Preparing student teachers to teach in diverse classrooms: A comparative case study of two teacher education programmes

Abstract
An increasing diversity in pupil populations poses new pedagogic and didactic demands on teacher educators and student teachers. Research on student teachers’ learning on campus indicates that teacher education programmes do not provide students with sufficient qualifications for teaching in diverse classrooms. Few studies look specifically into how campus programmes prepare student teachers for diverse classrooms. We provide insight into how student teachers are being prepared to teach in diverse classrooms by comparing two teacher education programmes in two European countries. Our research design is a comparative case study with a pattern-matching mode of analysis. We find that the two programmes have different approaches. One focuses on developing student teachers’ self-awareness by working with art and culture, the other focuses on effective methods for pupils’ learning. We claim that student teachers need to acquire competence both in Intercultural Education and in Differentiated Instruction, and that these two need to be merged in teacher education programmes. Training student teachers in self-awareness and intercultural sensitivity, as well as in developing strategies to differentiate their instruction, is of equal importance. Further research is necessary to find how student teachers can develop their professional agency for diversity on campus, and how this will reflect on their classroom practices.

Keywords: student teachers’ learning on campus, diversity, intercultural education, differentiated instruction

En komparativ casestudie av hvordan to lærerutdannings-program forbereder lærerstudenter til å undervise i et mangfoldig klasserom

Sammendrag
Et økende mangfold i elevpopulasjoner stiller nye pedagogiske og didaktiske krav til lærerutdannere og lærerstudenter. Forskning på lærerstudenter’s læring på campus indikerer at lærerutdanningsene ikke gir studentene tilstrekkelige kvalifikasjoner for å undervise i et mangfoldig klasserom. Det er få studier som ser spesielt på hvordan lærerutdanningen forbereder lærere til å undervise i et mangfoldig klasserom. Vi ønsker med denne studien å belyse hvordan lærerstudenter forberedes til å undervise i et
mangfoldig klasserom ved å sammenligne to lærerutdanningsprogrammer i to europeiske land. Vi bruker komparativ case-studie som metode i denne studien. Våre funn viser at de to programmene har forskjellige tilnæringer. Det ene fokuserer på å utvikle lærerstudenters selvbevissthet ved å arbeide med kunst og kultur, det andre fokuserer på effektive metoder for å sikre elevenes læring. I studien hevder vi at interkulturell undervisning og tilpasset opplæring og differensiering er to sider av samme sak og at disse to feltene må slås sammen i lærerutdanningen. Vi argumenterer for at lærerstudentene må få oppgaver som både kan utvikle selvbevissthet og interkulturell sensitivitet, samt utvikle strategier for differensiering og tilpasset opplæring. Videre forskning er nødvendig for å finne ut hvordan lærerstudenter kan utvikle profesjonell handlekompetanse for mangfold på campus, og videre hvordan dette reflekteres i praksis.

Nøkkelord: lærerstudenters læring på campus, mangfold, interkulturell opplæring, tilpasset opplæring, differensiert undervisning

Introduction

A growing number of pupils with diverse cultural, ethnic, religious, linguistic and learning backgrounds represent new challenges to the education sectors in European countries. This diversity poses new pedagogic and didactic demands for teachers, teacher educators and student teachers. Consequently, there is an increasing need to prepare future teachers for the competences necessary to respond to and manage evolving, diverse school environments (European Commission, 2017). Studies conducted on student teachers’ learning on campus indicate that teacher education programmes do not provide student teachers with sufficient qualifications to teach in diverse classrooms (e.g., Fosse, 2011; Cochran-Smith & Zeichner, 2005; Mitchell, 2017; NOKUT, 2013). Research also indicates that student teachers seem to learn instrumental tools for tackling complex classrooms and delivering curriculum (Fosse, 2016; Edwards, 2017). Despite what we know about how teachers’ beliefs and attitudes influence their choice of actions in the classroom and pupils’ learning (Beijaard et al., 2004; Fives et al., 2014; Hollins & Guzman, 2005), student teachers’ personal commitments and intentions are rarely topics of reflection and discussion in teacher education (Biøsta et al., 2015). We argue that this could be explained by the choices teacher educators make regarding what they think student teachers need to know and be able to do in diverse classrooms.

There are two areas of competence essential for teaching in diverse classrooms: differentiated instruction (DI) and intercultural education (IE). DI is defined as teacher responses to pupils’ diverse learning needs in mainstream classrooms (UNESCO, 2003; Valianides et al., 2018). IE is a dynamic concept that refers to evolving relationships between cultural groups (UNESCO, 2003; Valianides et al., 2018). The two concepts have lived separate lives in practice, research and frameworks (Valianides et al., 2018) but share a common philosophy
based on human rights and equity and should be discussed as an interrelated unit (UNESCO, 2003; Valiandes et al., 2018). Acknowledging DI and IE as two sides of the same coin will affect how teacher education programmes prepare student teachers for teaching in diverse classrooms.

Scant research has acknowledged IE and DI in this way when investigating how teacher education programmes (TEPs) prepare their student teachers (Gomez & Lachuk, 2017; Valiandes et al., 2018).

Our aim with this study is to provide insight into how two teacher education programmes in Europe, one in Greece and one in Norway, prepare their student teachers to teach in diverse classrooms, and, in what ways perspectives related to IE and DI influence these programs. Our research question is:

*What are the founding principles and learning objectives for preparing the student teachers for diverse classrooms, and what are the student teachers’ responses to these preparations?*

Both countries have a long history of a population made up of diverse groups of peoples. In this study we focus on the increase of complexities in classroom diversity due to the recent influx of immigrants to both countries. Our study is based on an Erasmus+ Mobility collaboration started in 2017, initiated by the leader of a Greek TEP (here called TEP-G) who invited us (the authors who work at a Norwegian TEP (here called TEP-N)) to visit TEP-G and lecture on varying topics for the student teachers there. TEP-G’s approach of art as a way of preparing students for teaching in diverse classrooms, inspired us to develop the comparative case study presented in this article.

TEP-G consists of two extra semesters to a subject-specific Bachelor’s degree programme, whereas TEP-N is a Master’s degree programme. The TEP-G curriculum has a pedagogic module, a module of didactic competence and a practicum. At TEP-G the students specialise in teaching mathematics and information-and-communications technology. The TEP-N curriculum also consists of a pedagogic module and a module of didactic competence, as well as a practicum. Here the students specialise in teaching languages, social sciences, natural sciences, and religion and ethics. Both programmes provide qualifications for teaching in lower and upper secondary schools.

**Theoretical framework: Professional agency**

Our theoretical framework draws on a sociocultural understanding of how student teachers construct knowledge. According to sociocultural theories, we construct knowledge based on the cultural tools available to us through participation in our environment (Vygotsky, 1978). Wells (1999) linked knowledge and understanding to a cyclical model that depicts four opportunities to construct knowledge in social situations:

Knowing starts with personal experience which, amplified by information, is transformed through knowledge building into understanding, where understanding is
constructed as knowing that is oriented to action of personal and social significance. (Wells, 1999, p. 85)

On their way to becoming professionals, student teachers construct knowledge related to teaching in diverse classrooms; their experience, knowledge construction and understanding all come into play. Wells’ cyclical model relates to developing professional agency, which is a central part of professional learning (Akkerman & Meijer, 2011; Beauchamp & Thomas, 2011; Edwards, 2017; Pantić, 2015; Toom et al., 2015). Professional agency is the capacity to observe pupils’ learning, to make and act upon informed choices based on these observations and to reflect on the results of the actions and learn from them (Edwards, 2017). There is a personal dimension to agency because agency relates to a person’s capacity to manifest and act upon his or her intention and commitment within a specific community (Edwards, 2017). Recognising agency as a dimension of an individual also involves recognising that personal commitment and agency are crucial elements of the learning required of professional teachers (Beauchamp & Thomas, 2011; Beijaard et al., 2004; Edwards, 2017). In teacher education, developing professional agency involves negotiating personal intentions, commitments and contextual demands.

Literature review

In this section, we present the fundamental guiding principles and research in the field of diversity and diversity-related concepts.

Intercultural education and differentiated instruction

IE and DI are both committed to a human rights education described by UNESCO as a child’s “right to receive the kind of education that does not discriminate on grounds of disability, ethnicity, religion, language, gender, capabilities and so on” (2003, p. 5). DI is currently conceptualised as teachers’ responses to the general diverse learning needs of pupils in mainstream classrooms (Fosse, 2011; Valiandes et al., 2018). The concept encompasses disability, advanced learners, and cultural and linguistic diversity. DI stems from the effective and ongoing assessment of learner needs, preparedness and motivation to use this information to differentiate content, process and product accordingly (Tomlinson & Allan, 2000). According to Valiandes et al. (2018), DI can promote “equity for all through quality of instruction” (p. 380).

IE and the concept of multicultural education are sometimes interpreted as synonymous. Our understanding is in line with UNESCO’s guidelines and Valiandes et al.’s (2018) interpretations. The UNESCO guidelines (2003) assert that the term multicultural describes the culturally diverse nature of human society, while interculturality is a dynamic concept that refers to evolving relationships between cultural groups. Where multicultural education emphasises
learning about other cultures to produce acceptance, or at least tolerance, of these cultures, IE goes beyond passive coexistence to achieve a sustainable way of living together in multicultural societies through the understanding of and respect for dialogue between cultural groups (UNESCO, 2003). According to UNESCO, the challenge for IE is to establish and maintain a balance between general guiding principles and the requirements of specific cultural contexts. Valiandes et al. (2018) claim that multiculturalism focuses on differences, while interculturalism “has an emancipatory and transforming character, as it questions the educational system” (p. 381). They claim that education needs to turn towards interculturalism because it tends to emphasise empathy, interaction and cultural change. Teachers operating within an intercultural mode apply critical thinking and decision-making skills; classroom discussions, dialogue and negotiation are important tools for intercultural awareness.

It is important to emphasise that DI and IE are interconnected competences for a professional teacher. We need teachers who can develop understanding through reflection and self-awareness, an understanding that should be reflected in a teacher’s ability to differentiate and adapt in diverse classrooms. This argument is in line with Zeichner’s (1993) review of the challenges of teacher education for diversity.

**What student teachers need to know and be able to do**

Zeichner’s (1993) review is from the US, where the challenges of educating teachers on diversity have been a topic of research for 60 years. In the review, diversity and diverse learners are related to social class, ethnicity, culture and language. According to Zeichner, student teachers and teachers need to learn about distinct cultures and re-examine their attitudes and values towards disparate ethnic groups. They also need to develop awareness of pupils with different experiences and perspectives, learn how to use knowledge of pupils’ backgrounds when preparing to teach and how to bridge the gap between the culture of a school and pupils’ homes. They also need to develop general sociocultural knowledge about child and adolescent development, as well as a variety of teaching strategies and practices, including how to involve parents and learning through field experiences; “and structured guided reflections about these experiences” (Zeichner, 1993, p. 22).

Zeichner’s findings show the relationship between DI and IE and the need for competences within both areas. An important competence highlighted in the review is that student teachers need to develop self-awareness of their own beliefs and attitudes, be able to develop equity, and adapt their teaching in diverse classrooms.

Research in the field of TE supports Zeichner’s findings on how student teachers’ training in intercultural sensitivity and awareness can shape their way of thinking and acting (Banks, 2014; Gomez & Lachuk, 2017; Rissanen et al., 2016). Researchers suggest creating “third spaces” in the community rather than
on campus, to foster students’ thinking and intercultural sensitivity (Gomez & Lachuk, 2017; Nieto, 1999). Nieto (1999) found that when student teachers guide pupils from various backgrounds and environments, in the pupils’ own context, they develop a more complex understanding of cultural distinctions.

There are several indications that case methodology also strengthens student teachers’ ability to think reflexively and to identify and analyse teaching and educational challenges (Børhaug & Hannes, 2020; Cochran-Smith & Zeichner, 2005; Nieto, 1999). Nieto (1999) discusses the necessity of culture-specific cases concerning students’ individual stories to build competence to teach in diverse classrooms; she warns against culture-specific information that is too general, which can nurture stereotypical attitudes, such as lower expectations and varying treatment of pupils. Nieto claims that discussions based on such cases can help student teachers reflect on and develop a better understanding of the complex manner and contexts in which pupils operate, and their responsibilities as teachers. Børhaug and Hannes (2020) argue that working with value dilemmas through cases in TE “can raise critical awareness of values and promote intercultural teaching competence” (p. 287).

Another level of influence on teacher education that merits commentary is policies. Several studies have described the ways policies influence teacher education programmes and what student teachers are expected to know and be able to do (Aasen, 2008; Sachs, 2016; Townsend & Bates, 2007). An example is that, due to low achievement scores in PISA tests and the changing global economy in the early 2000s, we were faced with performance cultures and increased accountability regimes (Sachs, 2016). This shifted the focus in teacher education from student teachers’ learning, to pupils’ learning (Cochran-Smith & Zeichner, 2005; Sachs, 2016). This may explain why teacher education tends to emphasise on providing effective tools for student teachers to deliver curricula, instead of developing the reflexive competence needed to teach in diverse classrooms (Fosse, 2016; Edwards, 2017).

Developing effective tools to meet individual learners’ needs and for managing diverse groups, relates to DI (cf. Tomlinson & Allan, 2000) and are among the competences needed for teaching in diverse classrooms. This section has highlighted the importance of developing competences within the area of IE in teacher education. Research shows how teachers’ attitudes, beliefs and experiences play an important mediating role when teachers plan and conduct teaching, pointing to the importance of intercultural sensitivity and self-awareness training being a part of teacher education programmes.

Methods

Our research design is a comparative case study (CCS) motivated by our intention to compare two local sites within and across places and historical moments. We
draw on Bartlett and Vavrus’ (2017) approach to CCS, as they offer a model of multi-sited fieldwork that allows the integration of diverse sources of evidence across sites and scales. They describe three axes of comparison: the horizontal, the vertical and the transversal. The horizontal compares how similar policies or phenomena unfold in socially produced locations, the vertical traces phenomena across scales, and the transversal traces phenomena and cases across time.

In our comparison of the two sites, the two TEPs, we need to consider their contexts to understand how preparing student teachers for teaching in diverse classrooms came into being (Bartlett & Vavrus, 2017). Bartlett and Vavrus define context as something spatial and relational, not fixed or static. In our study, we are interested in understanding historical circumstances, ideas and objectives that have influenced the preparations of student teachers for teaching in diverse classrooms. We are also interested in the student teachers’ perspectives on how they are being prepared for diverse classrooms.

**Data collection**

Our data collection comprises four different types of data: Documents, Interview, Questionnaires, and Observations (Table 1). The data collection from the TEP-G students was done in the spring semester of 2019 and the collection from the TEP-N students in the fall semester of the same year.

**Table 1. Overview of data collection**

<table>
<thead>
<tr>
<th>Source</th>
<th>TEP-G</th>
<th>TEP-N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Interview</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Observations</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**Document data**

In our search for, and in, relevant documents in Greece and Norway we used keywords such as ‘differentiated instruction’, ‘diversity’, ‘differentiation’, ‘multicultural education’, intercultural education’, ‘inclusive education’, and all the aforementioned words ‘and teacher education’. We have searched in national and international whitepapers and educational acts. We also used distinct approaches in the two countries. In our search for relevant educational acts and documents about teacher education in Greece, we were guided by both the leader (L) of the TEP-G and by a Greek PhD-candidate based in Norway. Thanks to them we found important documents from assorted websites, both in Greek and in English. Greek texts were translated to Norwegian for us by the PhD-candidate. As we found few Greek political documents on diversity in our searches, the European Commission and OECD reports became important resources. We rely mostly on written English data for the sake of transparency.

For the context of the TEP-N, we found research and policy documents from various websites. Written reports supported us with in-depth information on the
ideas and development of the TEP-N. We studied websites describing the objectives and contents of the specific semester on which we focused.

**Interview data**

As there was limited written information in English about the specific TEP-G we studied, we developed an interview guide with open-ended questions concerning the programme’s purpose, ideas, learning goals, content and activities, and conducted an interview with its programme leader. The interview was in English, took place in Greece and was audiotaped and partly transcribed.

The interview was prepared in accordance with The Norwegian Centre for Research Data’s (NSD) instructions. Before the leader signed the agreement with us, she was informed that her identity may be recognised in publications. We conducted a manuscript content check of the interview with the leader of the TEP-G. NSD accepted our study in spring 2019.

**Questionnaire data**

We conducted a questionnaire to gain insight into student teachers’ experiences and views of learning about diversity. We formulated three questions, of which the following two were subjected to analysis for methodological reasons:

**Q1)** *What is your understanding of the concept of diversity?*

**Q2)** *What, in your opinion, is the most important you, as a teacher, can bring to a diverse classroom?*

The questions are formulated as open-ended, broad and sufficiently general to increase the reliability of the answers (Cargan, 2007). They also “allow for spontaneous answers and a fuller picture of what is important to the respondent” (Cargan, 2007, p. 94). The students were informed about the study’s purpose and the questionnaires were handed out on paper and were answered anonymously.

As the questionnaire was first formulated in English, we translated the questions to Norwegian for the TEP-N students. The questions were answered in English and Norwegian, respectively. A methodological limitation is that the student teachers’ notion of the concepts related to diversity may vary in the two countries due to contextual circumstances like history and culture (i.e., the Norwegian *mangfold* and the English *diversity* may have different connotations). TEP-G has an annual class of about 40 student teachers, while TEP-N has an annual class of about 180 student teachers. Our data consist of answers from 32 out of a total of 40 Greek students and 97 out of a total of 180 Norwegian students. The uneven size of the groups may have influenced the results and is thus a methodological limitation. The majority in both groups were female.

**Observations**

As our study is based on limited material, generalisation is not possible. One way to contribute to generalisation is by comparing contexts. Another variant of
generalisation is recognising patterns observable in similar situations (Larsson, 2009). To help us better understand the TEPs, we made thick descriptions, including student teachers’ expressions of their experiences (Geertz, 2000; Larsson, 2009). Descriptions and experiences are taken from our field notes, direct observations and participant observations at TEP-G. From the TEP-N context, we used student responses from the question: *How has teacher education prepared you for a diverse classroom?* This was omitted from the comparative questionnaire analysis due to methodological reasons.

**Data Analysis**

We employed thematic analysis to identify and analyse “repeated patterns of meaning” across the data sets and searched for “the prevalence of the themes” in each case (Braun & Clarke, 2006, p. 93). Since there was a considerable difference in the number of answers between the two groups, we decided to present our findings by pointing to the central tendency in each group, which relates prevalence to a mode measure method (Frels & Onwuegbuzie, 2013).

Throughout the data collection, we discussed our findings in and across sites and made notes, tables and mind maps to illustrate and understand the three axes of comparison (Bartlett & Vavrus, 2017).

Questionnaire data were analysed in three phases. The first phase involved identifying themes, concepts and categories. The next phase entailed analysing and categorising the data (Braun & Clarke, 2006). In the third phase, we undertook a comparative analysis of the concepts and categories we found in the first two phases and related them to the concepts drawn from the literature review and theoretical background (Wolcott, 2001). In the initial phase, the idea is to let the data “speak for themselves” before categorising them in relation to specific concepts of DI and IE. In the first and second phases we identified themes and concepts, examples of which were related to students’ interests and commitments to whether they were focused on their own learning and/or on pupils’ learning, or as being inclined towards an instrumental or an emotional commitment to their task. In phase three, the answer “my ability in empathy, to hear others’ stories” we categorised as self-awareness, a category related to IE. For reliability reasons, we discussed our data and early drafts with colleagues (Wolcott, 2001).

**Results**

Our study aims to understand how two TEPs in two countries prepare their students for teaching in diverse classrooms by using a CCS approach and analysing our fieldwork within and across sites and scales. In this section, we present our findings from each TEP in the order of the three axes of comparison, the horizontal, the vertical and the transversal (Bartlett & Vavrus, 2017), using these titles: History, policies and research; Ideas, objectives and practices;
Questionnaire results and observations. We use the same order when comparing the two sites.

**Case TEP-G**

*History, policies and research*

The Greek education system is under the responsibility of the Ministry of Education, Research and Religious Affairs (European Commission, 2020), and the national guidelines for education are enshrined in Article 16 of the Greek Constitution (Library of Congress, 2021). Greek legislation aims at avoiding privilege and differentiation in education on any basis other than objective criteria, defined as children with special needs due to disabilities or handicaps (Library of Congress, 2007).

Greece has several schools designated for children with special needs who may also attend mainstream schools if they can. Some vocational training is offered, but as this is only in big urban centres, it is hard for children with special needs who live in remote areas to benefit from it (Library of Congress, 2007).

Recently, the Greek education system has found itself in a challenging context due to a decline in national income as the refugee crisis continues (OECD, 2018). Despite reductions in public expenditures and increased levels of unemployment, a reformed Greek curriculum emphasises the importance of a more diversified pedagogy that would enable the Greek school system to support greater equity for refugees, immigrants and other vulnerable groups (Library of Congress, 2007). The Greek Ministry of Education has implemented supportive educational measures to increase equitable access for vulnerable groups, such as “Roma, foreigners, refugees, vulnerable social groups etc.” (European Agency for Special Needs and Inclusive Education, 2020).

According to a report by the European Commission (2017), the term *diversity* in schools is usually understood as a multicultural mix of migrants, Muslim and Roma students. Mattheoudakis et al. (2017) investigated the attitudes and practices of Greek primary school teachers towards linguistic and cultural diversity among pupils. They found a need for teachers’ continued professional development related to how diversity has implications for their classroom practices. Our understanding of these studies is that the prevalent view of diversity in Greek schools tends to focus on linguistics and distinctions in first languages among pupils. A Committee for Intercultural Education and Intercultural Schools has been founded to “reconstruct current educational measures and policies that have been developed in connection with intercultural education addressed to immigrant students” (European Commission, 2017, p. 80).

*Ideas, objectives and practices – Interview with the leader of TEP-G*

From our interview with its leader (L), we learned that the foundation of TEP-G was inspired by the guidelines of TEPs at Stanford and Harvard universities in the US. The TEP-G’s core values are derived from Plato’s and Aristotle’s ideas of
education being a matter of value for society. Formulating her understanding of diversity, L quoted Plato as saying that Greek education is not just for Greek citizens, and Socrates as asserting that citizens of Athens are citizens of the world. L defined diversity as “respecting different mentalities, religions and languages” and “how I can live in peace with other people”.

In the interview, L stated that all children, including refugees and migrant children, have the right to education, and that she believes the DI and IE concepts of diversity “can bring together knowledge”. We found that her understanding of the concept of special needs includes pupils who have problems with “physical movement” or “psychological problems after asylum”. She said that Greece has special schools for pupils with special needs, and that is why TEP-G does not educate teachers to teach in these schools. Her explanation confirmed what we found in our document search. We did not pursue this topic in our interview, but we observed that the TEP-G student teachers seemed to learn little about pupils with special needs.

When describing the fundamental ideas of what student teachers need to learn related to diversity, L frequently used words like feelings, wisdom, emotions, tolerance and cultivation. She expressed the view that TEPs need to “focus on building emotional intelligence” and “cultivate basic values” to enable student teachers to reflect on how they see themselves as teachers.

Describing the projects Art and education and Education and civilisation, she said that these projects are dedicated to diversity and for the student teachers to connect to values from antiquity. L said that we need to help migrant children “come closer to the values from ancient Greek history” because these are the foundation for “Greek cultivation”. In her view, this can be done through art because “art is an international language that talks through the heart”.

L stated that European teacher educators need to collaborate and exchange knowledge about diversity and explained that she had invited us from TEP-N because we brought “a broader understanding of practices of policies and thereby improved the quality of our [their] teacher education”. Our contribution to TEP-G was viewed by both her and the student teachers as adding learning opportunities for them.

**Questionnaire results**

We first analyse the answers to Q1) What is your understanding of the concept of diversity? Our findings indicate that most of the TEP-G students see diversity as related to self-awareness and intercultural sensitivity, which we interpret as linked to IE. Few responses pointed to understanding diversity as DI, and even fewer pointed to understanding it as special needs. An example is Maria’s understanding of diversity as intercultural sensitivity: “Diversity in all its forms should not be seen as a problem, but an effective chance of combining, improving and broadening horizons for students and teachers.” Here we see that by focusing on
one’s own values and beliefs, one can gain critical insight into how these influence one’s responses to pupils’ diverse backgrounds.

We found two central themes among the answers to Q2) *What, in your opinion, is the most important you, as a teacher, can bring to a diverse classroom?* One theme centred on the student teacher’s professional learning and the other pointing to the learning of the pupil. We identified a tendency in the Greek responses towards emphasising their own professional development and learning, exemplified by Petros: “my ability in empathy, to hear others’ stories”, and Eris: “We have one thing in common. That is the fact that we are all humans. I as a teacher, want to let them know this factor in a practical way and let everyone cooperate with each other in a peaceful way.” Answers concerning pupils’ learning also point towards IE, as Olga wrote: “to encourage pupils to embrace human nature and be proud of themselves”, and Makis: “Trying to make them work as a team because in this way they will be able to understand that we are all connected.” We see in the results of the survey an indication that the TEP-G students have a strong focus on themselves as learners and a strong sense of their own growth in self-awareness and agency.

**Observations**

The Art and education project lasted for the entire spring semester, where the student teachers worked in groups of five to six with an external group leader from a non-profit organisation, among whom were an artist, a psychiatrist, a scenographer, an actor and a choreographer. For the students to develop a deeper understanding of the concept of diversity, they cooperated in creating art installations supervised by their group leaders. The semester culminated with a public exhibition of these art installations.

When we visited in 2018, the art installations were exhibited simultaneously with a conference on diversity hosted by the TEP-G, a conference that was open to the general educational community in the city. During the conference, the student teachers acted as guides in the exhibition area and proudly presented their installations to us. One installation was made from two pairs of differently sized jeans that had been filled with soil that green plants had grown out of (Figure 1). An enthusiastic male student explained to us that everyone should have the chance to flourish, despite their differences.

In our conversations with the Greek student teachers, we found clear signs of L’s intentions to develop self-awareness through the Art and education project manifested in their speech. Formulating what they had learned from the project, students expressed that it had challenged them cognitively, emotionally and psychologically and helped them to better understand themselves. They said they had learned approaches they would use as teachers. On the home page of the TEP-G, we found testimonials from students who participated in the Art and education project in 2018, expressing their experiences in ways that mirror L’s intentions:
I realised that teaching through art is one of the most important methods of experiential learning.

It helped me understand the problems, thought and feelings of people who migrate. I found myself in their place for a while.

**Figure 1.** Example of student art installation: An interpretation of diversity (Photo: Fosse)

Our observations indicate that the TEP-G students, through speech and behaviour, communicated a sense of growth in self-awareness and agency.

Summing up our findings from case TEP-G related to history, policies and research, we found that Greece has a tradition of separate schools for children with special needs, and that diversity in schools has tended to focus on linguistic differences in first languages among pupils. A reformed Greek curriculum emphasises the importance of a more diversified pedagogy to support greater equity for a diverse population.

We found that core values of TEP-G were derived from ancient Greek human idealism. In our interview with the leader we learned that objectives of the programme are to encourage and nurture the development of self-awareness and agency, to focus on emotional intelligence and basic values in order to enable the students’ self-reflection. This relates to IE (Valiandes et al., 2018).

We observed practices at TEP-G centred around developing the students’ self-awareness by working with art, because art, according to L, promotes feelings of self-awareness and sensitivity towards differences among people. The questionnaire and observations indicate that the students have developed a strong
sensitivity towards diversity through various activities in TEP-G (Zeichner, 1993).

Case TEP-N

History and policies

Adapted education (*tilpasset opplæring*) was introduced as a concept in the Primary Schools Act of 1975 (Langfeldt, 2006), which stated that all pupils have an equal right to education. For about 20 years, adapted education was primarily concerned with integrating pupils with learning challenges or special educational needs into ordinary classrooms (Fosse, 2011; Dale & Wærnes, 2004). Adapted education was combined with the will to care for the weakest, according to Regjeringen (2006), leading to practices primarily concerned with pupils who had problems following ordinary teaching (Dale & Wærnes, 2004; Ekeberg & Holmberg, 2004).

In 1998, adapted education became an overarching principle of the Education Act (EA) (Regjeringen, 2006). Although the EA has undergone revisions, the principle of adapted education and the right to special education remain the same: “Education must be adapted to the abilities and aptitudes of the individual pupil, apprentice, candidate for certificate of practice and training candidate” (§1–3) and “Pupils who either do not or are unable to benefit satisfactorily from ordinary teaching have the right to special education” (§5–1). Special education is legally bound by law that can be tried in court, if necessary. In the first version of the EA, the focus on inclusion and adapted teaching was directed towards pupils with learning challenges and disabilities (Fosse, 2011).

The objectives clause in the Education Act today states: “Education and training shall provide insight into cultural diversity and show respect for the individual’s convictions. They are to promote democracy, equality and scientific thinking” (Regjeringen, 2017, p. 5). Under the headline “Identity and Cultural Diversity”, the core curriculum states that the school

shall give pupils historical and cultural insight that will give them a good foundation in their lives and help each pupil to preserve and develop her or his identity in an inclusive and diverse environment. (Regjeringen, 2017, p. 7)

Related to teaching and differentiated instruction, the core curriculum remarks:

*Differentiated instruction* [our emphasis] means that the school adapts the teaching so that all pupils have the best possible learning outcome from the ordinary teaching. School can adapt the teaching by using various work methods and pedagogical approaches, by using various teaching aids, by the way they organise the teaching and by working with the learning environment, subject curricula and assessment. (Regjeringen, 2017, p. 19)

The current objectives in the EA and core curriculum concern community building in the growing, diverse population of Norway. The basic intentions point
towards a teaching profession that involves competences in both DI and IE and a relationship between these.

**Ideas, objectives and practices**

TEP-N is located at the Faculty of educational sciences at the University of Oslo (UiO). The Department of teacher education and school research (ILS) was established in 1996, but UiO offered Pedagogical seminars already in 1907. The five-year Master’s degree programme has been offered since 2005.

In 2011, a Centre for Excellence in Education (SFU) was established at ILS: Centre for Professional Learning in Teacher Education (ProTed). In the years before this appointment, ILS worked on a renewed model for teacher education called PUPILS (University of Oslo, 2011). According to a report from the investigating committee on the new model (University of Oslo, 2011), a close research collaboration with the TEP at Stanford University in the US became an important basis for the renewal. One of the intentions of the new model was to offer an education that was more thematically structured and focused on everyday school tasks. Coherence and core practices became central concepts according to the report. *Coherence* implies close cooperation between campus and practice activities and exams, and between subject didactics and pedagogy. *Core practices* means providing students with training on campus in situations they will face in the classroom, with a focus on classroom management, pupils’ learning, assessment of pupils’ learning and development, and diversity (University of Oslo, 2011). The topics were divided into four thematic areas: Observations and learning, Classroom organisation and learning, Assessment and learning, and Designing inclusive classrooms (University of Oslo, 2011). The area of Designing inclusive classrooms centres on inclusion, DI and IE.

The PUPILS model clearly focuses on pupils’ learning and on providing tools for relevant classroom practices. In the remainder of this section, we examine the ways in which the thematic area Designing inclusive classrooms was operationalised in pedagogy for our study’s participants. We do this by presenting the course objectives, the reading list, the titles of lectures and the content of topics and cases from the workshops.

The text presenting the course objectives consists of 809 words, of which the word *mangfold* (diversity) occurs three times, twice as “to meet students’ special needs and challenges related to learning, *diversity* [our emphasis], behaviour and health” and once as “You will further learn to value *diversity* [our emphasis] …”. Beyond this, the word *diversity* is not explained. The word *culture* does not occur in the text. The text below states the objectives related to DI.

**Course objectives relevant to DI (University of Oslo, 2021a) (Our translation)**

You as a student will learn to

- contribute to the development of your theoretical and practical understanding of adapted education and assessment
After completing the course, you should have acquired

- research-based knowledge and in-depth understanding of inclusion, adapted education and differentiated teaching in your subjects in order to be able to take care of all students, your professionalism and ethics
- methods to explore and develop your own professional practice
- skills to use relevant methods to differentiate and adapt your teaching, including being able to identify signs of learning difficulties and signs of violence and sexual abuse

You will further learn

- to value diversity by having expectations for the students and contribute to everyone’s learning based on their competencies and need for academic development
- to have a professional attitude and critically reflect on professional ethics and professional and educational policy issues

We see that these course objectives are clearly related to DI, as in “skills” and “methods to differentiate and adapt”. To learn “to value diversity” is related to adapting teaching to “contribute to everyone’s learning” and “need for academic development”. Student teachers also learn “skills” and “methods” to identify pupil’s difficulties, such as “signs of violence”. This indicates learning beyond technical methods for pupils’ academic learning. Developing teacher professionalism is also in front of the objectives and strongly connected to words like “value”, “attitude”, “reflection”, and “ethics”, which relate to developing personal as well as professional agency. To see how these objectives were operationalised in the pedagogy, we investigated the titles in the reading list and sought information on how the objectives were approached in the workshops.

The curriculum was organised with headings such as Assessment, Diversity, Inclusion/Adapted teaching/Differentiated instruction, Teachers’ professional work, and Research methods. In the following section, we focus on Diversity and Inclusion/Adapted teaching/Differentiated instruction.

The reading list for Diversity represented concepts within the area of equity and Intercultural education. Examples are “Competence for diversity: About the school’s challenges in multicultural Norway, Young people with an immigrant background after the transition to upper secondary education and Differences in class–gender in context” (University of Oslo, 2021b). Within the theme “Inclusion/Adapted teaching/Differentiated instruction”, most concepts were associated with pupils with a variety of challenges, such as “pupils’ mental health”, “pupils with severe behavioural problems” and “pupils with reading or writing problems” (University of Oslo, 2021b).

In pedagogy, on-campus teaching consists of lectures and workshops. The lectures are often a theoretical introduction to workshops for smaller groups of approximately 35 students, where issues and topics related to theory and practice are discussed. Of the seven workshops in the fall of 2019, we investigated three that focused on “Adapted teaching and differentiated instruction”. In the first workshop, concepts related to adapted education and DI were clarified and
students were instructed to “work practically to look at different ways of adapting a teaching plan”. The second workshop provided discussions of cases formulated by students based on their experiences in school practice. The students chose from among five case themes concerned with pupils “who have general learning difficulties of various kinds and degrees”; “with specific writing and reading difficulties, such as dyslexia”; “with behavioural difficulties of various kinds and degrees of internalising difficulties, such as anxiety, eating disorders or other mental difficulties”; “who have great learning potential, the gifted students” and “multilingual” (Canvas, 2021, Appendix 1). The case themes showed the ways students can work with a variety of challenges in pupils’ learning, behaviour and well-being, with the focus being DI and learning to identify individual pupils’ challenges and find methods and strategies to adapt teaching to them. The third workshop was concerned with norm-critical perspectives and hate speech. In this workshop, the students discussed norm-critical perspectives in a case and worked with different tasks concerning hate speech where the goals were to “understand different forms of hate speech online and assess what effect they can have – deal with stereotypes and prejudices – reflect upon appropriate actions against various hate messages online” (authors’ translation). This workshop seemed to focus on learning the concept of norm-critical perspectives and on methods and strategies on how to respond to hateful speech.

**Questionnaire results**
The answers to Q1) *What is your understanding of the concept of diversity?* indicate a strong focus on equity and pupils’ learning and development: “that everybody, regardless of their differences, have the right to develop and contribute”. The students showed a relatively strong sense of self-awareness, as Amir’s answer exemplifies: “Openness and understanding that people are different from yourself. They may have different opinions and ways of expressing themselves due to coming from other cultural contexts.” There is also evidence that diversity relates to special education, as in Diana’s words: “Pupils with different traits and functional abilities can all contribute in their own way.” We find that the answers to Q1 indicate an understanding of diversity as IE.

We again found two central themes among the answers to Q2) *What, in your opinion, is the most important you, as a teacher, can bring to a diverse classroom?* The one theme concerning the student teacher’s professional learning and the other centred on the pupil’s learning and DI. An example of the first is Eva saying: “to be a good role model of acceptance and tolerance. Pupils need to learn to accept people who are different from themselves.” An example of the latter as Lisa puts it: “to differentiate so that all pupils can learn regardless of their level”. The findings showed a strong sense of agency related to both IE and DI.
Observations
To match the thick description of our observations from the TEP-G, we will present some TEP-N students’ experiences from the survey on this. We found four themes on how teacher education has prepared them for a diverse classroom:
1) About their own professional obligation, Sofia said: “to consider the pupils’ backgrounds, that is family problems and understanding of the school subject”. 2) Concerning attitudes towards pupils with challenges, Morten said: “to not see pupils as difficult, but rather try to understand why they behave like they do”. 3) Related to IE, Mia said: “I have learnt to see the possibilities of diversity in a way that differences can be used as resources in learning”. 4) Related to DI, Eva said: “to differentiate teaching according to tasks and adapting to level”. Summarised, we find a strong tendency towards pupils’ learning and perceiving diversity as DI, but also a small tendency towards self-awareness and professional agency, as in example three.

Summing up our findings from case TEP-N related to history and policies, we see that equity in education and inclusion historically has been associated with DI. However, today we see a stronger relationship between DI and IE in the school’s core curriculum. In the course we studied at TEP-N, we found that student teachers primarily work with DI-related tasks, but are introduced to a broad perspective of diversity through lectures and literature. This is knowledge that Zeichner (1993) referred to as crucial for being able to teach in diverse classrooms. We also found that using research-based knowledge is an important part of becoming a professional teacher. This relates to Wells’ (1999) cyclical model of how student teachers construct knowledge for teaching. We find indications of intercultural sensitivity training in the workshop on norm-critical perspectives and hate speech. However, we find no indications that the students are provided with tools for self-awareness and intercultural sensitivity training.

Student teachers’ responses to Q2 show a sense of self-awareness and care for pupils. When reporting on how they understand the concept of diversity, the tendency is for them to understand diversity within the notion of IE. What may be a disparity between the students’ responses and our general observations could be due to the use of the word *mangfold* in the questionnaire. In Norwegian contexts, *mangfold* traditionally has been connected to IE, while *tilpasset opplæring* (adapted teaching) has been connected to DI. If we had used the concept *tilpasset opplæring*, the answers might have tended more towards DI. Nevertheless, we conclude that TEP-N students show a strong sense of agency towards teaching in diverse classrooms.

Comparing TEP-G and TEP-N

History, policies and research
It is logical that both TEPs are impacted by historical events and political decisions in their countries. Even if Greece has a long history of absorbing immigration from its neighbours, the current refugee crisis severely impacts the
country’s infrastructure and education system. Immigration to Norway has a shorter history, and due to its geographical position in Europe, Norway has not been influenced by the refugee crisis to the extent that Greece has. We found a clear disparity in the working conditions between the two programmes.

**Ideas, objectives and practices**

Both TEPs look to national and international research for guidance in developing their programmes and share a common inspiration from the TEP at Stanford University in the US. The Greek education system has a tradition of segregated schooling for pupils with special needs, whereas the Norwegian education system has been associating the inclusion of pupils with special needs and the understanding of adapted education primarily applying to pupils with learning difficulties. Research in Greek schools reveals that teachers’ primary concern is whether immigrant pupils master the Greek language.

The objectives of the TEP-G are rooted in the core values of classic philosophers, such as Plato and Socrates. Preparing student teachers for teaching in diverse classrooms is, thus, guided by ideals such as respect and tolerance applied through an art project. The TEP-G students’ learning about diversity manifested itself in their developing an understanding of self while relating to and respecting others. We see the TEP-G approach as one of formation of self-awareness and humanness, though we detected a trace of an assimilating attitude when the leader expressed the need for immigrant pupils to connect to values from ancient Greece.

The objectives of TEP-N are expressed through explicit learning goals for the student teachers, formulated with a focus on skills and methods to enhance pupils’ learning. At TEP-N, students prepare for teaching in diverse classrooms through lectures and workshops with case studies where we see a division between DI and IE.

**Questionnaires and observations**

Students at TEP-G expressed that the art project had provided them with important learning about self-awareness, whereas the words used by the TEP-N students pointed more towards having been provided with methodological skills to differentiate teaching according to task. Analyses of the questionnaire showed that students in both programmes perceived diversity in similar ways, but we found a tendency towards understanding diversity as intercultural education among the TEP-G students and as differentiated instruction among the TEP-N students.
Discussion

In the following, we delve into the meaning, importance and relevance of our results and how they relate to our research question, theoretical framework and literature review. In this study we wanted to investigate and compare two TEPs’ founding principles and learning objectives for preparing student teachers for diverse classrooms, and the student teachers’ responses to these preparations. The results indicate that student teachers in both countries construct knowledge about teaching in diverse classrooms, but that the two TEPs emphasise the construction of this knowledge differently. Both TEPs are influenced by their history and policies. From Norwegian history and policies, we see a development from a one-sided perspective on diversity to a perspective that includes a variety of pupils in schools. The same change of perspective can be seen at TEP-N. In both TEPs, student teachers reveal a strong sense of care for pupils and a strong sense of agency towards teaching in diverse classrooms.

Based on our findings, we suggest that TEP-G’s Art and education project acts as a “third space” which fosters students’ thinking and sensitivity to differences (Gomez & Lachuk, 2017), elements that have strong formative aspects for student teachers’ learning. TEP-G thus provides methods for student teachers to reflect on how their own culture has shaped their beliefs and attitudes, and how this self-awareness can contribute to their ability to teach in diverse classrooms (cf. Zeichner, 1993). However, with an inclination towards ideas of assimilation (UNESCO, 2003), TEP-G could benefit from having a more IE-oriented perspective. TEP-N on the other hand, has a strong focus on case methodology in order to construct effective ways to promote pupils’ learning. We find few signs that TEP-N provides student teachers with tasks related to training in intercultural sensitivity and self-awareness, leading us to believe that TEP-N has a relatively narrow view of preparing their students for diversity in the classroom (UNESCO, 2003; Valiandes et al., 2018).

A TEP focusing mainly on pupils’ learning and on developing instrumental tools for delivering the curriculum (Edwards, 2017; Sachs, 2016; Zeichner, 1993) may overlook essential aspects of student teachers’ agency development, their personal beliefs, commitments and motivation. TEPs need to be more aware of the influence teachers assert in the classroom and how their decisions affect pupils’ learning (Bates & Rosaen, 2010; Beijaard et al., 2004; Fives et al., 2014). By reflecting on their own values and attitudes, student teachers can develop a sensitivity towards pupils’ backgrounds and experiences and learn how to use this awareness to develop a sociocultural learning context (Valiandes et al., 2018; Zeichner, 1993). TEPs can facilitate the processes of developing self-awareness through working with case studies or training in intercultural sensitivity (Børhaug & Harnes, 2020; Nieto, 1999).

As we have shown, there are indications that the inclusion of pupils with special needs receives less attention in discussions relating to diversity. We want
to highlight the importance of student teachers constructing knowledge of a wide range of learning challenges, as this is required to become fully competent for teaching in diverse classrooms (Banks, 2014; Valiandes et al., 2018).

We do not claim that the two TEPs have a segregated approach (cf. Zeichner, 1993), but as we see them, they are not fully integrated, either. In TEP-G, we did not see the relationship between the Art and education-project and our workshops on diversity until we were invited to the conference and art exhibition in 2018. In the Norwegian context, diversity and differentiated instruction are presented as separate courses, thereby obscuring the coherence between the two fields. As Zeichner points to the limited long-term impact on attitudes, beliefs and teaching practices of segregated courses (1993, p. 14), we argue for the importance of recognising “teacher education for diversity” as an integrated part of all subjects and practices throughout a teacher education programme.

Although we believe that both TEPs in our study would benefit from further development, we see that both programmes provide student teachers with insight and knowledge of diverse classrooms, as well as strategies to differentiate their instruction (Banks, 2014; Nieto, 1999; Valiandes et al., 2018). Our study gives us as teacher educators, important information that we can use in furthering the development of our own TEP.

Conclusion and implications for teacher education

We conclude that to be able to teach in increasingly diverse classrooms, student teachers need competence within the field of intercultural education (IE) as well as in differentiated instruction (DI). IE develops a knowledge of understanding and nurturing relationships between cultural groups. DI responds and adapts teaching to diverse groups of pupils (Valiandes et al., 2018; Wells, 1999). The contribution of our research is twofold: First, we provide insight into how merging IE and DI can facilitate a more coherent understanding of the aspects of teaching in diverse classrooms. Second, we reveal that student teachers have a strong sense of agency for teaching in diverse classrooms. A merger between IE and DI would provide a basis for developing student teachers’ sense of agency by training in self-awareness and intercultural sensitivity, as well as a basis for developing strategies and methods for learning activities in the classroom. It seems that both case studies and working with art to develop self-awareness, are methods that are useful for building student teachers’ competence.

Preparing student teachers for teaching in diverse classrooms is a joint task between campus and practice (Zeichner, 1993). Not only should further research study what kinds of campus activities are best suited to prepare students for teaching in diverse classrooms, but also how these activities affect classroom practices.
About the authors

Britt Oda Fosse is Associate professor in pedagogy at the University of Oslo. Her research interests are in qualitative research on student teachers’ learning, drawing on sociocultural perspectives, and studies of student teachers’ sense of agency and adapted education.
Institutional affiliation: Department of Teacher Education and School Research, University of Oslo, P.O. Box 1099, Blindern, 0317 Oslo, Norway.
E-mail: b.o.fosse@ils.uio.no

Janne Thoralvsdatter Scheie is a Lecturer in media didactics at the University of Oslo. Her research interests are intercultural education, educational leadership, and the challenges experienced by novice teachers.
Institutional affiliation: Department of Teacher Education and School Research, University of Oslo, P.O. Box 1099, Blindern, 0317 Oslo, Norway.
E-mail: j.t.scheie@ils.uio.no

References


Regjeringen (2017). *Core curriculum – values and principles for primary and secondary education*. Oslo: Kunnskapsdepartementet. [https://www.regjeringen.no/contentassets/53d21ea2bc3a4202b86b83cfe82da93e/core-curriculum.pdf](https://www.regjeringen.no/contentassets/53d21ea2bc3a4202b86b83cfe82da93e/core-curriculum.pdf)


https://unesdoc.unesco.org/ark:/48223/pf0000134785


https://www.uio.no/studier/emner/uv/ils/PROF4045/h19/pensumliste/pensum-pedagogikk.html


