other societal developments also will have an impact on elements of teacher education. For example, the teaching of senior citizens, who have time and financial resources to either start or revive learning to play a music instrument. Or the developments of information and communication technology, which might change the way children expect to learn, and forces piano teachers to accept their responsibility to look beyond the music instrument. A teacher educator explained her understanding of this situation:

[N] owadays, we can find everything from the internet, and with terrible speed, and it can become a passive way of learning, that [children] kind of expect that everything comes easy. [...] we are not only teaching piano, but we are teaching a lot of skills for life. The children, all the time when they are learning the piano, even little tasks, they are learning about themselves, and they are learning perseverance and patience.

The current labor market situation suggests at least three further points for consideration in teacher education programs. Firstly, student teachers should get a complete teacher qualification; secondly, they should broaden, combine, and specialize their skills in an individual profile; and thirdly, they should become aware of, like one Finnish participant formulated, that they might have to "create their jobs by themselves". All Finnish teacher educators pointed out the difficult labor market situation and the necessity to do as much of the pedagogical studies as possible: "[I]f you want to get a job at a music institute or a music school in Finland, it's absolutely necessary to do that all." Music schools would ask nowadays for a "much more versatile [...] package [...] of skills", which could, however, be dependent on the location of the music school. It would be an asset in rural areas to have a wide range of additional skills, such as a second instrument, theory pedagogy, and choir leading, whereas in an urban music school a specialization that complements the teaching personnel could have higher value. In particular self-employed piano teachers would need to have the combination of a wide range of skills with an individual profile and specialization. They could establish their own music school, or develop and realize educational projects with other artists in a variety of different contexts, for example in immigration education.

Some of theses professional world aspects that influence teacher training programs were similarly mentioned by German participants. Student teachers were prepared for

employment at public music schools, however, as there is no such national curriculum like in Finland a teacher must follow, teachers are very autonomous in what they can do. On one hand music schools might offer an established framework that provides more easily accessible opportunities for cooperation with other teachers for small and larger projects. On the other hand they might be forced to ask their teachers to work under challenging conditions, such as more group teaching or short lessons of 25 minutes, based on public financial cuts. One German participant described the unfortunate income situation of music instrument teachers at music schools, which based on financial limitations in municipalities - could not offer many permanent positions, instead only payment without any social security obligations. This could result in considerably lower income than regular employment would guarantee. Increasingly more professional occupation is found therefore at established private schools, other institutions, or in self-employment. One German participant found the following words to describe the need for changes in piano teacher education: "The very traditional 1900-model of piano tuition for the high society daughter does not endure anymore, and a new type of teacher is needed". In particular self-employment demands, but also provides the possibility to develop a unique profile, thus might contribute to the fulfillment in the profession. One German participant described the phenomenon of creating own work from the perspective of a musician positively. "A patchwork existence of performing, teaching and maybe journalistic work or similar – this seems to be a good field, and in addition, quite attractive".

Based on the current situation of an increasing number of all-day schools in Germany, the music instrument tuition system has to consider to cooperate with schools and kindergartens. A number of cultural-political programs are proof of this trend, for example "JeKi" ("Jedem Kind ein Instrument", a long-term project of classroom instrument tuition in primary school classes with string or wind instruments, accompanied by several research projects; now "JeKits"; see www.jekits.de) or "Wir machen die Musik" (a program to support cooperation between music schools, kindergartens and elementary schools to engage all young children in music activities; see www.wirmachendiemusik.de). These programs seem to be responses to the broader music education approach initiated by UNESCO and the Bonn Declaration. However, the instrument piano cannot be employed like string or wind instruments in big classes, but there are other conceivable projects with piano that have "great potential [...] to reach more individuals than those pushed by parents from a young age on", like one German participant pointed out. Therefore it was seen necessary to inform, motivate

and inspire student teachers already during the studies for interdisciplinary projects, so that they would become capable of creating versatile educational spaces to enliven the experiences of individuals in piano tuition, but also to build connections to their environments. One teacher educator indicated the current chance to "open the eyes of students for working possibilities and sensible occupation [...] to guide individuals towards intensive musical activities and not only to superficial events". Engagement and enthusiasm of piano teachers is needed and would make a difference. One participant complained that in Germany, "when one got a position at a music school, a teacher could theoretically do what he wants to. Also the expectations of parents are often limited to just having the children come home happy". One effect of this lack of control might be the disappearance of a middle-field in piano pedagogy. Currently, there seemed to be only the extremes; on one side the special support for gifted and talented children in higher music education institutions, on the other side the broad approach, which, to overstate the case, could be covered with group lessons. Piano teachers might lower the standards of expectations, and as a result the education of good amateur pianists, like there had been in the past, seemed to be on the decline. However, this might not only be a result of missing regulations, but also because of bad tuition that still seemed to be the norm, which was cause of concern to one German teacher educator. Higher music education institutions should not only consider the needs of the market, or the wishes of music schools directors, but also their function as role model in setting standards in learning and teaching. A German participant summarized the role of higher education preparation in relation to professional life with clear words:

On one hand, there has to be the real world reference, so that [graduates] have a realistic chance when they apply for employment at a music school. On the other hand, we as higher music education institution want to signal what good piano tuition is, whether it is common practice at music schools or not.

4.2.2. Resulting working requirements. All participants from Finland and Germany concurred that piano teachers need "very many", a "wide range of", or "quite versatile" competencies. These competencies included at least four major areas: pianistic performance skills, musical or artistic knowledge and skills (or an artistic disposition), pedagogical knowledge and skills, and social skills. These areas overlapped, and built through combination and interplay a package of skills that was typical for a successful piano teacher in the view of participants.

Pianistic performance skills. Total agreement existed that a piano teacher should possess very good piano playing skills, and should have experienced success as performer, at least to some degree. Piano teachers should be very conscious about how to play the piano at a very high level, in order to be able to demonstrate and explain it to piano students. This knowledge included technical and physiological aspects of playing the piano, but also overall musicianship skills that are necessary for pianists, such as repertoire knowledge, skills in different styles including pop-rock-jazz, improvisation, sight-reading, chamber music, music theory, and, mentioned only in Finland, keyboard harmony or free accompaniment.

Artistic skills. In addition to the pianistic skills, it emerged in six interviews, that a piano teacher should also be able to inspire, to show enthusiasm, and to demonstrate relations to other artistic forms. In other words, the teacher should be capable of helping students to connect with artistic expression, and even with the arts on a more general level, beyond the relationship with the instrument piano. This kind of arts education seems absolutely necessary to root the long-term pursuit of musical activities in children. One way of doing this could be the creation of educational learning spaces through interdisciplinary projects.

Pedagogical knowledge and skills. Self-evidently, a teacher must have sound knowledge in pedagogical subjects. In Finland, participants mentioned especially developmental psychology, however, seven participants talked about the different age groups a piano teacher would need to deal with, starting from under school age, through childhood, adolescence, young adulthood, up to senior citizens. Furthermore, sound methodical knowledge and practical experience were seen essential, to some degree also in group teaching, and special needs education. Additionally, one could incorporate also organizational and management skills, which would include knowledge about working frameworks, like the national curriculum in Finland, or "Jugend musiziert" (a supportive national youth competition program, see www.jugend-musiziert.org) in Germany. These contexts require planning, preparation of students, and eventually the participation in the role of a judge at exams, recitals or competitions. One teacher educator mentioned the flexibility one needs to quickly adapt to different learners in changing situations. She emphasized that the best quality of a teacher would be to support students in developing into self-directed learners, so that the students become independent from the teacher. Another teacher educator pointed out, that piano teachers

should practice self-reflection to improve their own teaching and therefore the learning of their piano students at all times.

Social skills. Very strongly related to pedagogical skills are social skills, which were mentioned more or less explicitly by all participants. These social skills included interaction and communication with individuals of all ages and learning levels. Three participants also pointed out the importance of communication with parents or guardians. The ability to engage with the students individually, to build strong and safe relationships with them, to create and develop an atmosphere, where learning can happen, seemed to be some of the most essential qualities of a teacher. One teacher educator described it as devotion to the student. Emphasized was also the particularity of the relationship of piano teachers with individual students, which could be perceived as located somewhere between the relationship to a close relative and to a school teacher. Additionally, it could develop in a long-term relationship.

4.2.3. Further education. In two thirds of the interviews further education was discussed. For several reasons it seemed to be an important topic that needed to be mentioned also in teacher education courses. The following presents how participants expressed reasoning behind professional development, considerations about the organization of further training, and ways of linking student teachers with the idea of further education.

The changing elements in professional working life always concern the working piano teachers first, for example, changes to the curriculum, or new cultural-political programs. Those piano teachers, who had their higher education eventually decades ago, still need to or at least should get familiar with new concepts, strategies, or frameworks and the like. For example, one teacher educator recounted that about a decade ago, when free accompaniment became part of the exam requirements in Finland, "there was a lot of training for teachers who were already teaching in music schools, so that they would feel comfortable with it." Or the change in music schools to establish more and more group lessons in music instrument tuition would require piano teachers to develop skills in group teaching. An example of a teacher educator illustrates this very likely situation:

The problem is that the rectors say to someone who has been teaching twenty years only solo, "Ok, now you should start with the groups." No special training for that, just "Start!" Of course that's not an easy situation, to do suddenly something new without special training, because it's a different job.

He then suggested that "[o]ne would need to train people who are interested in this group teaching and who would like to be good at that." However, even without major changes or external influences, professional development is an essential part of a teachers life-long learning process. On one hand, the particularity of different working contexts might require specific skills, on the other hand, the creation of an individual and unique profile based on interest and opportunity might lead to further studies. A student teacher stated that as musician in working life one would continue to work on artistic skills anyway, but then "one could also specialize, or look for some niches".

Exchange with other professionals at, for example, conferences or meetings of piano teacher associations, seemed to be understood as part of further education. A participant told about this kind of meetings: "I cannot attend each time, but when I am there, it is extremely inspirational" with lively exchange, lectures, and interesting discussions to stay up-to-date. However, in Germany, two participants pointed out that there seemed to be two types of music instrument teachers, those who would readily attend professional development offers, and those who would not. There were further education offers available, but two teacher educators in both countries expressed the opinion that they could be increased. One German teacher trainer emphasized that these offers, however, should be of high quality and "so attractive that even the laziest would say: 'I benefit personally from participating." The occurring question of whose responsibility it would be to provide professional development or to initiate participation was only answered carefully. Higher music education institutions could be available for providing further education. One Finnish teacher educator explained: "I think [the higher music education institution] must do that, because at least in some way it's the place where the new things should start." And a German teacher educator suggested that the initiative should come from the music school directors, who could use further education obligations to eventually enhance the engagement of their teaching personnel.

Teacher educators in Finland and Germany suggested to inform and introduce student teachers already during the training program to further education. One Finnish participant stated that "it's important to prepare them for the real life. ... And when they get a job, how to improve that, how to work there." Similarly, one German participant stated the following, emphasizing the need to introduce the students to the field:

[There are] certain teachers who like to do further studies, and others, who rather not. Therefore it is very important to hear already during higher education studies about professional development, to get a taste of it, and to see

how exciting it can be, and that it is part of the profession, to undergo further training also later, and not to think: 'With the Bachelor under the belt, I'm fine, that's done.'

Raising the topic in seminar discussions, organizing excursions to professional association conferences, free participation for student teachers at symposia like in Finland, offering special courses at higher music education institution without credits gain like in Germany, all these seemed to be methods to engage student teachers with further education. In the German Master's degree program existed even a special course, which included the analysis of the further education sector, and the development of new ideas. The building of bridges between initial and further studies seems to provide a linking opportunity for higher music education institutions and professional working life.

4.2.4. Summary of professional working life. Several aspects of professional life, such as cultural-political developments, demographic or societal developments, and technological advancements, also have an impact on piano teacher education. The broader approach to music education, the teaching of increasingly also adults, or the possibilities of new technologies might demand different skills from a piano teacher than traditionally expected. All in all, successful piano teachers would need to display a combination of excellent performance skills, artistic skills, pedagogical knowledge and skills, and social skills. Additionally, interest in further education during working life for continuous updating and improvement of overall teaching skills was considered to be necessary, and student teachers in both cases were introduced to this topic.

4.3. Student teachers' professional skills and teacher identity development

Another element that should be considered when designing piano teacher education programs is how student teachers develop their professional skills and their teacher identity. This consideration might have influences on the timely structure of the program, the type of learning environments organized, or the learning goals of courses. Despite the individualism of each student teacher's development, there might be some aspects that could generally be taken into consideration. In the participants' views, the building of a sound knowledge base, practical experiences, feedback, the initiation of reflective practice, and the encouragement for skill-diversity seemed to be crucial in professional skills and identity development. Teacher identity development would start with a change of mindset in student teachers, to think as teachers and not as students,

and continued but would not end with accepting and appreciating the responsibilities and possibilities of a teaching personality, until viewing teaching as a form of artistic expression. The following presents the observations, assumptions and suggestions of participants.

4.3.1. Professional skills development. Presuming that all student teachers start their higher music education studies with a very high level of performance skills, it seemed of more concern to develop a sound professional knowledge base about pedagogical skills during the teacher education programs. Practical experience was seen as essential, however, relating theory and practice was differently approached in the two cases. Establishing reflective practice habits in student teachers, and equipping them with a starter kit were then again major concerns of teacher educators. They considered modeling as a method to help students to acquire these skills, nevertheless emphasized their student-centered approach, encouraging skill-diversity.

Performance skills. A Finnish teacher educator stated that a piano teacher should have high level performance skills: " ... one should be very good himself or herself in playing piano in order to be a good teacher". This view was explicitly mentioned by seven participants, although it seemed to be implicit in studying at a higher music education institution. Teacher educators from both countries confirmed that those accepted at higher music education institutions already had a very high level of piano performance skills, and these skills would be further supported and developed. A German participant asserted: "Actually, one could basically assume that a graduate of a higher music education institution has all professional competencies, definitely the artistic ones."

Knowledge base. The accumulation of professional knowledge about pedagogical, psychological, and methodological theories also seemed to be an evident component of higher music education studies in both countries. However, there seemed to be a difference in how theoretical knowledge was delivered in relation to practice. In Finland the view of "theory from practice" prevailed, whilst in Germany the view of "theory for practice" was prevalent. In other words, Finnish student teachers got in their program ample practical experience, intensively supervised already at an early stage of studies, and had then more rigorous theoretical studies later in the Master's degree program, whereas German student teachers at the time of the interviews had their practical experiences organized in later semesters and with less obligations, after completing more general theoretical courses in pedagogy and psychology in the

beginning of the Bachelor's degree program. The first view of "theory from practice" underlines that one might understand theoretical concepts better based on practical experiences; one might be able to relate to them, and might derive relevant theoretical knowledge from them. The second view of "theory for practice" underlines more the scientific sound and maybe broader knowledge that serves as basis for good practice. Nevertheless, all participants concurred that practical experiences were absolutely necessary for developing teaching skills.

Practical experiences. Most German participants noted that there should be more practical experiences, especially as informal teaching experiences with private students seemed to decrease. One teacher educator told: "Nowadays, only few student teachers have their own piano students. When I studied, this was totally normal. We financed our studies like this." This informal learning environment of own private students was also mentioned by a Finnish teacher educator:

I encourage them to take private students and to teach as much as possible, because it is also very important that you learn by doing. I can always explain things, they can get ideas, but then they have to put it into practice. It's only by experience that you really learn.

The most effective learning environment for developing practical teaching skills was considered to be individually supervised teaching on a regular basis. There, student teachers got feedback, could discuss and reflect their teaching, attempted improvements and got feedback on this again. The following is the description of a Finnish teacher educator, who emphasized the importance and effectiveness of feedback in this practice student system:

[E] veryone has there his own practicing student. They work weekly with them, and every other week I'm listening and commenting. I've seen that this is where the development happens. It's not actually during the lectures. During the lectures they get some theory, and they make different workshops, but the practice is very important. I think, that it's important to try to improve all the time, and it depends on how we give feedback, and how we comment on, and how we try to help them to improve their skills as a teacher. The feedback is the important thing.

The Finnish student teacher told about the practice student sessions: "[T]hat is what we do: First we teach, then we reflect, and then we try to ... do something better the next time." The practice student system also takes into account the long-term relationship

with a student, and thus could increase the chances of experiencing fast and spontaneous decision making, or of experimenting with own teaching behavior based on self-reflection. One of the Finnish teacher educators described it like this:

[T]aking the responsibility for a child, and being in charge for the whole year, [...] you have all the time to think about yourself, and get feedback. The students get feedback from me, from my point of view, but I ask them also to self-reflect, to write down what they did or think about it, and then plan a little bit ahead, all the time remembering that everything can change, because of the atmosphere or something.

These advantages of individual teaching supervision were also mentioned by the German teacher educators. Although individual sessions were currently not compulsory organized, probably due to financial limitations, they were seen as the best opportunity to learn how to teach. Two teacher educators described the individual sessions as their idea of an optimal learning environment:

[Given] all resources there would be individual instruction, similar to the artistic instruction on the main instrument, artistic-pedagogic-didactic instruction (laughs), meaning the student teachers would be intensively supervised in their own process of learning to teach, for a specific time, in one-to-one situations.

The ideal would be actually individual tuition. This is of course a matter of finances. ... But it is really effective. That's where student teachers learn of course the most.

The German teacher educator currently offered individual sessions, but as they were not compulsory, these sessions were not so often frequented. If there would be no limitations, two teacher educators envisioned the establishment of an integrated music school, where student teachers would have to teach regularly over a longer period of time and under supervision. One teacher educator described his idea like this:

If I would have free reins and money and everything, then I would try to found an institution within the higher music education institution, like a music school, where students could be taught without suffering from having their teachers only for a relatively short time.

Another teacher educator had a similar idea when asked about suggestions for improving practical experiences, suggesting collaboration with existing music education institutions:

Network, to affiliate a music school with the higher music education institution and then all student teachers would have to teach at least one day per week, starting from the fourth semester, but this would have to be regularly supervised.

Reflective teaching practice. In group seminars, student teachers could simulate teaching situations or demonstrate teaching for discussion. These seminars provided an environment, where they could practice to be in the supervisors role, and learn to give feedback. The individual sessions and the group discussions, both contributed to the establishment of reflective teaching practice and routine, which seemed to be one of the core aspects of expertise development. One teacher educator described the learning-to-teach-process as follows: "Actually, it is scrutinizing what one has done, asking what other options would have been available, what went wrong, [...] what was the reason, what other alternatives would have been possible." Participants of both countries expressed that the introduction of reflective practices could help the student teachers to develop a self-reflective habit of life-long learning in professional life.

Starter kit. Apart from the reflective practice initiation, teacher educators also indicated that the program should support students to start working as professionals. In some recounts it emerged that novice teachers do not have the experience or expertise of more experienced professionals, especially in terms of making quickly the right decisions, reacting to unforeseen situations, or overviewing the long-term development of piano students. There seems to be a whole scale of elements of good teaching, beginning from appropriately communicating learning content to supporting the development of an individual personality. For the starting period as novice teacher it seems therefore helpful to have some sort of framework or knowledge base to relate to, to refer to, and to build upon. One Finnish teacher educator illustrated this idea with the following statement:

And as I have 35 years of teaching experience, it's kind of normal that probably my tool kit is a bit bigger than theirs. So, this is maybe the theme, that I have a tool kit, and that I would like them to build their own by having the necessary ones, the ones everybody has to have, and then they will add more of their own tools.

One German participant had even two different ways of illustrating this framework reference, pointing out that the way of employing the framework is crucial, and that only there teaching expertise would become perceivable:

What is necessary background knowledge should be conveyed to the students. I think, one needs a certain net, where one knows "I should not fall through there". However, this is by far not everything ... and maybe not the name of the game. [...] But basically only some kind of security net, and in reality you try to balance on the rope.

The pharmacist also needs to have endless different medications, ... but then it is important to understand what and how much is needed now.

Modeling. Initiating the reflective practice seemed to be a very student centered approach to learning, however, it appeared that modeling for student teachers seemed as important. One could say that teacher educators tried to model good reflective practice. One Finnish teacher educator told about how modeling could be part of the seminars, reinforcing reflective practice skills:

I put myself into this observation situation, they take notes, and then we discuss about it, and then I can explain why I did it like this, why I didn't do that. It doesn't mean that my way is the only way.

The German piano teacher, who was not lecturing in the teacher education program, but taught student teachers in piano, demonstrated a strong master-apprentice-model by confessing that in his opinion he educated

piano teachers through teaching them, of course not through teaching how to teach, but through just doing it, [so] that the students can copy things. And sometimes I comment, why I say something now in this way, or why I did it in the past, or didn't want it at another time.

Modeling seemed to be understood as providing examples and possibilities, not as authoritarian instruction. The Finnish student teacher, for example, relativized the act of copying by commenting:

[E]ven when you try to copy from somebody else, you make your own interpretations. You might not fully understand what the intention of the other teacher was. So, even though you copy from somebody else, you probably bring also something own into it as well.

Student-centered. Teacher educators in both cases also clearly stated that it is important to build on the knowledge of student teachers and work with them, as one Finnish teacher educator told: "I try to understand what they know, and then I work with them to kind of improve that. Because it is of no use if I tell them things they already know, we need to get a little bit further." The whole structure of the German piano teacher education program of first building a more general foundation and then providing the opportunity to develop an individual profile through choosing among elective courses according to own interest reflects this student-centered approach. The German teacher educator even stated that how he designed one of his courses for extended piano pedagogy would probably not be found in any course description, because it was closely adapted to the student teachers' interests and needs.

Skill diversity. As part of developing professional teaching skills the heads of pedagogical programs declared the necessity to gather skills around the main subject, which on one hand should be individually profile based on the student teachers' own interests and capabilities, and on the other hand should be provided through informative and inspirational settings. The German participant explained: "[D]uring the studies they should not sit all day at the piano and practice, but should get manifold impulses, and develop themselves in different directions." The Finnish participant reasoned this approach out with the connection to the professional world, and how higher music education students want and should benefit from the variety of experiences in the professional world. In one of the courses in the Finnish program, several invited professional externs shared their biographies and experiences in working life with student teachers, to provide them different perspectives, orientation, and a variety of ideas.

4.3.2. Teacher identity development. One of the major issues in music instrument teacher education seemed to be the conflict arising through the actual need of developing expertise in two areas at the same time, the artistic piano performance skills and the teaching skills. Participants in both countries indicated that in the beginning of the studies, student teachers were focusing more on their own artistic performance development than on the teaching skills development. This tendency was notable even in the separated German performance and education program. One Finnish participant pointed out, that teaching skills are necessary or at least helpful for every musician, even the most successful ones. "Still, the main profession is to teach, more or less, with children or with adults, in some universities, or master classes – all need pedagogical

skills." The development of teaching skills, nevertheless, has to start early as it also requires a lot of time. The transformation from student to teacher seemed to go hand in hand with conceptual change about knowledge. One Finnish teacher educator pointed out this change.

What is important is that as teachers, they need to be able to produce knowledge, not just learn themselves, and I think that is a quite big thing for many, especially when they start [...]. [T] his is the first situation when they need [...] to explain to others. This is usually quite a big change in the state of mind.

One participant also described the importance for student teachers to understand that one's own music learning biography might be privileged, quite rare, and very different compared to the learning situation of one's future students. The student teachers themselves very likely had exceptional talent and favorable conditions, such as supportive parents, and might have had piano playing as a priority in their lives. The average student does not have these features.

I think, student piano teachers need to learn that their experiences are not similar to the ones of their future piano students. [...] I believe that it is a real process for every student teacher to learn this when they start teaching, and not become frustrated.

Interestingly, most German participants mentioned that being a good teacher is dependent on the personality, in some way a predetermination, and cannot necessarily be learned, or only through difficult processes. The music school principal recounted that in job applications the minutes before the actual teaching demonstration, when teacher and student meet the first time and unpack before the lesson, these minutes might more likely reveal whether one is a good teacher or not. "And either you have it or you don't. Or you have to become aware of it, so that you can get it. [...] I do believe that one can learn it, but one needs to want to learn it." Another teacher educator stated that not all competencies, which a good piano teacher would need, could be learned, and that missing relationship competences were mostly the reason why piano tuition would fail. In contrast, the Finnish participants, who also emphasized the human quality of a teacher, seemed not to question whether this was something that could be learned or not.

[...] somehow the humanity, which I think is so important. If you don't have it, if you are only mechanical, if you are not deeply there at the moment together with

your pupil, if your heart is not with your work, the teaching process is not complete or perfect.

This statement leads to two more aspects that seemed to be relevant in teacher identity development: the inspiration for teaching, and the responsibility awareness. In both countries teacher educators highlighted the importance of inspiration to work as a teacher, the inspiration when teaching, and the need to inspire students. For example, one Finnish participant explained what she loves most about her profession:

[...] to see how they grow, and how they ..., they get the inspiration. One of my mottos is that inspiration is contagious, that once the teacher is inspired and motivated about what he is doing, or she is doing, then the students are getting the same.

A German participant formulated his passion for the teaching profession, and how he felt the need to convince student teachers: "I actually try to advertise this profession a lot. [...] How important, and exciting, and diverse this profession can be – some do not yet understand this, but this is a concern of mine." One Finnish participant mentioned in addition that it is very important to have influence on the profession and to really appreciate the work one is doing: "If you copy something else, but it's not coming from your own heart, you are not so deeply connected to that. You don't like your profession, if you can't influence what you are doing." Another Finnish participant expressed that student teachers should understand themselves as representatives and ambassadors of the art, and how teaching is in his opinion a form of art.

[T]hey need to understand [...] that they are representatives of our artistic piano playing. And wherever they work afterwards, [...] they are kind of ... the light there, and it's their responsibility to not only teach half an hour a student or pupil and then another half an hour, but work actively in the music school and do their artistic work. [...] [I]t's a much bigger thing than just sitting in the classroom and teaching.

What makes one a good teacher? Devotion [...] ... devotion to the art, but also to the student. [...] So, they also need to understand, that's part of the profession, the devotion. And that's why I always tell them ... teaching is artistic work, it's one form of artistic work, it's one form of working as an artist. The medium is different than just our own instrument and [the] stage and the concert hall, but it is still the thing.

4.3.3. Summary of professional skills and teacher identity development. All in all, it seems crucial to consider the learning developments of student teachers when designing teacher education programs, as two expertise developments could compete with each other. Extremely important for the development of teaching skills seemed practical experience and the establishment of reflective practice. Participants were in unison about that individual supervision and feedback, combined with developing effective self-reflection habits, was the most favorable approach to start the lifelong learning process of a teachers profession. Outstanding was also the conceptual change that has to happen during the study program, the change of a student's mindset into a teacher's mindset. Of special concern was here to learn, to understand, and to take on the responsibility one has as a piano teacher. The responsibility towards piano students to develop their musical skills, life skills and personal identity, but also towards the arts, as an ambassador and representative of the arts.

5. Discussion

All in all, the findings of this study seem concurrent with study results of existing research, such as the development of teacher identity in performers (for example: Bennett, 2009b; Bennett & Stanberg, 2006; Garnett, 2014; Maccarelli Slawsky, 2011; Mark, 1998; Mills, 2004), the contextualization and continuity in teacher education (for example: Ballantyne, 2007; Korthagen et al., 2006), and the development of reflective practice for a teacher's lifelong learning (for example: Elgersma, 2012; Korthagen et al., 2001; Shulman & Shulman, 2004). There are several different aspects for discussion, and the following relates these aspects to the teacher education program features of the two cases. The remainder of this section presents pedagogical implications, clarifies limitations, and suggests ideas for further studies.

5.1. The teacher education programs in relation to different aspects

The following discusses first, how the programs take into account the professional skills and teacher identity development of student teachers. Second, it examines the parallels and differences of music instrument teacher education compared to classroom teacher education. Third, it explores how the competences and roles for music instrument teachers presented by the Polifonia working group are reflected in the piano teacher education programs, and fourth, how the programs deal with the uncertainty of the future working environment and requirements. Finally, it considers the elements of teacher education programs that comply with policy developments.

5.1.1. Performer and teacher education in conflict. Most participating teacher educators in this study mentioned the importance of high level piano performance skills for future teachers. On one hand, these skills are valued as substantial professional subject knowledge, on the other hand, they motivate and inspire future piano students. Valuing these skills also stands for accepting the performer identity as an essential part of the teacher personality. However, as teaching is believed to be the main income generating activity of pianists, it is crucial to also develop professional pedagogical knowledge. These findings are concurrent with findings of Juntunen (2014). As a consequence, teacher educators and student teachers struggle alike with the arising conflict of developing expertise in two domains at the same time. In addition to this constraint, the attitude of beginning tertiary music instrument students towards the teaching profession seems predominantly reserved, similar to the observation in Bennett

and Standberg's study (2006). The German higher music education institution attempted to tackle this issue by offering a separate study line, for which a pedagogical admission test was established, for the purpose of avoiding the strong competition with international applicants. This separating structure allows for recruiting those tertiary piano students who already envision and plan to work as teachers. This view of building on already existing minimal teacher identity is in agreement with suggestions of Haston and Russell (2012). However, it disregards the possibility of teacher identity development in performing students by limiting their opportunities. The separation of tertiary music students at the beginning might even miss the chance of collaboration between the fields of art and education, and the opportunity to initiate and inspire teacher identity development. In contrast, the Finnish higher education institution did not separate tertiary music students at the beginning, acknowledged the initial resistance of performing students, and responded with concrete and intensive practical experiences at an early stage. Participants believed that, based on their experiences, student teachers would notice the benefits of teaching practice for their own performing skills, and become amenable for also developing their pedagogical skills through more intensified theoretical learning. The study of Bennett and Stanberg (2006) in a multidisciplinary combined introductory education unit demonstrated that positive teaching experiences in collaborative learning environments had a favorable impact on engagement with teaching as career option. The creation of collaborative learning environments, bringing performance and pedagogy students of different instruments actively together, could therefore provide an exciting arena to inspire all tertiary music students for teaching in their portfolio careers, convince them of the benefits for their performer identity, and initiate a disposition for collaboration between arts and education, like it is proposed in arts and music education policies.

Considering the time factor in the development of performance and teaching skills, it seems worth thinking about the extension of teacher education offers to established musicians and performers in form of further education options or short-term intensive programs. Darling-Hammond (2000) also reported the pressure of inadequate time to develop content and pedagogical knowledge in traditional school teacher training programs. Although performer and teacher identity development might nurture each other, and it seems logical to initiate the development processes for both identities at the same time, individual differences can be expected. It seems therefore restrictive to only offer programs that force the development at the same time. Some will argue that more than an initiation and temporary accompaniment of these developments cannot be

expected from a higher music education institution anyway. However, it could be worth extending teacher training offers, either during existing study programs, or through increased accessibility for externs, as it would ultimately lead to higher teaching quality, and a higher acceptance of the teaching profession among musicians, with probably improved musical practice results for music instrument learners. Furthermore, as reflective practice is seen inherent of the profession, music instrument teacher education might need to consider once more to open and soften structures to make it possible for practicing piano teachers to always develop their skills further. The quality of reflective practice certainly can develop during professional life, and the exchange with the academic world would have beneficial effects. Thus the discourse with scholars should not remain in conferences and exclusively among those being able to afford the travel, but could be made accessible in local contexts and result in a better collaboration between higher music education institutions and professional working life.

5.1.2. Learning from general teacher education. Both cases of piano teacher education presented differences in the way theoretical studies were embedded in the program. In Germany, student teachers started with broad theoretical foundations to inform practical and further specialized theoretical studies later in the program structure. In Finland, the supervised practical experiences formed the basis of teacher education, deducting within the courses from and later building on these experiences to study more comprehensive theory. In both cases of piano teacher education, the initiation of reflective practice in teaching seemed to be a major goal. For this purpose, the program approach of building theoretical knowledge on practical experiences represented this reflective practice of teaching, and seems therefore more suitable for modeling (Korthagen et al., 2006). Experiencing the structure of reflective practice on this macro level provides an example for further independent studies when it comes to individual profile development and the adoption of lifelong learning habits.

The importance of reflective practice and lifelong learning behavior is widely acknowledged in the teaching profession. Unfortunately, the organization of professional development structures and offers in the field of music instrument teaching seems far behind compared to existing structures and offers in general teacher education, especially in Finland. Teacher educators in both cases of this study pointed out the necessity of further education after graduation, the limited opportunities, and the lacking quality assurance of current offers. Participants agreed that the responsibility for further professional development must come first from the professionals themselves,

however, they also underlined the two contrasting attitudes of willingness to participate in further education or not. This seems to be an important factor to consider and to react to. Music school principals could initiate the professional development of their staff, or even could make further education obligations an element of employment contracts. As there is a substantial part of music instrument teachers working as freelancers, who would not fall under such contracted professional development regulations, these selfemployed teachers could eventually be certified or accredited by associations or higher music education institutions for further education activities. Nevertheless, as the aims for professional development could be extremely versatile, it might be difficult to define the quality of further education offers. However, it was suggested from teacher educators in both cases that the offers could be provided at higher music education institutions. It seems therefore worthwhile thinking about the role each higher music education institution wants to play in further education. Establishing structures for continuous professional development might not only have pedagogical impact on music instrument student learning, but also could be discussed as a source of income for these education institutions.

Korthagen et al. (2001) provided suggestions for teacher educators how to create learning environments with different levels of difficulty and authenticity, to gradually support the development of teaching skills and reflective practice skills. To support the development of teaching skills in student teachers in music instrument teacher education, it seemed important for teacher educators to provide safe learning environments especially for practical experiences. Participants of this study mentioned simulations, peer teaching, individual student teaching under supervision, teaching presentations in groups, the responsibility for students for a longer period of time, and block-teaching of students under supervision. This already gives an impressive list of divers learning environments, but still seems to leave a gap between higher music education learning and the real life situation. The time of transitioning into working life, like an induction period, which is so much more supported and studied in school teacher education than in music instrument teacher education, should eventually get more attention from higher music education institutions and scholars. The models and concepts of introducing student teachers into professional life vary and include internships, practicums, and mentoring programs. School teacher education institutions benefit here greatly from co-operations with practice schools. Piano teacher educators in Germany mentioned the wish to build such a practice school, where student teachers would get real life experiences. Finnish educators seemed very content with being able

to work with the practice school system, however, the student teacher mentioned that only one practice student was not so realistic either. Creating varied learning environments for practical experiences that increase in authenticity could support student teachers' learning, build confidence, and facilitate the transition into working life (Haston & Russell, 2012). A conceivable bridging scenario into professional independence could be the undertaking of responsibility for a couple of piano students, teaching an afternoon per week for a prolonged period of time under varying degrees of supervision.

5.1.3. Developing competences and awareness of roles. The set of competences and roles of music instrument teachers (see figure 1 on p.14) identified by the Polifonia working group (AEC, 2010; Lennon & Reed, 2012) seems to comply with what study participants described as desirable competences. Teacher educators and student teachers in both countries agreed that the teacher has a role as performer or artist, as communicator and pedagogue, and as reflective practitioner, responsible for his or her own professional growth. The competences of a planner and organizer in terms of setting objectives, monitoring and evaluating learning and teaching were mentioned only by teacher educators. This difference between participants could be due to the amount of professional practice experience. The two remaining roles of facilitating learning environments and advocating in schools, community and society were also pointed out by teacher educators, and emphasized by those with the responsibility for the pedagogical program structure. It seems that these identified roles are commonly accepted, nevertheless, each higher music education institution needs to find own strategies and measures to develop these required and targeted competences in their student teachers. Because the interview questions of this study remained fairly broad, it proved difficult to identify how teacher educators intended to develop the specific competences for the different roles envisioned for piano teachers. However, the development of competences to adopt the roles of a performer, pedagogue, reflective practitioner, and planner and organizer seemed very well supported by the piano teacher education programs in the two cases, mainly through the performance training, the piano pedagogy courses with the practical training, individual feedback on performing and teaching activities, and intensified theoretical studies in pedagogical sciences. The development of competencies to adopt the roles of a facilitator of learning environments, and of an advocate, networker and collaborator, could maybe get more support. Group project work, co-operations with schools and kindergartens, and the

option to plan, realize and reflect on a project for thesis work, seem to be steps into this direction. The Finnish student teacher expressed appreciation for experiencing team-teaching in an environment that was not piano-performance based. The German student teacher also appreciated the classroom experience, although clearly expressed initial demurs about the usefulness of these experiences for her professional career. It might be necessary to actively work and openly discuss with students their professional perspectives and possibilities and support the development of a vision as suggested by Ferm Thorgersen et al. (2015). Then they might develop deeper understanding for the initiatives of teacher educators, their own learning trajectories within the program, and thus might be able to harvest all benefits the program has to offer.

5.1.4. Dealing with the uncertainty of the future. Teacher educators in both cases mentioned that although it was necessary to have the labor market in mind for educating future teachers, it seemed to be clear for them that the higher music education institution should signal core values that are independent of working life situations. The ability to cope in changing market situations was more understood as to set high standards for oneself, and to believe in one's own work by being able to influence it. Essential parts of this core building would be the development of reflective practice, and the development of generic skills. Here again, it could be useful to support the development of a professional vision in student teachers as described by Ferm Thorgersen et al. (2015). In order to support students to transition into the professional world, it might be helpful to create tasks, projects or courses that would force students to think about their future. Carey and Lebler (2012) described in their case of Bachelor of Music reform the introduction of a new series of courses that span over four years, and impart useful knowledge and skills for study and professional life. Included in the compilation of a professional portfolio at the end of the courses would be a realistic plan on activities and income for five years after graduation. Such activities could not only facilitate the transition for students into the professional world, but would set examples of how to continue and develop during professional career.

5.1.5. Music education policies for orientation. In both cases, very high motivation and sincere endeavors of teacher educators were notable to provide and develop excellent teacher qualification alongside with excellent artistic training. The recommendation of the Bonn Declaration (EMC, 2011) of including compulsory pedagogical training in professional music studies therefore seems almost redundant for these higher music education institutions, and should be explicitly directed to providers

of funding. Teacher educators in both cases mentioned financial limitations, however, there also was acceptance for the overall economic situation perceptible.

In the Finnish case, the teacher training was only partly compulsory, however, it seemed that most higher education piano students chose to complete the teacher qualification. In the German case, the higher music education institution provided minimal pedagogical training for all higher education piano students, and offered a specific performance and education study program. None of these cases, provided an opportunity for teacher qualification after graduation. In the light of the mentioned policy recommendations about availability of pedagogical training for artists, educators and communities (UNESCO, 2010, 2.b), this is a limitation that could be addressed by both institutions. Together with addressing this issue, considerations about the role of higher music education institutions in providing continuous professional development (EMC, 2011) for music instrument teachers would be practicable.

The Bonn Declaration also recommends the development of cross-curricular projects such as interdisciplinary arts experiences or co-operation with non-artistic disciplines (EMC, 2011, p.2). In the Finnish case, as some of the teacher qualification courses were organized together with higher education students from other art disciplines, this co-operation between institutions could lay the foundation for future artists' and educators' collaboration. In the German case, the compulsory course about co-operations with schools and kindergartens, created the awareness for collaborative work between and with formal institutions. These approaches are good starting points, nevertheless, they could be expanded, for example through increased practical experiences or portfolio work.

On one hand, music education policies could build the framework for curriculum design and development at higher music education institutions, on the other, they also could be subject to study for student teachers, to help them build their vision of educational practice (Ferm Thorgersen et al., 2015; Shulman & Shulman, 2004), and to support their teacher identity development. Teacher educators in Finland and Germany pointed out that future piano teachers should have knowledge about cultural-political developments. This knowledge could encompass broader arts education policies, specific music curricula or programs, awareness of cultural-political decision organs and processes, and understanding of funding and support structures. Being knowledgeable in these areas could increase confidence and security in working life at music schools and in self-employment, strengthen cultural-political engagement, and

contribute to raising the status of music instrument teachers. Observing relevant policy developments therefore could support reflective practice, and be one important aspect of lifelong learning habits.

5.2. Pedagogical implications

To complement the master-apprentice model in music instrument teaching, which still prevails (Daniel & Parkes, 2015; Maccarelli Slawsky, 2011), and seems to be reproduced through higher music education institutions, it appears absolutely necessary to strengthen the pedagogical training of performers, so that the elitist and isolated status of musicians might soften and open up, like several policies suggest. The present study also found that there is a tendency towards the one-to-one-teaching model, even in the context of learning how to teach. When it is suggested to include a wider variety of learning environments into the education of teachers in order to be prepared for working life, the intention is not to doubt the effectiveness of individual teaching and supervision, or to diminish the importance of this learning environment. However, in order to become agents of change, future piano teachers need to be exposed to group teaching that is not only restricted to the piano. They need to experience team teaching, peer learning, project initiation and realization that go beyond classical structures. Providing these learning environments to student teachers, might incline them to create those learning environments also for their piano students (see for example: Korthagen et al., 2006). Rudiments of this wider approach to teaching were showing in both cases, but Finland seemed to provide more practical experience opportunities embedded already in the teacher qualification. Still, there is ample room for innovation and improvement; many projects, course offers, and topics for processing are conceivable that could be included in teacher training, and would have an impact on teaching qualifications of performers and musicians, on their career satisfaction and success, and ultimately on piano students' learning. Surely, the time conflict of performer and teacher identity will rise again, and could spoil any attempt of including great ideas. It seems therefore imperative to start thinking about resolving this dilemma by overcoming traditional frameworks and structures. Most obvious seems the need for appropriate professional development structures for performers and experienced teachers. Then, an enhanced exchange between scientific research and practitioners seems mandatory, which means that educational faculties and artistic faculties would need to network beyond their current channels to bring the state-of-the-art knowledge directly to those, who will and are working with music instrument students. Intensified cooperation

between higher music education, local music institutions, and teaching practitioners could lead to the creation of more authentic learning contexts for student teachers, and incidentally support novice teachers in the beginning of their professional career. The responsibility for the implementation of these implications would ideally be shared between all stakeholders, such as higher music education institutions, professional associations, local music institutions, and industries. However, the initiative for such collaborative learning communities might be best supported when directed from scholars, who should be able to provide guidance in the complexity of this venture.

5.3. Limitations

Due to time and resource restraints, this study is only based on interview data collected on single occasions with the opportunity for participants to add comments and further thoughts to the transcripts. Additional observations, follow-up interviews, and research of curricular documents could have complemented the data collection, and would have contributed to a more comprehensive representation of the two cases. Because the present study had a very broad approach, there was a richness of data with limitations to depth. For example, a focus on the mentioned music education policies, or on the competences and roles presented by the Polifonia working group, and their reflection in piano teacher education programs could have resulted in much more specific interview questions and vigorous findings. In addition, the study was subject to threat of researcher's bias, as the researcher had strong opinions on the piano teaching profession based on personal experiences in tertiary education and working in the professional world, in music schools and as freelancer. However, this specific knowledge and experience might have contributed to yield factors in piano teacher education that more distant researchers would not have noticed as relevant. Apart from this beneficial aspect, most other researchers in this field have similar backgrounds, taking divers measures to increase validity. For the present study, these measures had been firstly a review of the literature, revealing the growing interest and relevancy in music instrument teacher education, and identifying concurrent themes and developments; secondly, careful ethical researcher's conduct; and thirdly, the employment of member checking, inter-rater coding, and discussion of methodological issues with impartial colleagues and mentors. This study had a limited focus on piano teacher education at higher music education institutions of only two cases in different countries, nevertheless, the pedagogical implications and suggestions for further research are

concerning music instrument teacher education in general. Whether these inferences are applicable in other cases depends on the reader's assessment.

5.4. Suggestions for future research

Any further study of music instrument teacher education in different cultural and institutional contexts would strengthen the academic research in the field. There might be differences in regard to the music instrument in question as suggested by Ferm Thorgersen et al (2015), differences in regard to the higher music education institution, and differences in regard to the cultural context. The following suggests only ideas that are in consequence of the present study.

Apparently, pedagogical training for music instrument teacher educators is limited. More studies about music instrument teacher education would contribute to the building of a comprehensive pedagogy for educators, and could inform curriculum developers at higher music education institutions. These studies could concentrate, for example, on effects of specific learning environments on student teachers' learning, or on how teacher educators build and share their expertise. In the light of the current labor market situation, it also would be very informative to study the transition of music instrument student teachers from higher music education institution into working life at music schools or as freelancers. A longitudinal study would describe their experiences, and could reveal the flaws, but also the strengths of their teacher education. These findings in turn could again inform teacher educators and curriculum developers. Initial teacher training is essential, however, this study yielded the importance of further education during professional life. Further research of the behavior and views of novice and more experienced music instrument teachers in regard to professional development might advise higher music education institutions and further education providers alike. Ultimately, the effect of teacher education on the learning and musical practice of music instrument students, how ever challenging it might be to measure, could be the best consultant.

6. Conclusion

This study explored piano teacher education programs in two cases at higher music education institutions in Finland and Germany through interviewing knowledgeable agents, namely the head of programs, piano teacher educators, other lecturers of the program, and student teachers. The findings of content analyses were grouped in three major themes: (1) information about the program structure, program content, learning environments, and the process of program development; (2) views about the professional life, the working environment, resulting working requirements, and further education; and (3) the student teachers' professional skills and teacher identity development. These findings were discussed relating teacher education program features to different aspects, namely the conflict between performer and teacher identity development, the research in general teacher education, the development of competences, the uncertainty of the future, and existing music education policies. Bearing in mind the individual developments of higher music education students during their studies and later in their likely protean careers, pedagogical implications emphasized the interlocking of teacher education with professional life for providing extended practical teaching experiences, and for developing structures for continuous further education. Benefiting from the fund of research in general teacher education and from various experiences of different existing programs and offers, music instrument teacher education does not have to reinvent the wheel. After all, this study underlines once more the need for intensified networking and exchange within and between higher music education institutions, as well as with all stakeholders on local, national, and international level to empower the development of music instrument teacher education, which could ultimately lead to revitalized high standards of broad musical practice.

References

- AEC (2010). Handbook: Instrumental and vocal teacher education: European perspectives. Polifonia working group for instrumental and vocal music teacher training. Utrecht: Association Européenne des Conservatoires, Académies de Musiques et Musikhochschulen. http://www.polifonia-tn.org.
- Ballantyne, J. (2007). Integration, contextualization and continuity: three themes for the development of effective music teacher education programmes. *International Journal of Music Education*, *25*(2), 119-136. doi:10.1177/0255761407079955
- Barnett, R. (2009). Knowing and becoming in the higher education curriculum. *Studies in Higher Education*, *34*(4), 429-440. doi:10.1080/03075070902771978
- Bauer, W. I., & Berg, M. H. (2001). Influences on instrumental music teaching. *Bulletin of the Council for Research in Music Education*, (150), 53-66.
- Bennett, D. (2009a). Academy and the Real World Developing realistic notions of career in the performing arts. *Arts and Humanities in Higher Education*, 8(3), 309-327. doi:10.1177/1474022209339953
- Bennett, D. (2009b). Developing teacher identity among music performance students. In *The XXXIst ANZARME Annual Conference and the 1st Conference of the Music Educators Research Centre (MERC) Music Education Research Conference, Jul 3 2009, Akaroa, New Zealand: Monash University.* Retrieved from http://espace.library.curtin.edu.au/R?func=dbin-jump-full&local_base=gen01-era02&object_id=133595
- Bennett, D., & Stanberg, A. (2006). Musicians as teachers: developing a positive view through collaborative learning partnerships. *International Journal of Music Education*, 24(3), 219-230. doi:10.1177/0255761406069646
- Carey, G. & Lebler, C. (2012). Reforming a Bachelor of Music programme: A case study. *International Journal of Music Education*, 30(4), 312-327. doi:10.1177/0255761412459160
- Christensen, S. E. (2010). Practicing strategically: The difference between knowledge and action in two eighth-grade students' independent instrumental practice. *UPDATE: Applications of Research in Music Education, 29*(1), 22-32. doi:10.1177/8755123310377924

- Creech, A. & Hallam, S. (2003). Parent-teacher-pupil interactions in instrumental music tuition: A literature review. *British Journal of Music Education*, 20(1), 29-44. doi:10.1017/S0265051702005272
- Creech, A. & Hallam, S. (2011). Learning a musical instrument: The influence of interpersonal interaction on outcomes for school-aged pupils. *Psychology of Music*, *39*(1), 102-122. doi:10.1177/0305735610370222
- Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, E., Potter, J., ... & Welch, G. (2008). From music student to professional: The process of transition. *British Journal of Music Education*, *25*(3), 315-331. doi:10.1017/S0265051708008127
- Daniel, R., & Parkes, K. (2015). The Apprentice to Master Journey: Exploring Tertiary Music Instrument Teachers' Reflections on Their Experiences as Learner. *Journal of Arts and Humanities*, 4(3), 52-63.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of teacher education*, *51*(3), 166-173. doi:10.1177/0022487100051003002
- DeCuir-Gunby, J. T., Marshall, P. L., & McCulloch, A. W. (2011). Developing and using a codebook for the analysis of interview data: an example from a professional development research project. *Field Methods*, *23*(2), 136-155. doi:10.1177/1525822X10388468
- Dudt, S. (2012). From Seoul to Bonn: a journey through international and European music education policies. In C. Harrison & S. Hennessy (Eds.), *Listen Out: International Perspectives on Music Education* (pp. 126-137). Retrieved from http://www.emc-imc.org/cultural-policy/music-education/international-andeuropean-music-education-policies/
- Elgersma, K. (2012). First year teacher of first year teachers: A reflection on teacher training in the field of piano pedagogy. *International Journal of Music Education*, 30(4), 409-424. doi:10.1177/0255761412462970
- EMC (2011). *Bonn Declaration*. Bonn: European Music Council. Retrieved from http://www.emc-imc.org/cultural-policy/music-education/bonn-declaration/
- Ferm Thorgersen, C., Johansen, G., & Juntunen, M. L. (2015). Music teacher educators' visions of music teacher preparation in Finland, Norway and Sweden. *International Journal of Music Education*. Published online before print June 29, 2015. doi:10.1177/0255761415584300.

- Fernández González, M. J. (2012). How students learn to teach? A case study of instrumental lessons given by Latvian undergraduate performer students without prior teacher training. *Music Education Research*, *14*(2), 227-242. doi:10.1080/14613808.2012.685455
- Fitzpatrick, K. R. (2011). A mixed methods portrait of urban instrumental music teaching. *Journal of Research in Music Education*, *59*(3), 229-256. doi:10.1177/0022429411414912
- Garnett, J. (2014). Musician and teacher: employability and identity. *Music Education Research*, *16*(2), 127-143. doi:10.1080/14613808.2013.847073
- Gillham, B. (2005). *Research Interviewing: The Range of Techniques*. Berkshire, GBR: McGraw-Hill Professional Publishing. Retrieved from http://www.ebrary.com
- Göktürk, D. (2010). Current status of string teacher education at university music teacher training schools in Turkey. *International Journal of Music Education*, 28(2), 176-192. doi:10.1177/0255761410363550
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012a). Planning and Preparing the Analysis. *Applied thematic analysis* (pp. 21-49). Thousand Oaks, Sage. doi:10.4135/9781483384436.n2
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012b). Validity and Reliability (Credibility and Dependability) in Qualitative Research and Data Analysis. *Applied thematic analysis* (pp. 79-107). Thousand Oaks, Sage. doi:10.4135/9781483384436.n4
- Haddon, E. (2009). Instrumental and vocal teaching: how do music students learn to teach?. *British Journal of Music Education*, *26*(01), 57-70. doi:10.1017/S0265051708008279
- Hallam, S. (2001). The development of expertise in young musicians: Strategy use, knowledge acquisition and individual diversity. *Music Education Research*, *3*(1), 7-23. doi:10.1080/14613800020029914
- Hallam, S., Rinta, T., Varvarigou, M., Creech, A., Papageorgi, I., Gomes, T.,
 Lanipekun, J. (2012). The development of practising strategies in young people.
 Psychology of Music, 40(5), 652-680. doi:10.1177/0305735612443868
- Haston, W., & Russell, J. A. (2012). Turning Into Teachers Influences of Authentic Context Learning Experiences on Occupational Identity Development of

- Preservice Music Teachers. *Journal of Research in Music Education*, *59*(4), 369-392. doi:10.1177/0022429411414716
- Holstein, J. A. & Gubrium, F. A. (2003). Transcription Quality. *Inside Interviewing* (pp. 267-288). Thousand Oaks, Sage. doi:10.4135/9781412984492.n13
- Isbell, D. S. (2008). Musicians and Teachers The Socialization and Occupational Identity of Preservice Music Teachers. *Journal of Research in Music Education*, *56*(2), 162-178. doi:10.1177/0022429408322853
- Juntunen, M. L. (2014). Teacher educators' visions of pedagogical training within instrumental higher music education. A case in Finland. *British Journal of Music Education*, *31*(02), 157-177. doi:10.1017/S0265051714000102
- Korthagen, F. A., Kessels, J., Koster, B., Lagerwerf, B., & Wubbels, T. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Routledge.
- Korthagen, F., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and teacher education*, 22(8), 1020-1041. doi:10.1016/j.tate.2006.04.022
- Kvale, S., & Brinkmann, S. (2009). Learning the craft of qualitative research interviewing. *Thousands Oaks: Sage Publications*.
- Lennon, M., & Reed, G. (2012). Instrumental and vocal teacher education: competences, roles and curricula. *Music Education Research*, *14*(3), 285-308. doi:10.1080/14613808.2012.685462
- Maccarelli Slawsky, M. (2011). Transitioning from student to teacher in the masterapprentice model of piano pedagogy: An exploratory study of challenges, solutions, resources, reflections, and suggestions for the future (Doctoral dissertation). Retrieved from http://scholarcommons.usf.edu
- Mark, D. (1998). The Music Teacher's Dilemma—Musician or Teacher?/Das Dilemma des Musiklehrers—Musiker oder Lehrer?. *International Journal of Music Education*, *32*(1), 3-23. doi:10.1177/025576149803200102
- McPherson, G. E. (2009). The role of parents in children's musical development. *Psychology of Music, 37*(1), 91-110. doi:10.1177/0305735607086049
- McPherson, G. E., & Davidson, J. W. (2002). Musical practice: Mother and child interactions during the first year of learning an instrument. *Music Education Research*, *4*(1), 141-156. doi:10.1080/14613800220119822

- McPherson, G. E., & Renwick, J. M. (2001). A longitudinal study of self-regulation in children's musical practice. *Music Education Research*, *3*(2), 169-186. doi:10.1080/14613800120089232
- Miksza, P. (2012). The development of a measure of self-regulated practice behavior for beginning and intermediate instrumental music students. *Journal of Research in Music Education*, *59*(4), 321-338. doi:10.1177/0022429411414717
- Mills, J. (2004). Conservatoire students as instrumental teachers. *Bulletin of the Council for Research in Music Education*, 145-153.
- Mills, J., & Smith, J. (2003). Teachers' beliefs about effective instrumental teaching in schools and higher education. *British Journal of Music Education*, 20(1), 5-27. doi:10.1017/S0265051702005260
- Nielsen, S. (2001). Self-regulating learning strategies in instrumental music practice. *Music Education Research*, *3*(2), 155-167. doi:10.1080/14613800120089223
- Northfield, J., & Gunstone, R. (1997). Teacher education as a process of developing teacher knowledge. In J. Loughran, & T. Russell (Eds.), *Teaching about teaching: Purpose, passion and pedagogy in teacher education* (pp. 48–56). London: Falmer Press.
- Partti, H., Westerlund, H., & Björk, C. (2013). Oppimiskäsitykset reflektiivisen musiikkikasvattajan toiminnan ohjaajina. In M.-L. Juntunen, H. M. Nikkanen, & H. Westerlund (Eds.), *Musiikkikasvattaja kohti reflektiivistä käytäntöä*.

 Jyväskylä: PS-kustannus (pp. 54-70). Retrieved from https://www.uniarts.fi/sites/default/files/MUKAesikarsinta_artikkeliFIN_2015.p
- Pitts, S., & Davidson, J. (2000). Developing effective practise strategies: Case studies of three young instrumentalists. *Music Education Research*, *2*(1), 45-56. doi:10.1080/14613800050004422
- Poland, B. D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative inquiry*, 1(3), 290-310. doi:10.1177/107780049500100302
- Purser, D. (2005). Performers as teachers: exploring the teaching approaches of instrumental teachers in conservatoires. *British Journal of Music Education*, 22(03), 287-298. doi:10.1017/S0265051705006546

- Schatt, M. D. (2011). High school instrumental music students' attitudes and beliefs regarding practice: An application of attribution theory. *UPDATE: Applications of Research in Music Education*, 29(2), 29-40. doi:10.1177/8755123310396981
- Schmidt, M. (2005). Preservice String Teachers' Lesson-Planning Processes An Exploratory Study. *Journal of Research in Music Education*, *53*(1), 6-25. doi:10.1177/002242940505300102
- Schmidt, M. (2013). Transition from student to teacher: Preservice teachers' beliefs and practices. *Journal of Music Teacher Education*, *23*(1), 27-49. doi:10.1177/1057083712469111
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard educational review*, *57*(1), 1-23.
- Shulman, L. S. (1998). Theory, practice, and the education of professionals. *The Elementary School Journal*, *98*(5), 511-526.
- Shulman, L. S., & Shulman, J. H. (2004). How and what teachers learn: A shifting perspective. *Journal of curriculum studies*, *36*(2), 257-271. doi:10.1080/0022027032000148298
- Stambaugh, L. A. (2011). When repetition isn't the best practice strategy: Effects of blocked and random practice schedules. *Journal of Research in Music Education*, *58*(4), 368-383. doi:10.1177/0022429410385945
- Triantafyllaki, A. (2005). A call for more instrumental music teaching research. *Music Education Research*, 7(3), 383-387. doi:10.1080/14613800500280535
- UNESCO (2006). *Road Map for Arts Education*. Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from http://www.unesco.org/new/en/culture/themes/creativity/arts-education/
- UNESCO (2010). Seoul Agenda: Goals for the Development of Arts Education. Paris: United Nations Educational, Scientific and Cultural Organization. Retrieved from http://www.unesco.org/new/en/culture/themes/creativity/arts-education/

APPENDIX A – Interview questions in English

I am interested in how universities prepare future piano teachers for their working life. I am particularly interested in how the learning of teaching is understood, and how it is taking place.

1. Please describe briefly your position and tasks at the higher music education institution!

What do you do in relation to the piano teacher training? How long have you been in this role?

2. Let us begin with the end in mind: What competences should a piano teacher have?

In addition to (...), what else do you think are areas a piano teacher should be competent in?

3. How is piano teacher training offered at X?

What kind of qualification do students get?
What are the criteria to get admitted to the piano teacher training?
For whom is it intended? Who is taking part in the teacher training? How many?

4. What are the special features of the teacher training at X?

What kinds of learning environments exist? How is teaching competence assessed? Tell me about special projects or collaborations?

5. What (do you think) are the principles/basic ideas behind this way of preparing future piano teachers?

How do students develop their teaching competence? What exactly is it that helps them to become good teachers?

6. How would you like to develop the teacher training?

What kind of (structural) changes should be made? What kind of courses should be included?

7. How does the teacher training program development happen?

What kind of evaluation takes place? Who has the responsibility? Who is included in the decision process?

8. What would you like to add to the topic of piano teacher training?

Although the interview has ended now, I would like to invite you to share with me your thoughts about the topic that you might have later. You could write me an email, for example, or you could add something to the transcript I will send you. Thank you very much for sharing your time and your valuable insights!

APPENDIX B – Interview questions in German

Ich interessiere mich dafür, wie Universitäten zukünftige Klavierlehrer für ihr Arbeitsleben ausbilden. Und im Besonderen interessiere ich mich dafür wie das Lernen des Lehrens verstanden wird und stattfindet.

1. Bitte beschreiben Sie kurz Ihre Stellung und Ihre Aufgaben an der Musikhochschule!

Was machen Sie in Verbindung mit der Klavierlehrerausbildung? Wie lange sind Sie schon in dieser Rolle?

2. Fangen wir mit dem Ende an: Welche Kompetenzen sollte ein Klavierlehrer haben?

Zusätzlich zu (...), was sollte ein Klavierlehrer sonst noch können?

3. Wie wird Klavierlehrerausbildung hier an der Hochschule angeboten?

Was für eine Qualifikation erhalten die Studenten? Was sind die Kriterien, um zu der Klavierlehrerausbildung zugelassen zu werden? Für wen ist dieser Studiengang bestimmt? Wer nimmt daran teil? Wie viele?

4. Was sind Ihrer Meinung nach die besonderen Merkmale der Klavierlehrerausbildung an der Musikhochschule?

Welche Arten von Lernumgebungen werden angeboten? Wie wird Lehrkompetenz festgestellt? Erzählen Sie mir von Projekten oder Kollaborationen!

5. Was (denken Sie) sind die Prinzipien/Grundideen die hinter dieser Lehrerausbildung stehen?

Wie entwickeln Studenten Lehrkompetenzen? Was genau ist es, was den Studenten hilft gute Lehrer zu werden?

6. Wie würden Sie die Lehrerausbildung weiter entwickeln?

Welche (strukturellen) Veränderungen schlagen Sie vor? Welche Kurse sollten mit dazu gehören?

7. Wie wird der Studiengang weiterentwickelt?

Welche Art von Evaluierung unterstützt den Prozeß? Wer hat die Verantwortung? Wer wird in den Entscheidungsprozeß mit einbezogen?

8. Was würden Sie noch zu dem Thema "Klavierlehrerausbildung" ansprechen wollen?

Obwohl wir das Interview jetzt hier beenden, möchte ich Sie einladen, Gedanken und Ideen, die Sie eventuell später noch dazu haben, gerne mit mir zu teilen. Sie können mir zum Beispiel eine Email schreiben, oder Sie können dem Transkript, das ich Ihnen zusenden werde, etwas hinzufügen.

Vielen Dank für Ihre Zeit und Ihre Einsichten!