Teachers' cultural diversity beliefs and culturally responsive practices

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Contents

Abstract

The present dissertation about teachers' cultural diversity beliefs and culturally responsive practices includes a general introduction (Chapter 1), a systematic literature review (Chapter 2), three empirical studies (Chapter 3, 4, and 5) and it ends with a general discussion and conclusion (Chapter 6). The major focus of investigation laid in creating a deeper understanding of teachers' beliefs about cultural diversity and how those beliefs are related to teaching practices, which could or could not be considered to be culturally responsive. In this dissertation, I relied on insights from theoretical perspectives that derived from the field of psychology such as social cognitive theory and intergroup ideologies, as well as from the field of multicultural education such as culturally responsive teaching.

In Chapter 1, I provide the background of this dissertation, with contextual information regarding the German educational system, the theoretical framework used and the main research objectives of each study.

In Chapter 2, I conducted a systematic review of the existing international studies on trainings addressing cultural diversity beliefs with pre-service teachers. More specifically, the aims of the systematic literature review were (1) to provide a description of main components and contextual characteristics of teacher trainings targeting cultural diversity beliefs, (2) report the training effects, and (3) detail the methodological strengths and weaknesses of these studies. By examining the main components and contextual characteristics of teacher trainings, the effects on beliefs about cultural diversity as well as the methodological strengths and weaknesses of these studies in a single review, I took an integrated approach to these three processes. To review the final pool of studies ($N = 36$) I used a descriptive and narrative approach, relying primarily on the use of words and text to summarise and explain findings of the synthesis.

The three empirical studies that follow, all highlight aspects of how far and how teacher beliefs about cultural diversity translate into real-world practices in schools. In Chapter 3, to expand the validity of culturally responsive teaching to the German context, I aimed at verifying the dimensional structure of German version of the Culturally Responsive Classroom Management Self-Efficacy Scale (CRCMSES; Siwatu, Putman, Starker-Glass, & Lewis, 2015). I conducted Exploratory and Confirmatory Factor Analysis, and run correlations between the subscales of the CRCMSES and a measure of cultural diversity-related stress. Data ($n = 504$) used for the first empirical study (Chapter 3) were collected in the InTePP-project (Inclusive Teaching Professionalization Panel) in which pre-service

teachers' competencies and beliefs were assessed longitudinally at two universities: the University of Potsdam and the University of Cologne.

In the second empirical study, which forms Chapter 4, the focus is on teachers' practices resembling school approaches to cultural diversity. In this study, I investigated two research questions: (1a) What types of descriptive norms regarding cultural diversity are perceived by teachers and students with and without an immigrant background and (1b) what is their degree of congruence? Additionally, I was also interested in how are teachers' and students' perceptions of descriptive norms about cultural diversity related to practices and artefacts in the physical and virtual school environment? Data for the second empirical study (Chapter 4) were previously collected in a dissertation project of doctor Maja Schachner funded by the federal program "ProExzellenz" of the Free State of Thuringia. Adopting a mixed-methods research design I conducted a secondary analysis of data from teachers' ($n = 207$) and students' ($n = 1,644$) gathered in 22 secondary schools in south-west Germany. Additional sources of data in this study were based on pictures of school interiors (hall and corridors) and sixth-grade classrooms' walls ($n = 2,995$), and screenshots from each school website ($n = 6,499$).

Chapter 5 addresses the question of how culturally responsive teaching, teacher cultural diversity beliefs, and self-reflection on own teaching are related. More specifically, in this study I addressed two research questions: (1) How does CRT relate to teachers' beliefs about incorporating cultural diversity content into daily teaching and learning activities? And (2) how does the level of teachers' self-reflection on their own teaching relate to CRT? For this last empirical chapter, I conducted a multiple case study with four ethnic German teachers who work in one culturally and ethnically diverse high school in Berlin, using classroom video observations and post-observation interviews.

In the final chapter (Chapter 6), I summarised the main findings of the systematic literature review and three empirical studies, and discuss their scientific and practical implications.

This dissertation makes a significant contribution to the field of educational science to understanding culturally responsive teaching in terms of its measurement, focus on both beliefs and practices and the link between the two, and theoretical, practical, and future study implications.

Keywords: cultural diversity, teacher beliefs, culturally responsive teaching

Zusammenfassung

Die vorliegende Dissertation über Überzeugungen von Lehrern zur kulturellen Vielfalt und zum kultursensiblen Unterricht beinhaltet eine allgemeine Einführung (Kapitel 1), eine systematische Literaturübersicht (Kapitel 2), drei empirische Studien (Kapitel 3, 4 und 5) und endet mit einer allgemeinen Diskussion und dem Fazit (Kapitel 6). Der Schwerpunkt der Untersuchung sollte auf der Schaffung eines tieferen Verständnisses und Überzeugungen der Lehrer über kulturelle Vielfalt liegen und wie diese Überzeugungen mit den Unterrichtspraktiken zusammenhängen, die als kulturell ansprechend angesehen werden konnten oder nicht. In dieser Dissertation stützte ich mich auf Erkenntnisse aus theoretischen Perspektiven, die sich aus dem Bereich der Psychologie, insb. wie der sozialen Kognitionstheorie und gruppenübergreifenden Ideologien sowie aus dem Bereich der multikulturellen Bildungsarbeit und des kultursensiblen Unterrichts, ableiten.

In Kapitel 1 stelle ich den Hintergrund dieser Dissertation mit kontextuellen Informationen über das deutsche Bildungssystem, den theoretischen Rahmen und die Forschungsziele der einzelnen Studien dar.

In Kapitel 2 habe ich mit Lehrern in der Ausbildung eine systematische Review der bestehenden internationalen Studien zu Schulungen, die sich mit den Überzeugungen zur kulturellen Vielfalt befassen, durchgeführt. Insbesondere waren Ziele der systematischen Literaturrecherche: (1) die Beschreibung der Hauptkomponenten und kontextuellen Merkmale von Lehrerausbildungen, die sich an den Überzeugungen der kulturellen Vielfalt orientieren; (2) die Schulungseffekte zu berichten und (3) die methodischen Stärken und Schwächen dieser Studien zu beschreiben. Durch die Prüfung der Hauptkomponenten und kontextuellen Merkmale der Lehrerausbildung, der Auswirkungen auf die Überzeugungen von kulltureller Vielfalt sowie der methodischen Stärken und Schwächen dieser Studien in einer einzigen Untersuchung, habe ich einen ganzheitlichen Ansatz für diese drei Prozesse gewählt. Um die endgültige Kette von Studien ($N = 36$) zu untersuchen, benutzte ich einen deskriptiven und narrativen Ansatz, der sich hauptsächlich auf die Verwendung von Wörtern und Texten stützte, um die Ergebnisse der Synthese zusammenzufassen und zu erläutern.

Die drei folgenden empirischen Studien zeigen Aspekte auf, inwieweit sich die Überzeugungen der Lehrer über kulturelle Vielfalt in reale Praktiken in Schulen umsetzen lassen.

In Kapitel 3, zielte ich darauf ab, die Gültigkeit der Schulung bei kultureller Herausforderung auf den deutschen Kontext auszudehnen und die dimensionale Struktur der

deutschen Version der *Culturally Responsive Classroom Management Self-Efficacy Scale* (CRCMSES; Siwatu, Putman, Starker-Glass, & Lewis, 2015) nachzuprüfen. Ich habe eine *Exploratory* und *Contirmatory Factor Analysis* durchgeführt, und um Korrelationen zwischen den Subskalen der CRCMSES und einem Maß für den Stress im Zusammenhang mit kultureller Vielfalt zu ermitteln. Die Daten ($n = 504$) für die erste empirische Studie (Kapitel 3) wurden im *InTePP-Projekt* (Inclusive Teaching Professionalization Panel) gesammelt, in dem die Kompetenzen und Überzeugungen der Lehrkräfte in Ausbildung an zwei Universitäten, der Universität Potsdam und der Universität Köln, longitudinal bewertet wurden.

In der zweiten empirischen Studie, die Kapitel 4 bildet, liegt der Schwerpunkt auf den Praktiken der Lehrer, die den schulischen Ansätzen zur kulturellen Vielfalt ähneln. In dieser Studie bin ich zwei Forschungsfragen nachfegangen: (1a) Welche Arten von beschreibenden Normen zur kulturellen Vielfalt werden von Lehrern und Schülern mit und ohne Migrationshintergrund wahrgenommen und (1b) wie hoch ist ihr Grad der Kongruenz? Darüber hinaus interessierte mich auch, wie die Wahrnehmungen von Lehrern und Schülern über die Normen zur kulturellen Vielfalt mit Praktiken und Unterrichtsergebnessen in der physischen und virtuellen Schulumgebung zusammen hängen?

Die Daten für die zweite empirische Studie (Kapitel 4) wurden zuvor in einem vom Landesprogramm "ProExzellenz" des Freistaates Thüringen geförderten Dissertationsprojekt von Doktor Maja Schachner gesammelt. Mit Hilfe einer gemischten Forschungsmethode habe ich eine Sekundäranalyse der Daten von Lehrern ($n = 207$) und Schülern ($n = 1.644$) an 22 Sekundarschulen im Südwesten Deutschlands durchgeführt. Weitere Datenquellen in dieser Studie basierten auf Bildern von Schulinnenräumen (Halle und Flure) und Wänden von Klassenzimmern der sechsten Klasse ($n = 2,995$) sowie Screenshots von jeder Schul-Website ($n = 6,499$).

Kapitel 5 befasst sich mit der Frage, wie kulturell ansprechender Unterricht, mit den Überzeugungen von Lehrern zur kulturellen Vielfalt und Selbstreflexion über den eigenen Unterricht zusammenhängen. Genauer gesagt, habe ich in dieser Studie zwei Forschungsfragen angesprochen: (1) Wie verhält sich CRT zu den Überzeugungen der Lehrer über die Einbeziehung von Inhalten zur kulturellen Vielfalt in die täglichen Lehr- und Lernaktivitäten? Und (2) Inwiefern bezieht sich das Niveau der Selbstreflexion der Lehrer über ihren eigenen Unterricht auf CRT? Für dieses letzte empirische Kapitel habe ich eine mehrfache Fallstudie mit vier ethnischen Deutschlehrern durchgeführt, die an einem kulturell

und ethnisch vielfältigen Gymnasium in Berlin arbeiten, wobei ich Videobeobachtungen im Klassenzimmer und Interviews nach der Beobachtung verwendete.

Im letzten Kapitel (Kapitel 6) habe ich die wichtigsten Ergebnisse der systematischen Literaturrecherche und den drei empirischen Studien zusammengefasst und deren wissenschaftliche und praktische Auswirkungen diskutiert. Diese Dissertation leistet einen wichtigen Beitrag auf dem Gebiet der Erziehungswissenschaft zum Verständnis einer Schulung mit kultureller Herausforderung in Bezug auf ihre Messbarkeit, die sich konzentrieren auf beides: Überzeugungen und Praktiken und die Verbindung zwischen den beiden und auf theoretische, praktische und zukünftige Auswirkungen der Studie.

Stichworte: kulturelle Vielfalt, Überzeugungen von Lehrern, kultursensibler Unterricht

Preface

Occasion of this thesis

In 2009 and thereafter, in my research stay at the Department of Learning Plasticity of the University of Nijmegen, I studied the implementation of inclusive education of students with special educational needs in the Netherlands. I observed how the shift to a more inclusive educational system had met a strong ideological resistance from major educational stakeholders but particularly from in-service as well as pre-service teachers. As a result, legislation efforts for inclusive education in the Netherlands were postponed many times and came into effect only several years after their initial discussion. I gradually became aware how the implementation of inclusive education requires not only for school staff the acquisition of new knowledge and skills, but it also concerns a shift of deep-seated mental models from key figures such as teachers who have to meet the learning needs of all students. In other words, I realised that to achieve the goal of including pupils with special educational needs effectively in regular education classrooms, teachers should be willing to accept the philosophy and practice of inclusion.

When I moved to Germany at the end of 2014, the country was facing the challenge of accommodating nearly 350,000 official refugee children fleeing mostly from the war in Syria (Friedrich Elbert Stiftung, 2016). I wondered how schools and particularly teachers might facilitate the inclusion of refugee newcomers but also how they value a pre-existing diverse student population in Germany. Conducting literature searches I was surprised to learn that a large body of research on teachers' views and pedagogical approaches to address cultural diversity was published in the United States. On the contrary, it seemed to me that in Germany and other European countries research on cultural diversity in education, and more specifically on the role of teachers, was still in its infancy. This is remarkable if one considers the long history of migration in Europe.

As an educational researcher and teacher educator, numerous questions came to my mind. For example, I wondered how pre-service teachers' beliefs about cultural diversity could be deconstructed in initial teaching education and noticed that a recent systematic literature review on teacher trainings was missing. Relatedly, I did not find a validated instrument in the German context that could evaluate teachers' self-perceived ability to implement culturally responsive practices in the classroom context. When looking closely to the way in which in-service teachers deal with cultural diversity, I noticed that empirical

studies exploring German schools had been rarely published. In addition, although there is some evidence indicating that teachers' beliefs about cultural diversity and their teaching practices are related, I saw some inconsistencies in previous studies that combined self-reported measures with classroom observations. Those unanswered questions, gaps in the literature, and long interest in teachers' beliefs occasioned and inspired my work on the present thesis entitled *Teachers' cultural diversity beliefs and culturally responsive practices*.

- Chapter 1 -

General introduction

Chapter 1

General introduction

1.1 Cultural diversity in education: Background information

Cultural diversity in society is not a new phenomenon, but its nature is rapidly changing around the world. Currently, there are 244 million migrants (i.e., those not living in their country of birth) recorded worldwide, more than ever before (United Nations, 2015). Amongst refugees specifically, 51% are under the age of 18 (UNHCR, 2018). While student populations reflect this global trend of increasing migration-based diversity, teachers and teacher educators remain predominantly homogenous with an overwhelming presence of members of the dominant culture (Santoro, 2015). For instance, only 6% of the elementary and secondary school teaching staff in Germany are of migrant background (European Commission, 2016). In stark contrast, 31% of school-aged children are of migrant background (Statistisches Bundesamt Mikrozensus, 2016). Clearly, the diversity of the educator workforce is not keeping pace with the diversity of the student body. This discrepancy can produce challenges for both students and teachers as they navigate the cultural and pedagogical environment of learning.

Importantly, the growing mismatch between the background and lived experiences of different educational stakeholders represents a possible challenge to effectively teaching diverse students in their classrooms. Pre-service teachers may hold negative beliefs about cultural diversity (Kumar & Hamer, 2013), report low levels of self-efficacy in promoting culturally responsive instructions (Siwatu, 2011), feel uncomfortable working with minority students (Warren, 2018), and have little knowledge of empowering pedagogical approaches in culturally diverse classrooms (Gay, 2000). Initial teacher preparation (ITP) and on-going professional development need to provide teachers support - independently of their cultural background - which is not limited to an isolated learning opportunity (e.g., a single module or an elective course) but a teacher education continuum.

Many scholars subscribe to the idea that improving initial teaching preparation helps to a great extent to empower students. Clearly, other important social factors, such as institutional discrimination and poverty, contribute substantially to inequitable educational outcomes (Cochran-Smith & Villegas, 2016) and enlarge the opportunity gap (Gorski, 2017). However, in the set of ITP professional responsibilities, teacher preparation for meeting cultural diversity in school is seldom seen as a priority for educational policymakers.

Nonetheless, in this dissertation, I[1] argue that it should certainly be a priority, and two studies included in this thesis (Chapter 2 and Chapter 3) focus on how ITP can best prepare future teachers to deal with culturally diverse classrooms.

Besides exploring how ITP equips pre-service teachers for the diversification of the student population, there is a need to closely look at how more experienced teachers address cultural diversity in schools. How schools respond to cultural diversity partially depends on how teachers approach diversity and this, in turn, influences how students perceive and experience their school context. Yet, there is little agreement about how schools around the world and teachers in particular should aim at dealing with cultural diversity (Thijs & Verkuyten, 2014). On the one hand, teachers may adopt teaching strategies and classroom materials that aim at a holistic understanding of cultural differences, for example by adopting curriculum sources and content that provide accurate presentations of cultural and ethnic minorities. These teaching practices might contribute to developing a warm and supportive environment for students' individual needs (Gay, 2010). On the other hand, cultural diversity in education is often embraced and limited to celebrating religious holidays and ethnic food (Portera, 2008). Such practices are often criticised because they may lead to reinforcing stereotypes and misconceptions through cultural essentialist conceptions of who students are (Gorski, 2016). In addition, addressing cultural diversity only in specific, isolated school events (e.g., multicultural breakfast) may convey the message that culture is irrelevant in learning and dealt outside the classroom (Banks, 2015). In Chapter 4, I therefore examine school diversity approaches by using multiple data sources, and investigate how teachers and students from different immigrant backgrounds perceive their school context.

The last major aspect investigated in this thesis centres around the beliefs about cultural diversity and the relations of those beliefs to the practices of in-service teachers with their diverse students in their classrooms (Chapter 5). Teachers make personal and pedagogical sense of how cultural diversity should be incorporated into daily classroom activities and classroom climate. Beliefs that teachers endorse towards their culturally diverse students and their backgrounds determine the organization and implementation of culturally responsive practices. A few studies have attempted to shed light on this association by including actual classroom observations of teachers in action (e.g., Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015; Guerra & Wubbena, 2017). The findings of these empirical reports

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[1] In the first and last chapters (Chapter 6) of the dissertation, I use the first person singular ('I'). In the following chapters (Chapters 2 to 5), I switch to the first person plural ('We') because the studies have all been conducted with co-authors.

showed some inconsistencies between teachers' beliefs and practices. In Chapter 5, I investigate the relation between teachers' cultural diversity beliefs and responsive teaching practices through an in-depth multiple case study, conducting classroom observations and post-observation interviews with four in-service teachers.

In the following sections, I first provide a short introduction into some characteristics of the German educational system regarding cultural diversity. Then, I introduce some key terms that are used throughout the thesis and describe the theoretical framework of this dissertation. At the end of this chapter, I provide an outlook to the dissertation project, a description of the main research objective, and an overview of the four studies that form the individual chapters of this thesis.

1.2 Cultural diversity in Germany: Resistance to change?

Migration has always played a fundamental role in German history. Especially considering Germany's post-war past, between 1950 and 1998 about 20 million Germans left the country or moved from the former German Democratic Republic to West Germany (Oltmer, 2016). During the same period, approximately 30 million people immigrated to Germany. These were amongst others the guest workers ('*Gastarbeiter*') and their families, recruited mainly from Turkey, Italy, Greece, Portugal, Morocco, and Spain; EU citizens following the Freedom of Movement Act within European Union; and war refugees from Afghanistan and the former Yugoslavia. Those movements in and out of Germany illustrate that migration (not only in Germany) has been for a long time a two-way process (Schneider, 2018).

The initial pedagogical approach taken by German educational institutions to deal with various flows of migration was based on exclusion. For instance, for children of guest workers schooling was initially not compulsory. Or, since they were expected to return to their countries of origin, these children were offered lessons in separated classrooms in the language of origin to help to smooth the way for returning to their home countries (Mecheril, 2010). From the mid-1960s, when schooling in primary schools became mandatory for all children, priority was mostly given to help children of foreign workers to acquire sufficient German language skills (Hüpping & Büker, 2014). As a result, teachers mainly perceived the new students as individuals with language problems, and diversity dealt with as a deficit (Faas, 2008).

By the end of the 1980s, new laws and integration initiatives were introduced, thereby slowly acknowledging that Germany is an immigration country (Faas, 2016; Wegmann, 2014). The late acknowledgement that German schools have comprised culturally, ethnically, and linguistically diverse students for decades has not occurred without consequences. The academic achievement gap between children with and without an immigrant background remains one of the largest in Europe (OECD, 2012). A pedagogy that favours assimilation, as well as separation, continues to be common (Faas, 2008a; Wegmann, 2014), with children of immigrant background overrepresented in the lowest academic track (Kristen & Granato, 2007). Experimental studies have repeatedly shown that pre-service teachers embrace negative stereotypical expectations towards culturally diverse students, especially male ones (Glock, 2016; Glock & Böhmer, 2018). Moreover, in-service teachers often exhibit open and subtle discriminatory behaviours towards culturally diverse students (Faas, 2008; Moffitt, Juang, & Syed, 2018).

Currently, Germany is the second most popular immigration destination in the world (OECD, 2017). As a result, the educational demographic profile of students in this country is likely to change in the near future more significantly than in any other European country. In many urban areas such as Berlin, Hamburg, Frankfurt, Stuttgart and the Ruhr Area, schools have between 50 and 90% of students with an immigrant background (Schneider, 2018). This means that contact, exposition, and access to other cultures have never been as intense as today and will increase even more.

Yet, teachers often feel unprepared for classroom diversity. The so-called refugee crisis starting from 2014 onwards has highlighted the increasing need for teachers to receive additional training. For instance, most of the refugees who arrived in Germany initially did not speak German or any other official language of the European Union (Aktionsrat Bildung, 2016). Nevertheless, even if all federal regions in Germany have committed to include diversity-related content within ITP across different school grades and subjects, a national overview revealed that only 44 universities out of 65 have actually put this into action and worked on their curricula (Monitor Lehrerbildung, 2016). Furthermore, in one-fourth of these 44 institutions, courses with diversity-related content are offered as elective courses and thus they have not become fully integrated as compulsory elements into all ITPs. All in all, those significant developments and changes point to an urgent need to better understand how teachers are prepared to embrace cultural diversity in classrooms, as well as how culturally diverse students are received and taught in schools.

1.3 Words matter: Terminology of the present dissertation

In this section, I explain the rationale of choosing terms that are used throughout this dissertation. Oftentimes within a manuscript, it is hard to exhaustively define certain terms due to strict publication guidelines that limit the number of words. The use of terminology is generally related to the theoretical perspective taken in a scientific work and carries important implications, for example, for how populations under study are represented and treated. Thus, in line with theoretical perspectives employed in this thesis and my personal preferences, here I clarify the use of the most relevant terms that continue to appear throughout the different chapters, which are 'culture', 'cultural diversity', and 'culturally diverse students.'

Culture. Several debates across different disciplines and research fields have critically discussed the meanings of culture, even suggesting in some cases to abandon this term (see for example Poortinga, 2015). Borrowing from Causadias and colleagues (2018), 'culture' can be defined as 'an integrated constellation of practices, symbols, values, and ideals that are constructed and shared by a community or ethnic group, transmitted from one generation to the next, constantly renegotiated and subject to change, and operating at the individual and societal level' (p. 2). Three aspects in this definition are particularly important in my view: culture is transmissible to others, culture changes over time, and culture contributes to shaping individual's and society's behaviour.

In the educational context, culture implies more than addressing individual cultural differences in practices, values, or ideals. It requires an understanding of the cultural embeddedness of education itself, as for example reflected in how much educators' conceptions of normality are grounded in culture (Ogay & Edelmann, 2016). The essence of culturally responsive teaching (introduced later in this chapter, see section 5.4) stresses the importance of moving beyond isolated opportunities of attending to individual cultural differences in classrooms and schools towards a recognition of how culture impacts teaching and learning (Gay, 2010; Kumar, Zusho & Bondie, 2018; Ladson-Billings, 2011).

In Germany, 'culture' is commonly used as a proxy for, and conflated with 'ethnicity' (Schneider, 2018). Although 'culture' and 'ethnicity' are closely related and I use them sometimes in combination, I acknowledge that they do not describe the same construct. 'Ethnicity' refers to groups or clusters of individuals who have common cultural features that distinguish them from those of other groups or clusters of people (Smedley & Smedley,

2005). Similarly to the term 'culture', 'ethnicity' is not fixed, and individuals can move into another ethnic group and become engaged in that ethnicity (Syed, Azmitia, & Phinney, 2007).

In this dissertation, I avoid the use of the term 'race' but instead I make use of the term 'racism'. Most importantly, the use of the construct 'race' is bound to the socio-historical context of the United States (Umaña-Taylor, et al., 2014). The term 'race' is officially banned from European Parliament language more than two decades ago, because its use could wrongly support the existence of a pre-established order of races (Portera, 2008). Nonetheless, racism and discrimination based on skin colour remain pervasive not only in the United States but also in Germany as well in other European countries (EU, 2018).

Cultural diversity. As embedded in the UNESCO *Universal Declaration on Cultural Diversity*, 'cultural diversity' in education can be defined as 'promoting through education an awareness of the positive value of different identities, values, and lifestyles' (UNESCO, 2002; p. 2). However, cultural diversity is frequently seen as a threat and detriment to be denied, avoided, or eliminated in the educational context (Gay, 2010). If it is acknowledged, it is mostly perceived as a challenge. Relatedly, I prefer to use the term 'diversity' rather than 'heterogeneity'. With the use of 'heterogeneity' especially in the German context, Sliwka (2010) argues that differences are seen as a challenge to be dealt with, while with 'diversity' differences are seen as an asset and opportunity because they serve as a resource for individual and mutual learning and development.

Culturally diverse students. All students are culturally diverse because they all carry cultural features and are involved in processes that make them contribute to certain cultures. Yet, this broader constructivist definition of cultural diversity (which is also the theoretical core proposed by culturally responsive teaching) unfortunately did not always match the definitions applied in the different studies and chapters of this thesis. As used later in this thesis, the definition of 'culturally diverse students' may be narrow and only refer to students with an immigrant background (see Chapter 4 and 5, whereby only students with migration history themselves or with their parents having migrant biographies are being referred to as culturally diverse). This is, of course, a challenge to the reader of this thesis, which unfortunately could not be avoided because of necessary methodological choices. Relatedly, I often used the term 'students with an immigrant background' or 'immigrant students'. I am aware that these terms are very broad and may both lead to *othering* individuals (i.e., Germans as opposed to non-Germans), with possible negative consequences and exclusive discourses. What needs to be said is that where more narrow definitions related to immigration biographies are used some facts should be kept in mind: German schools and

classrooms include students from a large range of cultural backgrounds. Homogenous classes are indeed a myth. I believe that in using 'culturally diverse students' I acknowledge that diversity is a reality in today's society.

I have rarely used the term 'culturally marginalized students'. On the one hand, I do agree with Addy's argument (2015) i.e., that using the term 'culturally marginalized students' acknowledges the power differential between these students and the White middle-class students, and how these students are daily disadvantaged in classrooms. On the other hand, I believe that the use of the term 'culturally marginalized students' may also lead to primarily paying attention only to negative aspects or challenges that may derive from teaching and interacting with a variety of different cultures.

1.4 Theoretical framework

In this dissertation, I rely on insights from theoretical perspectives that derived from the field of psychology such as social cognitive theory and intergroup ideologies, as well as from the field of multicultural education such as culturally responsive teaching. The decision to combine theoretical insights from psychology and educational science in this thesis is related to my educational background in both disciplines. Furthermore, I follow the steps of recently published scientific literature especially with regard to teachers and schools dealing with cultural diversity in the German context, which has successfully opened the space for new contributions to the field of educational psychology (e.g., Hachfeld, et al. 2011; Schachner, Noack, Van de Vijver, & Eckstein, 2016). In the following sections, I summarise the theoretical insights applied in this dissertation. More specifically, I first introduce teachers' beliefs, delve more in detail into teachers' beliefs about cultural diversity, and then describe theoretical perspectives on culturally responsive teaching. Lastly, I present the concept of culturally responsive teaching self-efficacy beliefs that effectively represents a joint synthesis of the different theoretical perspectives included in this dissertation.

1.4.1 Defining teachers' beliefs

Following Bandura's theory of triadic reciprocal determinism (1997), beliefs are seen as individual cognitive conceptions in constant relation to behaviour and the external environment. Bidirectional relationships exist between personal beliefs, behaviour, and the external environment (e.g., school and classroom characteristics), but their influence and

reciprocal effects vary for different activities and under different circumstances. Research on the bidirectional relationships between teachers' beliefs and practices has rapidly grown in the last two decades. A review of the teacher belief literature (Fives & Buehl, 2012) indicates that beliefs teachers hold towards a certain matter (e.g., cultural diversity in education) have three relevant functions: they act as a filter to the knowledge, they influence the framing of a problem or a task, and they guide the teacher's intention and action.

All three functions of beliefs may be antecedents of teaching behaviour in the classroom (Fives & Buehl, 2012). However, different belief functions may serve different situations. For example, the function of beliefs as a filter is particularly relevant in the context of ITP. Beliefs function as a filter in the sense of shaping and interpreting the information teachers receive during all phases of teachers' professional development, determining the knowledge that will later be transferred to their teaching. This is what is investigated especially in Chapter 2 of this thesis when I review studies on teacher trainings targeting cultural diversity beliefs with pre-service teachers. Beliefs shape the way in which a teacher frames a problem or a task. Accordingly, once teachers extract information, beliefs help teachers to judge what is relevant in classroom and school. This function of beliefs was investigated in Chapter 5 and partially in Chapter 4 with in-service teachers, where I examine more closely teachers' practices in schools and classrooms.

Beliefs guide intention and action and thus function as a motivational force that influences goals teachers set, the effort required to achieve these goals, and how they feel while engaging in meeting these goals. This latter function of beliefs is later described and referred to the construct named as culturally responsive teaching self-efficacy beliefs. This construct is especially relevant in Chapter 3 where I adapted and validated a scale in German that measures culturally responsive teaching self-efficacy beliefs.

Teachers' beliefs are cultivated, oftentimes reflect values of mainstream society, and are influenced by the social, cultural, and historical contexts they experience during their career (Schultz, Jones-Walker, & Chikkatur, 2008). Thus, on the one hand, beliefs are considered dynamic and prone to change (Thompson, 1992). On the other hand, beliefs might be relatively stable and resistant to alter because the origins of teachers' beliefs are tied to individuals' experiences (Kagan, 1992; Richardson, 2003). Previous research on the formation of teachers' beliefs attributes a crucial role to family socialisation (Knowles, 1992), prior school experience (Richardson, 2003), and personal life experiences, such as a study abroad (Garmon, 2004).

1.4.2 Teachers' Beliefs about Cultural Diversity

Teachers' beliefs about cultural diversity should not be seen as a monolithic block but considered as a multidimensional and multi-layered construct. Research rarely specifies what types of beliefs are investigated beyond issues related to cultural diversity. Drawing from Fives and Buehl (2012), teachers' beliefs about cultural diversity can be framed in five different, albeit related, areas: (1) beliefs about own cultural self-efficacy, (2) beliefs about cultural context and environment, (3) beliefs about cultural content or knowledge, (4) beliefs about culturally sensitive teaching practices and approaches, and (5) beliefs about culturally diverse students and their families.

The first area includes teacher sense of efficacy related to cultural diversity, such as culturally responsive teaching self-efficacy. These beliefs can positively influence learning outcomes, and have emerged as a distinct and measurable construct (Siwatu, 2007). The second area addresses beliefs about cultural context or environment. These beliefs are related to the teaching contexts and instructional environments, such as beliefs about teaching in highly culturally and ethnically diverse schools and geographical areas (Haberman, 1996). The third area addresses beliefs about cultural content or knowledge. These beliefs focus on the subject matter, such as beliefs about what should be taught (e.g., teaching history regarding marginalised population) (Virta, 2009). The fourth area includes beliefs about culturally sensitive teaching practices and approaches, such as culturally responsive teaching (Gay, 2010) and transformative learning (Mezirow, 1978). In the fifth area, Fives and Buehl (2012) include beliefs about culturally diverse students and their families.

In the present dissertation, I take into account this multidimensionality of teachers' cultural diversity beliefs. More specifically, in Chapter 2, when I review teacher trainings targeting all different cultural diversity belief areas; in Chapter 3 where I adapt and validate a scale measuring culturally responsive teaching self-efficacy beliefs; and in Chapter 5, when I address the relation between beliefs about cultural content and teaching behaviour. In Chapter 4, I do not examine teachers' cultural diversity beliefs but schools practices implemented by teachers to address cultural diversity.

1.4.3 Colour-evasive and multicultural beliefs

Different intergroup ideologies derived from the field of social psychology (e.g., *colour-evasiveness*[2] and *multiculturalism*; see for a review Rosenthal & Levy, 2010) have been adapted to study teachers' beliefs about cultural diversity. *Colour-evasiveness* and *multiculturalism* reflect prescriptive beliefs about cultural and ethnic diversity, indicating how the world, or individuals, should be. More specifically, colour-evasive beliefs seek to ignore diversity by de-emphasizing cultural differences (Apfelbaum, Norton, & Sommers, 2012). Multicultural beliefs refer to the recognition of, and support for, culturally diverse groups (van de Vijver, Bruegelmans, & Schalk-Soeker, 2008). *Colour-evasiveness* and *multiculturalism* may downplay or support instructional practices that are responsive to cultural diversity in schools and classrooms.

Conceptually, *colour-evasiveness* and *multiculturalism* are not mutually exclusive, in fact, both beliefs arguably advocate for equality. Teachers may tend to hold beliefs that are in line with one ideology, *colour-evasive* or *multicultural*, or combine elements of both (Hachfeld et al., 2011), and vary for their application across different situations in their teaching. However, empirical research with pre-service teachers has shown that a strong endorsement of *colour-evasive* beliefs leads to ignoring students' cultural backgrounds. In Germany, pre-service teachers (N = 433) holding beliefs in line with *colour-evasiveness* were found less willing to adapt teaching for and about cultural diversity (Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015). Likewise, in a sample of 239 U.S. White pre-service teachers, *colour-evasive* beliefs predicted low levels of cultural diversity awareness (Wang, Castro, & Cunningham, 2014). Thus, this dissertation is written based on the assumption that *colour-evasive* beliefs can hinder the recognition of culturally diverse groups, while *multicultural* beliefs may support the use of culturally responsive teaching (assumption assessed in Chapter 5).

Colour-evasiveness and *multiculturalism* have been adapted also to school policies, and classroom practices (Celeste, Baysu, Meeussen, Kende, & Phalet, 2016; Schwarzenthal, Schachner, van de Vijver, & Juang, 2018). In particular in the German context, *colour-evasiveness* may be inherent in a broader perspective of e*quality and inclusion* (Schachner, 2017). The emphasis of e*quality and inclusion* is primarily on promoting equal treatment and contact across groups to undermine stereotyping and prejudice in order to combat racism and discrimination. This also implies emphasizing between-group similarities and downplaying

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[2] The original term *colour-blindness* is not used in this dissertation to avoid any negative connotation regarding individual differences in visual capabilities.

differences (Park & Judd, 2005). In Chapter 4, I study how *equality and inclusion* (and not *color-evasiveness*) can be shown in school practices implemented by teachers.

1.4.4 Pedagogical approaches: Culturally responsive teaching

     Born as an outgrowth of multicultural education, culturally responsive teaching (CRT) is a conceptual framework developed in the United States more than twenty years ago. Several scholars from historically underrepresented groups have contributed to the development of CRT (e.g., Gay, 2000; Ladson-Billings, 1995; Nieto, 1992; Paris, 2012; Villegas & Lucas, 2002). Although there are differences in the way CRT is conceptualized and defined (e.g., culturally relevant pedagogy, culturally congruent instruction, culturally sustaining pedagogy), a major premise of CRT is culture influences how and what children learn both in and out of school, as well as how and what teachers teach (Gay, 2015).

     In my dissertation, when studying CRT, I used the highly influential work of Geneva Gay (2000, 2010). Gay identified six characteristics of CRT that have been consistent with other scholars in this field. Specifically, CRT is validating, comprehensive, multidimensional, empowering, transformative, and emancipatory. CRT is *validating* because it affirms every student's culture and cultural identity, providing connections to their culture. CRT is *comprehensive* because it seeks to educate student's academic, social, moral, and political spheres. CRT is *multidimensional* because it encompasses curriculum content, instructional strategies, achievement assessment, as well as teacher-student relationship. CRT is socially and academically *empowering* because it highlights the need to set high expectations for students with a commitment to pursue every student's success. CRT is *transformative* because it aims at eliminating educational disparities by relying on students' existing strengths. CRT is *emancipatory* because it encourages students to engage more actively to shape their own learning.

     A narrative synthesis of qualitative studies has demonstrated that CRT benefits multiple kinds of student achievement across the content areas of history, social studies, as well as subjects often considered culture-free such as mathematics and science (Aronson & Laughter, 2016). Relatedly, more quantitative and longitudinal findings speak in favour of CRT practices for students from various minority and traditionally marginalized groups (Dee & Penner, 2017; Matthews & López, 2018). All in all, these results indicate that student cultural background should be considered as a resource in teaching and learning rather than as a problem to overcome or ignore (Gay, 2010). However, most research conducted on CRT

reports evidence from one country, namely the USA (Sleeter, 2012). Thus, more research is needed to explore and describe how CRT is implemented in ITPs in other major immigrant destinations, or how more experienced teachers embrace CRT across different levels of schooling and subjects. One major aim of this thesis was to contribute to the literature and knowledge about CRT in the German context.

As efforts to promote CRT increase, there is a need for translating the insights of CRT scholars into a cohesive representation of teaching and learning practices. Critics to CRT oftentimes highlight that it is difficult to understand what CRT means and how it looks in the classroom (Schmeichel, 2012; Sleeter, 2012). These critiques provide input for discussion and for conducting more systematic empirical research without dismissing the field of CRT. For example, Powell and colleagues (2016) have recently developed and validated a classroom observation protocol that can be used to assess culturally responsive practices of pre-service and in-service teachers. CRT should not be reduced to a checklist of steps, but this observation protocol can be used in combination with self-report measures. This classroom observation protocol was highly relevant in Chapter 5 of this thesis, when I used it in combination with semi-structured interviews. Capturing CRT through a variety of research methods could support implementation as well as finding obstacles to culturally responsive teaching in ITP.

1.4.5 Culturally responsive teaching self-efficacy beliefs

An ever-increasing interest is rising about the role of teacher self-efficacy beliefs in the field of teacher education (Zee & Koomen, 2016). Grounded in social cognitive theory (Bandura, 1997), self-efficacy beliefs are defined as individuals' perceptions of their capabilities to execute and plan specific behaviour. Yet, scant attention has been paid to context- and task-specific attributes of teacher self-efficacy. For example, few studies focus on context-specific aspects of teacher self-efficacy that take into account culturally and ethnically diverse classrooms and schools in which teachers must be able to enact a behaviour. Teacher self-efficacy in classrooms and schools with ethnically mixed student bodies could be perceived differently than self-efficacy in schools with a more homogenous cultural and ethnic make-up. Building on culturally responsive teaching (Gay, 2000; Ladson-Billings, 1995), Siwatu (2007) introduced the concept of culturally responsive teaching self-efficacy, partially addressing the task-specific issue, by increasing the specificity of teacher self-efficacy. Culturally responsive teaching self-efficacy beliefs are the perceived capability to enact the pedagogical principles of culturally responsive teaching. Accordingly, a teacher

could feel efficacious teaching history but less efficacious in the teaching of history regarding marginalised populations or including materials and perspectives that reflect diverse students' cultural backgrounds.

Self-efficacy is particularly malleable during ITP. Following Bandura's insights (1997), mastery and vicarious experiences are powerful sources of self-efficacy information and development. For most pre-service teachers, opportunities to practice (mastery experiences) and observe (vicarious experiences) culturally responsive teaching ideally occur during the field experience situated in culturally diverse classrooms. In a mixed-methods study, Siwatu (2011) reviewed the doubts of pre-service teachers who reported low culturally responsive teaching self-efficacy. Participants indicated having few opportunities to practice or observe aspects of culturally responsive teaching during ITP. When these opportunities were offered, they occurred not in their instructional methods courses (e.g., teaching mathematics in the elementary school) but in sporadic classroom discussions. Fitchett and colleagues (2012) developed and tested the effects of a social studies methods course, integrating culturally responsive teaching insights and practical examples of successful culturally responsive instructional planning. At the end of the course, results showed that pre-service teachers were more efficacious in their abilities to teach multicultural social studies content. Thus, also in a method course, a combination of theoretical insights and related practical examples can be meaningful to sustain culturally responsive teaching self-efficacy. In Chapter 3, I adapted and validated a scale in the German context that can help to collect efforts in enhancing culturally responsive teaching self-efficacy beliefs, ideally throughout ITP.

To sum it all up, through a combination of theoretical perspectives from psychology (i.e., social psychology and cognitive psychology) and educational science (i.e., culturally responsive teaching), many useful hints for formulating solid research questions are incorporated in the different chapters of this thesis. The theoretical framework also helps to find possible explanations for the results of the different studies contributing to the overall thesis. In the following section, I give an overview of each study, including a brief description of the main objectives, methods, and datasets analysed.

1.5 Dissertation Outline

The present dissertation about teachers' cultural diversity beliefs and culturally responsive practices includes a general introduction (Chapter 1), a systematic literature review (Chapter 2), three empirical studies (Chapter 3, 4, and 5) and it ends with a general discussion and conclusion (Chapter 6). The major focus of investigation laid in creating a deeper understanding of teachers' beliefs about cultural diversity and how those beliefs are related to teaching practices, which could or could not be considered to be culturally responsive. In this framework, the different chapters of this thesis served to investigate different aspects that according to existing literature and knowledge might be most striking yet remain to be explored more in detail. In the present chapter (Chapter 1), I provide the background of this dissertation, with contextual information regarding the German educational system, the theoretical framework used and main research objectives of each study.

In Chapter 2, I conduct a systematic review of the existing international studies on trainings addressing cultural diversity beliefs with pre-service teachers. More specifically, the aims of the systematic literature review are (1) to provide a description of main components and contextual characteristics of teacher trainings targeting cultural diversity beliefs, (2) report the training effects, and (3) detail the methodological strengths and weaknesses of these studies. By examining the main components and contextual characteristics of teacher trainings, the effects on beliefs about cultural diversity as well as the methodological strengths and weaknesses of these studies in a single review, I take an integrated approach to these three processes. To review these studies I use a descriptive and narrative approach (Dixon-Woods et al., 2006; Kavanagh, Campbell, Harden, & James, 2012; Popay et al., 2006), relying primarily on the use of words and text to summarise and explain findings of the synthesis. I apply one inclusion criteria: studies that assess the effects of a training longitudinally (e.g., one-group pre-post-test design with or without a control group, panel and diary studies).

The three empirical studies that follow, all highlight aspects of how far and how teacher beliefs about cultural diversity translate into real-world practices in schools. The focus of each of the studies is rather specific. Nonetheless, all of them aim at exploring a small part of the puzzle around the relations between teacher beliefs about cultural diversity and culturally responsive practices – each study thus adds to the framework in a different way. The three empirical studies are based on three different datasets containing data collected within the German context.

In Chapter 3, to expand the validity of culturally responsive teaching to the German context, I aim at verifying the dimensional structure of German version of the Culturally

Responsive Classroom Management Self-Efficacy Scale (CRCMSES; Siwatu, Putman, Starker-Glass, & Lewis, 2015). To do so, I conduct Exploratory and Confirmatory Factor Analysis, and run correlations between the subscales of the CRCMSES with a measure of cultural related-stress. Data ($n = 504$) used for the first empirical study (Chapter 3) were collected in the InTePP-project (Inclusive Teaching Professionalization Panel) in which pre-service teachers' competencies and beliefs were assessed longitudinally at two universities: the University of Potsdam and the University of Cologne.

In the second empirical study, which forms Chapter 4, the focus is on school approaches to cultural diversity. In this study, as I am interested in school practices implemented by teachers, I investigate two research questions: (1a) What types of descriptive norms regarding cultural diversity are perceived by teachers and students with and without an immigrant background and (1b) what is their degree of congruence? I am also interested in how are teachers' and students' perceptions of descriptive norms about cultural diversity related to practices and artefacts in the physical and virtual school environment? Data for the second empirical study (Chapter 4) were previously collected in a dissertation project of doctor Maja Schachner funded by the federal program "ProExzellenz" of the Free State of Thuringia. Adopting a mixed-methods research design I conducted a secondary analysis of data from teachers' ($n = 207$) and students' ($n = 1,644$) gathered in 22 secondary schools in south-west Germany. Additional sources of data in this study are based on pictures of school interiors (hall and corridors) and sixth-grade classrooms' walls ($n = 2,995$), and screenshots from each school website ($n = 6,499$).

Chapter 5 addresses the question of how culturally responsive teaching, teacher cultural diversity beliefs, and self-reflection on own teaching are related. More specifically, in this study I address two research questions: (1) How does CRT relate to teachers' beliefs about incorporating cultural diversity content into daily teaching and learning activities? And (2) how does the level of teachers' self-reflection on their own teaching relate to CRT? For this last empirical chapter, together with three other PhD candidates (Ursula Moffitt, Miriam Schwarzenthal, and Jana Vietze), I collected data with in-service teachers ($n = 99$) and students ($n = 1335$) in 17 secondary schools in Berlin. Additionally, I conducted a multiple case study with four ethnic German teachers using classroom video observations and post-observation interviews in one culturally and ethnically diverse high school included in the bigger sample.

In the final chapter (Chapter 6), I summarise the main findings of the systematic literature review and three empirical studies, and discuss their scientific and practical implications.

Challenging beliefs about cultural diversity in education:

A synthesis and critical review of trainings with pre-service teachers

This chapter is based on:

Abstract

Teaching culturally diverse classrooms starts from embracing beliefs that recognise the strengths of cultural diversity. Research is needed to understand how teacher training contributes to shaping pre-service teachers' beliefs about cultural diversity. Accordingly, the purpose of this review is to 1) provide a description of main components and contextual characteristics of teacher trainings targeting cultural diversity beliefs, 2) report the training effects, and 3) detail the methodological strengths and weaknesses of these studies. A total of 36 studies published between 2005 and 2015 that used a longitudinal assessment of cultural diversity beliefs were reviewed. The collective results of these studies indicate a large variance amongst trainings, with experiential learning shifting cultural diversity beliefs positively. However, existing studies have significant limitations in the study design and training evaluation that hinder their conclusions regarding internal and external validity and point towards new directions for future research.

Keywords: cultural diversity; beliefs; teacher education; pre-service teacher

Chapter 2

The cultural and ethnic profile of student populations is rapidly changing in many parts of the world. Such an increase in the cultural and ethnic diversity in education has the potential to promote human development, growth, and creativity (UNESCO, 2009), but also to give rise to new challenges. Given teachers' central role in determining equity in education, their responsibility to prepare all students adequately is greater than ever. This critical responsibility has pushed ongoing debates about how to best prepare future teachers (Zeichner, Payne, & Brayko, 2015). Based on the work of prominent scholars in the field of multicultural education (Gay, 2010; Milner, 2010), developing professional preparation for teaching students from different cultural backgrounds starts from embracing beliefs that recognise the strengths of cultural diversity. Thus, exploring and challenging pre-service teachers' beliefs about cultural diversity should constitute a primary objective in teacher education. Little is known, however, of whether teacher trainings are effective in changing teacher beliefs. Therefore, the main goal of the present work is to systematically review and assess trainings targeting beliefs about cultural diversity with pre-service teachers.

2.1 Introduction

Following insights from social cognitive theory (Bandura, 1997), beliefs are seen as individual cognitive conceptions in constant relation to behaviour and the external environment. Bidirectional relationships exist between personal beliefs, behaviour, and the external environment, but their influence and reciprocal effects vary for different activities and under different circumstances (Bandura, 1997). In educational research, teachers' beliefs have often been studied following cognitive theories.

Ullucci (2007) argued that teachers' beliefs form the foundation of the relationship between students and teachers. School practices and the learning environment may be shaped by or reflect beliefs teachers hold about the children in their care (Nelson & Guerra, 2014). These beliefs act as a filter to knowledge, influence the framing of a problem or a task, and guide the teacher's intention and action in the classroom (Fives & Buehl, 2012). As part of any teacher professional development, teachers need time to engage in explicit reflection on their beliefs and also to understand the possible consequences of these beliefs (Fives & Buehl, 2016).

Teachers' beliefs are cultivated, oftentimes reflect values of mainstream society, and are influenced by the social, cultural, and historical contexts they experience during their career (Schultz, Jones-Walker, & Chikkatur, 2008). Thus, on the one hand, beliefs are considered dynamic and prone to change (Thompson, 1992). On the other hand, beliefs might be relatively stable and resistant to alter because the origins of teachers' beliefs are tied to individuals' experiences (Kagan, 1992; Richardson, 2003). Previous research on the formation of teacher beliefs attributes a crucial role to family socialisation (Knowles, 1992), prior school experience (Richardson, 2003), and cross-cultural life experiences, such as a study abroad (Garmon, 2004).

It is during formal teaching preparation, however, that beliefs are more susceptible to change (Milner, 2010). Prospective teachers can be confronted with possible negative conceptions about cultural diversity (Gay & Kirkland, 2003). For instance, some prospective teachers may bring stereotypical ethnic biases (Glock, 2016), or tend to hold colourblind beliefs by rejecting the cultural capital that students bring into the learning environment (Ladson-Billings, 1995). Teachers with such beliefs may not be aware of or apply instructional practices to successfully teach diverse students (Aronson & Laughter, 2016; Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015). To this end, teacher education is viewed as the principal vehicle to ensure from the very beginning that teachers acknowledge and challenge their own beliefs about cultural diversity in education.

2.1.1 Towards a multidimensional definition of beliefs about cultural diversity

There is a great variability in how teachers' beliefs are studied and conceptualised (Levin, 2015), perhaps partly due to the fact that a unified theory for teachers' beliefs is still missing. Further, the lack of a common terminology has caused confusion amongst educational researchers (Kane, Sandretto, & Heath, 2002). Fives and Buehl (2012) acknowledge the complexity of teachers' beliefs and highlight the importance of distinguishing teachers' beliefs in different areas rather than view them as a monolithic construct. The present review adapted the distinction proposed by Fives and Buehl (2012) to teachers' beliefs about cultural diversity in education - another multidimensional and complex construct (Gay, 2015). More specifically, the present review identifies teacher trainings that targeted different areas of beliefs about cultural diversity, and it assesses which areas of beliefs were explored and positively changed, highlighting new directions for teacher preparation.

Drawing from Fives and Buehl (2012), teachers' beliefs about cultural diversity can be framed in five different, albeit related, areas: (1) beliefs about own cultural self-efficacy, (2) beliefs about cultural context and environment, (3) beliefs about cultural content or knowledge, (4) beliefs about culturally sensitive teaching practices and approaches, and (5) beliefs about culturally diverse students and their families. The first area includes teacher sense of efficacy related to cultural diversity, such as culturally responsive teaching self-efficacy. Teachers' beliefs that they can positively influence learning outcomes has emerged as a distinct and measurable construct (Siwatu, 2007). The second area addresses beliefs about cultural context or environment. These beliefs are related to the teaching contexts and instructional environments, such as beliefs about teaching in highly culturally and ethnically diverse schools and geographical areas (Haberman, 1996). The third area addresses beliefs about cultural content or knowledge. These beliefs focus on the subject matter, such as beliefs about what should be taught (e.g., teaching history regarding marginalised population) (Virta, 2009). The fourth area includes beliefs about culturally sensitive teaching practices and approaches, such as culturally responsive teaching (Gay, 2010) and transformative learning (Mezirow, 1978). In the fifth area, Fives and Buehl (2012) include beliefs about students and their families. As these types of beliefs may influence how teachers respond to and interact with students, the current review also includes studies on trainings that explore and challenge beliefs about culturally diverse students and their families.

2.1.2 Teacher training on cultural diversity beliefs

Many teacher programmes have added trainings aimed at exploring and challenging beliefs towards cultural diversity in education (Trent, Kea, & Oh, 2008). The main components of these trainings, such as the length, format, learning activities implemented, and the aims of critically changing these beliefs, vary widely (Castro, 2010). Additionally, the context of diversity training (e.g., attendance requirement, standalone versus integrated approach) is often overlooked (Bezrukova, Spell, Perry, & Jehn, 2016). Exploring the main training components as well as understanding how trainings are positioned and reinforced in teacher education can provide meaningful insights on the effects of cultural diversity trainings on cultural diversity beliefs.

Most of these studies claiming the effectiveness of trainings on teachers' cultural diversity beliefs are based on cross-sectional evaluation (Sleeter & Owuor, 2011). Although these studies offer insights into the possible precursors for the acceptance of cultural diversity,

such correlational studies cannot ascertain any transfer of trainings to targeting beliefs, because no direction of causality can be inferred. In addition, there are conflicting findings from cross-sectional and longitudinal studies about their effects (Sleeter, 2008). An understanding of the effects of teacher trainings targeting beliefs is incomplete without a systematic consideration of the development of those beliefs over time. A longitudinal assessment can provide valuable insights into teacher growth (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Kagan, 1992). Therefore, to strengthen the conclusion and inform practice, only longitudinal studies that investigated the effects of trainings on beliefs about cultural diversity are included in the present review.

During the last decade, there have been several research reviews of teacher trainings to prepare for cultural diversity (Castro, 2010; del Prado Hill, Friedland, & Phelps, 2012; Gay, 2015; Sleeter & Owuor, 2011; Trent, Kea, & Oh, 2008). These reviews have often focused on a specific method of teacher preparation to address beliefs, such as cultural immersion field experience (del Prado Hill, Friedland, & Phelps, 2012). These reports have reached a similar conclusion: research on teacher trainings targeting beliefs about cultural diversity is fragmented (Gay, 2015), with beliefs operationalised in many ways (Trent, Kea, & Oh, 2008), and more research is needed to trace the changes and development of pre-service teachers' beliefs during teacher preparation (Castro, 2010).

2.1.3 The present review

Currently, to the best of our knowledge, there are no recent reviews that systematically inspect the main components and contextual characteristics of teacher trainings on cultural diversity beliefs. We examine the effects of trainings on pre-service teachers' beliefs about cultural diversity in education. Finally, the present review identifies strengths and weaknesses of these studies, looking at study design and training evaluation. Three basic questions guided this synthesis of the literature:

1) What are the main components and contextual characteristics of teacher trainings targeting pre-service teachers' beliefs about cultural diversity?

2) What are the effects of these trainings on pre-service teachers' beliefs about cultural diversity?

3) What are the methodological strengths and weaknesses of these studies?

By examining the main components and contextual characteristics of teacher trainings, the effects on beliefs about cultural diversity as well as the methodological strengths and weaknesses of these studies in a single review, the present work took an integrated approach to these three processes.

2.2 Methods

In this study, a systematic review with a descriptive and narrative approach is applied to exploring primary studies (Dixon-Woods et al., 2006; Kavanagh, Campbell, Harden, & James, 2012; Popay et al., 2006), relying primarily on the use of words and text to summarise and explain findings of the synthesis. This approach was preferred for two reasons. First, given the complexity of beliefs, data gathered from belief measures are subjected to quantitative, qualitative and mixed methods analysis (Hoffman & Seidel, 2015). Thus, a descriptive and narrative approach allows a more comprehensive synthesis of different designs, without privileging quantitative (e.g., meta-analysis), or qualitative investigations (e.g., thematic analysis). Second, a descriptive and narrative approach allows us to capture the current state of knowledge (first research question), assess the effects of these trainings on beliefs about cultural diversity (second research question), and critically review the methodological strengths and shortcomings of studies (third research question).

2.2.1 Search procedure

To search for relevant studies, an electronic and manual search was conducted. The most widely used electronic databases in educational research were screened: Educational Resources Information Center (ERIC), Academic Search Premier (EBSCO), which contains several other databases such as PsycINFO, PsycARTICLES, Educational Sources, and JSTOR. The descriptors used were: *beliefs* AND *pre-service teacher* OR *student teacher* AND *cultural diversity* OR *multiculturalism* OR *multicultural education*, AND *teacher training* OR *teacher preparation* OR *teacher education*. Attitudes, perceptions, and dispositions were searched for in addition to beliefs because these terms are often used interchangeably in the field of teacher education (Pajares, 1992). Therefore, to ensure that our review was comprehensive, we ran an additional search with each of these terms separately. The combinations of those keywords were used to search for both titles and abstracts. Successively the reference lists of the initially included articles and previous research

syntheses (i.e., Castro, 2010; del Prado Hill, Friedland, & Phelps, 2012; Gay, 2015; Sleeter & Owuor, 2011; Trent, Kea, & Oh, 2008) were also searched manually. A summary of the systematic review process with studies initially selected, main reasons for study exclusion, and final pool of studies included in the analysis is depicted in the flow diagram (Figure 1)

Research Objectives

(1) Investigate the *components* of teacher training
(2) Investigate the *effects* on beliefs about cultural diversity
(3) Investigate the *methodological strengths and weaknesses* of study design and trainings evaluation

Definition of Boundaries

– International studies published from 2005 to 2015
– Pre-service teachers
– Beliefs about cultural diversity
– Longitudinal design

Search Features

– Electronic databases
– Manual search in prior narrative reviews
– List of references of articles initially included

Initial pool of studies selected from the first search
N = 84

Studies excluded
N = 48

Focused on in-service teachers

Adopted a cross-sectional design

Focused on ethnic identity development or other aspects of diversity

Presented incomplete information about the sample or of the training

Inclusion

Final pool of studies reviewed in the descriptive and narrative synthesis
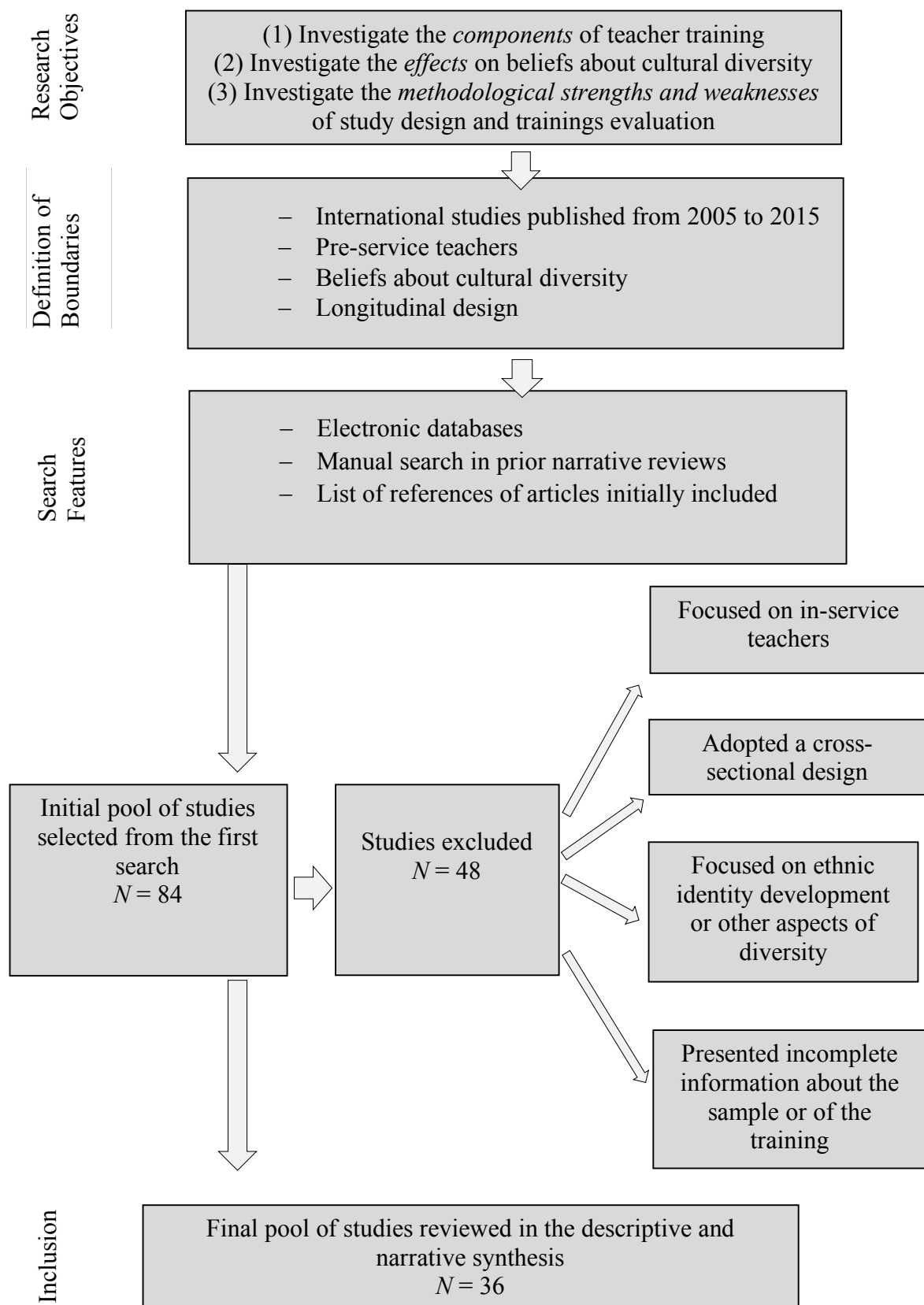*N* = 36

Figure 1. A summary of the systematic review process with studies initially selected, studies excluded and final pool of studies included in the analysis.

2.2.2 Inclusion and exclusion criteria

Abstracts and titles were screened to retrieve journal articles which potentially could suit this review. Book chapters and dissertations were excluded because they were often difficult to retrieve and hard to assess whether they have been subjected to the same rigorous peer review process as journal articles.

The following inclusion and exclusion criteria were used. First, beliefs about cultural diversity were the main target of training. Second, the search was limited to the past decade (2005-2015) to ensure a more contemporary review of trainings. Third, only studies in which pre-service teachers were the focal participants were included. Although trainings with in-service teachers are also worth considering, this review aims to develop specific recommendations for teacher training institutions. Fourth, studies reporting the effects of trainings to prepare teachers across all grades were considered. The contexts and content of teaching are clearly related to different school settings, but accounting for cultural diversity is equally important regardless of school grades. Fifth, this review included studies published in international peer-reviewed journals (in English) using any type of data sources (e.g., questionnaires, interviews, written reflections), and located in any geographical area. We did not review studies specifically focusing on teachers' beliefs about students learning the national language as a second language because it is a distinct field of research (for a review, see Lucas, Villegas, & Martin, 2015). Sixth, only studies with a longitudinal component (e.g., one-group pre- post-test design with or without a control group, panel and diary studies) were included in the final pool. More specifically, we included studies that collected data for two or more distinct periods, without time restrictions; participants investigated were the same, from one period to the next, and the analysis involved some comparison of data across periods (Menard, 2002). Studies using a retrospective research design were excluded because they suffer from several limitations, such as the amount of data that can be collected on one occasion (Ruspini, 1999).

2.2.3 Coding procedure and data analysis

Two researchers (the first author and a research assistant) conducted the search and reviewed the full text of the studies initially selected. Final decisions about whether to include a study were based on reading the full manuscript. After every five studies, the decision regarding inclusion was undertaken. Any discrepancies were resolved through consensus and, when needed, the second and third author helped with the inclusion and exclusion decision.

The two researchers also coded all studies, developing an iterative coding procedure. For the first research question, we coded the theoretical framework of the training, length (number of months, hours, meetings), format (e.g., coursework, coursework in combination with field experience), learning activities implemented in the training, attendance requirement (mandatory or elective), training approach (standalone versus integrated), and five areas of teachers' beliefs: (1) beliefs about own cultural self-efficacy, (2) beliefs about cultural context and environment, (3) beliefs about cultural content or knowledge, (4) beliefs about culturally sensitive teaching practices or approaches, and (5) beliefs towards culturally diverse students and their families.

The main results of each study (e.g., statistical results reported, participants' verbatim quotes) were read multiple times to evaluate the effects on beliefs and which aspects were considered helpful (second research question). Finally, methodological strengths and weaknesses of each study (third research question) were assessed looking at authors' relationships to participants (course instructor or independent researcher), a presence of a control or comparison group (Yes or No), data gathering (e.g., questionnaire, interview, written journals), and data analysis procedure (e.g., effect size, triangulation, reliability). The methodological strength and weakness indicators were partially based on the work of previous reviews in the field of multicultural education (Gay, 2015; Sleeter & Owuor, 2011; Trent, Kea, & Oh, 2008), recommended standards in measuring beliefs (Hoffman & Seidel, 2015; Kane, Sandretto, & Heath, 2002; Levin, 2015) as well as following diversity training literature (Bezrukova et al., 2016).

2.3 Results

2.3.1 Search results

The electronic search yielded 872 results. From this electronic search, we retrieved a total of 78 peer-reviewed journal articles. We identified 6 additional articles in the manual search, resulting in an initial pool of 84 articles. All 84 full-text papers were subjected to data extraction. After applying our inclusion and exclusion criteria, we excluded 48 articles. The final pool of studies reviewed included 36 studies published from 2005 to 2015 in 19 journals. Most of these empirical investigations were conducted in the USA ($n = 33$), two in Finland (Acquah & Commins, 2013; 2015), and one in the United Kingdom (Harris & Clarke, 2011). This predominance of studies carried out in one country (i.e., the USA) in our final sample highlights the rooted origins of multicultural education movement in the USA, and its focus

on determining the effectiveness of interventions (Verkuyten & Thijs, 2013). Because student populations are becoming increasingly culturally diverse globally (Santoro, 2015), there is an urgent need to explore the assessment of teacher trainings on beliefs about cultural diversity beyond these three countries.

The number of participants across the studies reviewed varied widely, ranging from 1 to 243, *Mdn* = 41.5. In addition, a particularly striking feature of these studies is the use of small convenience samples (< 100, *n* = 30) gathered often in one university, limiting generalizability. Demographics of the samples were similar across studies, indicating that these trainings targeted mostly pre-service teachers in their early twenties, female, and self-identified as the ethnic majority group. Two studies (Acquah & Commins, 2013; 2015) included a sample of international pre-service teachers, while only one study reported the effects of a training on trainees primarily comprised of African American students (Carter Andrews, 2009). Future studies should test the effects related to demographics characteristics of pre-service teachers. A great proportion of culturally diverse trainees may be related to more favourable responses to the training of beliefs about cultural diversity as well as having higher levels of cultural diversity acceptance (Georgi, 2016).

2.3.2 Research question 1: Training components and contextual characteristics

The following section addresses the first research question: What are the main components and contextual characteristics of teacher trainings targeting pre-service teachers' beliefs about cultural diversity? To gain an overview of the nature of the recent empirical research conducted, the reviewed studies were coded according to the theoretical framework of the training, training approach, training length, training format, training learning activities, attendance requirement, and five areas of cultural diversity beliefs. Table 1 shows a summary of training components.

Table 1

Summary of training components in the reviewed studies

Reference	Training Theoretical Framework	Training Approach	Training Length	Training Format and Learning Activities	Attendance Requirement
Acquah and Commins (2013)	Schema theory*, evidence-based for field experience	Standalone	One semester	Coursework with group discussion, course readings combined with field work (school observations)	Elective
Acquah and Commins (2015)	Critical cultural consciousness*	Standalone	One semester	Coursework with critical discussion (written and oral)	Elective
Akiba (2011)	Social cognitive-instructional model, culturally responsive teaching*	Standalone	One semester	Coursework with course readings, opportunity for reflection combined with field experience	Mandatory
Almarza (2005)	Realistic approach*	Standalone	One semester	Coursework with group reflection and discussion related to field experience	Not reported
Amatea et al. (2012)	Critical reflection, funds of knowledge*	Standalone	One semester	Coursework with twelve different in-class and out-of-class learning activities	Mandatory
Baldwin et al. (2007)	Evidence-based for service-learning	Standalone	4 weeks for the first group, 12 weeks for the second group	School-based and community-based service learning	Mandatory
Bales and Saffold (2011)	Conceptual change learning theory, culturally responsive teaching*	Standalone	One semester	Coursework with group reflection combined field experience	Elective
Bennett (2013)	Culturally responsive teaching, situated learning, sociocultural theory*	Standalone	One semester	Field experience with one-on-one student-teacher interactions and critical reflection	Mandatory
Bleicher (2011)	Evidence-based for field experience	Standalone	1 week	Short field experience combined with course readings and assignments	Mandatory
Bravo et al. (2014)	Culturally responsive pedagogy, funds of knowledge*	Standalone	One semester	Coursework with course readings and activities resembling the Five Standards for Effective Pedagogy	Mandatory
Carter Andrews (2009)	Evidence-based for service-learning	Standalone	One semester	Coursework combined with service learning and group reflection	Mandatory

Cho and Cicchelli (2012)	Critical pedagogy*, evidence-based for field experience	Integrated	2 years	Coursework combined with field experience in urban and suburban schools	Mandatory
Cicchelli and Cho (2007)	Multicultural teacher education, evidence-based for field experience	Integrated	2 years	Coursework combined with field experience (Fordham's Initial Teacher Education Programme)	Mandatory
Conaway et al. (2007)	Evidence-based for field experience	Standalone	One semester	Field experience combined with tutoring by classroom teachers and university instructors	Mandatory
Cone (2012)	Evidence-based for service learning	Standalone	One semester	Coursework with course readings, group discussion combined with service learning	Elective
Conner (2010)	Contact theory, theory of unlearning*	Standalone	One semester	Coursework with course readings combined with service learning	Mandatory
Cooper (2007)	Evidence-based for service learning	Standalone	Two semesters	Coursework combined with service learning (six structured activities)	Mandatory
Dotger (2010)	Situated cognition, social role-taking*	Standalone	One semester	Coursework with role-playings and group discussion	Elective
Fitchett et al. (2012)	Culturally responsive teaching*	Standalone	One semester	Coursework with group discussion, opportunity for reflection, combined with field experience and field work (school observations)	Mandatory
Frederick et al. (2010)	Critical pedagogy, pedagogy of poverty*	Standalone	One semester	Coursework with class simulations, school observations, course readings and group discussions	Mandatory
Frye et al. (2010)	Culturally responsive teaching*	Standalone	One semester	Coursework with course readings and group discussion	Not reported
Han (2013)	Critical literacy, critical pedagogy*	Standalone	One semester	Coursework with course readings and group discussion	Not reported
Han et al. (2015)	Critical literacy, Bourdieu's notion of different field experience*	Standalone	One semester	Coursework with course readings and group discussion	Mandatory
Harris and Clarke (2011)	Evidence-based for coursework	Standalone	One semester	Coursework covering topics related to history teaching and cultural diversity, and case scenarios	Mandatory
Kambutu and Nganga (2008)	Transformative learning*, evidence-based for international experience abroad	Standalone	2 weeks	International field experience with additional classes (coursework) taken in the host country	Elective

Kyles and Olafson (2008)	Evidence-based for field experience	Standalone	One semester	Field experience combined with guided reflection and personal reflective narratives	Not reported
Malewski et al. (2012)	Four levels of cultural knowledge*, evidence-based for international field experience	Standalone	5 weeks	Coursework in the host country combined with field experience	Elective
Milner (2005)	Culturally responsive teaching*	Standalone	One semester	Coursework with course readings and group discussion	Not reported
Mueller and O' Connor (2007)	Equity pedagogy*	Standalone	One semester	Coursework covering topics related to cultural diversity and group discussion, and educational autobiography	Mandatory
Pohan et al. (2009)	Evidence-based for field experience	Standalone	One semester	Field experience with direct experience in the classroom and other school-based activities	Not reported
Sbazo and Anderson (2009)	Inquiry-learn approach, critical reflection*	Standalone	One semester	Coursework with a combination of lectures and small group discussion	Mandatory
Souto-Manning (2011)	Critical pedagogy*	Standalone	One semester	Boalian theatre of the oppressed adapted for pre-service teachers	Not reported
Spalding et al. (2007)	Evidence-based for international field experience	Standalone	5 months (coursework) 9 days for international field experience	Preparatory coursework with course readings and group discussion, combined with international field experience	Elective
Waddell (2013)	Evidence-based for coursework and field experience, situated learning*	Standalone	One semester	Coursework with course readings and group discussion combined field-based activities with students' families	Not reported
Walker-Dalhouse et al. (2006)	Evidence-based for coursework and field experience	Standalone	One semester	Coursework with critical reflection combined with field experience	Not reported
Wiggins et al. (2007)	Multicultural readiness*, research based-evidence for field experience	Standalone	One semester (30 hours for the first group, 60 hours for the second group)	Field experience combined with school on-site coursework	Mandatory

Note. * Training theoretical framework made explicit.

2.3.2.1 Training theoretical perspectives

The most frequently used theoretical frameworks in these trainings included theories on teaching and learning, such as culturally responsive teaching (Gay, 2010), culturally relevant teaching (Ladson-Billings, 1995), equity pedagogy (Banks, 1989), and social justice theories, such as critical pedagogy (Freire, 1998) and transformative learning (Mezirow, 1978). These theories offer a framework for best preparing teachers for cultural diversity, including challenging their beliefs about cultural diversity. Some studies ($n = 12$), however, did not mention a theoretical framework used in the training. Rather, these studies described the context of the training and drew on previous research. For example, in a study by Pohan and colleagues (2009), the rationale for assessing the impact of field placement on pre-service teachers' beliefs about teaching diverse students is derived from previous reviews of the literature of these practices (e.g., Hollins & Torres-Guzman, 2005). In future research, a more rigorous explanation of the theoretical framework that guided the training should be included.

2.3.2.2 Training approach: Standalone versus integrated

Across the reviewed studies, the approach of the training was mainly a standalone unit, either a course or a field experience, or a combination of both, as a part of a teacher preparation curriculum. Only two studies (Cho & Cicchelli, 2012; Cicchelli & Cho, 2007) reported the effects of a programme in which a comprehensive curriculum focused exclusively on cultural diversity. This indicates that trainings about cultural diversity related issues are mostly offered in an additive fashion to the teacher education curriculum.

2.3.2.3 Training length

The length of a training was in many cases a semester-long ($n = 28$). Five studies reported the effects of a short intervention ranging from one week (Bleicher, 2011) to three months (Baldwin, Buchanan, & Rudisill. 2007). Four studies reported the effects of a programme that lasted one or two years (Cho & Cicchelli, 2012; Cicchelli & Cho, 2007), or a one-year long internship (Conaway, Browing, & Purdum-Cassidy, 2007; Cooper, 2007). Across the reviewed studies, the amount of hours spent in field experience or the number of meetings pre-service teachers were required to attend in a training, were seldom reported. In a quasi-experimental study (Wiggins, Follo, & Eberly, 2007) the effect of the length of a field experience was tested amongst three groups of pre-service teachers. The authors found that the group that spent the longest amount of time (60 hours) with students and parents at a culturally diverse urban school and in the community reported the greatest shift of beliefs

towards teaching in culturally diverse classrooms. Future research should be more precise about time spent in the training to allow for an assessment of length on cultural diversity beliefs.

2.3.2.4 Training format

The format of the trainings varied, with one-fourth of the studies (*n* = 9) reporting the effects of coursework on beliefs about cultural diversity in education. Most studies (*n* = 27) reported results of a training that combined coursework with experiential training (field experience and service learning community), or experiential learning in coursework through the use of role-playing or theatre games (e.g., Souto-Manning, 2011). The specific effect of field experience abroad on pre-service teachers' beliefs about cultural diversity was studied in three qualitative investigations (Kambutu & Nganga, 2008; Malewski, Sharma, & Phillion, 2012; Spalding, Savage, & Garcia, 2007). All in all, across the studies reviewed, the format of the training is often highlighted as a central training component. Yet, its relation with other training features (e.g., training approach, length) should be not overlooked.

2.3.2.5 Training learning activities

Overall, researchers greatly varied in how they reported content and learning activities used in their trainings. For example, Amatea and colleagues (2012) provided a detailed description of course activities and readings with the correspondent research purpose to examine and influence pre-service teachers' beliefs about working with low-income and ethnic minority families. On the other hand, Cicchelli and Cho (2007) reported the effects of a 2-year teacher programme specifically focused on sensitising new teachers regarding cultural diversity. However, the authors did not provide an in-depth description of the training and only briefly mentioned the format (coursework and field experience) implemented. Overall, it is important to report a more detailed description of the trainings to draw conclusions about the effects of different learning activities on beliefs about cultural diversity.

2.3.2.6 Training attendance requirement: Mandatory versus elective

Another training component examined in this review was attendance requirement (mandatory or elective). In many cases (*n* = 8), these trainings were elective courses or trainings, in which participants either volunteered or were selected to participate in the trainings. In nine studies, it was unclear whether the course was an elective or part of the

teacher curriculum. The attendance requirement is an aspect of the training that indicates how the training is positioned and reinforced within teacher education. As such, differing attendance requirements could lead to different effects on beliefs.

2.3.2.7 Coding of dependent outcomes

Because beliefs about cultural diversity were operationalised in many ways, it was sometimes difficult to identify and code the target outcome of a training. Table 2 provides five examples of how cultural diversity beliefs were operationalised in different studies (Baldwin, Buchanan, & Rudisill, 2007; Bales & Saffold, 2011; Fitchett et al., 2012; Han, 2013; Harris & Clarke, 2011) and how these studies were coded in the five areas of teachers' beliefs (Fives & Buehl, 2012) that were adapted to cultural diversity beliefs in the present review.

Table 2

Examples of operationalisations of beliefs about cultural diversity in the reviewed studies

Reference	Areas of Cultural Diversity Beliefs	Operationalisation
Fitchett et al. (2012)	1	'Culturally responsive teaching self-efficacy beliefs'
Baldwin et al. (2007)	2	'Desire and dispositions toward teaching in diverse settings'
Harris and Clarke (2011)	3	'Beliefs and attitudes towards teaching history in a sensitive culturally manner'
Han et al. (2015)	4	'Dispositions toward diversity, social justice education, and critical pedagogy'
Bales and Saffold (2011)	5	'Socialized beliefs about children of colour'

Note. (1) Beliefs related to cultural self-efficacy, (2) beliefs about cultural context and environment, (3) beliefs about cultural content or knowledge, (4) beliefs about culturally sensitive teaching practices or approaches, and (5) beliefs towards culturally diverse students and their families.

Studies targeted mostly beliefs about culturally diverse students and their families (*n* = 19), and less frequently addressed beliefs towards cultural content or knowledge (e.g., history or science) (Cone, 2012; Harris & Clarke, 2011). For example, Harris and Clarke (2011) reported the effects of a training on beliefs towards broadening teaching of multi-ethnic history (third area of cultural diversity beliefs). Trainings also targeted beliefs about cultural diversity in combination with other outcomes, such as ethnic identity development (e.g., Souto-Manning, 2011). Table 3 provides an overview of the cultural diversity beliefs targeted in each study.

Table 3

Training dependent outcomes of reviewed studies

	Areas of Cultural Diversity Beliefs				
Reference	*Cultural self-efficacy*	*Cultural context and environment*	*Cultural content or knowledge*	*Culturally sensitive teaching practices or approaches*	*Culturally diverse students and their families*
	1	2	3	4	5
Acquah and Commins (2013)					X
Acquah and Commins (2015)					X
Akiba (2011)					X
Almarza (2005)					X
Amatea et al. (2012)	X				
Baldwin et al. (2007)		X		X	
Bales and Saffold (2011)					X
Bennett (2013)				X	
Bleicher (2011)					X
Bravo et al. (2014)	X				
Carter-Andrews (2009)		X			
Cho and Cicchelli (2012)					X
Cicchelli and Cho (2007)					X
Conaway et al. (2007)		X			
Cone (2012)			X		
Conner (2010)					X
Cooper (2007)					X
Dotger (2010)					X
Fitchett et al. (2012)	X				
Frederick et al. (2010)				X	
Frye et al. (2010)	X				
Han (2013)				X	
Han et al. (2015)				X	
Harris and Clarke (2011)			X		

Author	(1)	(2)	(3)	(4)	(5)
Kambutu and Nganga (2008)					X
Kyles and Olafson (2008)					X
Malewski et al. (2012)				X	
Milner (2005)					X
Mueller and O'Connor (2007)					X
Pohan et al. (2009)					X
Souto-Manning (2011)		X			
Spalding et al. (2007)				X	
Szabo and Anderson (2009)					X
Waddel (2013)					X
Walker-Dalhouse et al. (2006)					X
Wiggins et al. (2007)		X			

Note. (1) Beliefs related to cultural self-efficacy, (2) beliefs about cultural context and environment, (3) beliefs about cultural content or knowledge, (4) beliefs about culturally sensitive teaching practices or approaches, and (5) beliefs towards culturally diverse students and their families.

2.3.3 Research question 2: Training effects on beliefs about cultural diversity

The second research question of interest was: what are the effects of these trainings on pre-service teachers' beliefs about cultural diversity? While focusing solely on whether there was a shift or not would limit the current review, we highlighted training components that were reported more often as beneficial for participants. Thus, this section also includes the format and learning activities that were likely to shift cultural diversity beliefs positively.

The majority of the studies ($n = 26$) reported positive findings regardless of the area of beliefs targeted, with few studies reporting negative shifts of pre-service teachers' beliefs (Han, 2013; Milner, 2005). Eight studies reported mixed results (Akiba, 2011; Bravo, Mosqueda, Solis, & Stoddart, 2014; Cicchelli & Cho, 2007; Han, Madhuri, & Scull, 2015; Kambutu & Nganga, 2008; Kyles & Olafson, 2008; Pohan et al., 2009; Szabo & Anderson, 2009). For example, after a training of writing reflective letters and cultural autobiographies, only participants who had multicultural experience (e.g., multicultural schooling) showed more favourable positive beliefs about teaching diverse learners (Kyles & Olafson, 2008). In a mixed-methods study (Szabo & Anderson, 2009), qualitative data sources (classroom discussion and written reflections) showed positive changes in pre-service teachers' beliefs towards culturally diverse students and their families. However, quantitative results from a

self-report questionnaire showed no statistically significant difference between pre- and post-findings.

Two training components seemed particularly beneficial: an experiential component, and the opportunity for reflection and discussion about cultural diversity. Field experience and service-learning community experience were reported nearly always as effective in targeting beliefs about cultural diversity. Baldwin and colleagues (2007) reported an example in which experiential learning is offered as a combination of school-based and community-based experiences. Through the analysis of interviews and written reflections, they found support for experiential learning, and particularly in service-learning, positively affecting beliefs about teaching in diverse settings and towards social justice.

Besides combining coursework with experiential learning, critical discussion and self-reflections were elements that seemed to be particularly helpful for participants as a meaningful method to critically review their own beliefs about cultural diversity. In two studies conducted by Acquah and Commins (2013; 2015), the authors showed the beneficial effects of reflections and classroom discussion. By contrast, in a large survey-based study (Akiba, 2011), statistical analysis of pre- and post-findings revealed that the coursework had an impact on participants' beliefs about cultural diversity. Yet, receiving opportunities for reflection through scenarios or case studies, and class discussion, were not associated with improvement in diversity beliefs scores. Likewise, Han (2013) incorporated classroom discussion in her seminar to develop critical perspectives and make a moral commitment to correct social inequities. However, the author reported that participants did not develop positive dispositions towards social justice over the semester.

2.3.4 Research question 3: Methodological strengths and weaknesses of the reviewed studies

A key question for this review of literature was: What are the methodological strengths and weaknesses of these studies? Five discrete coding features helped to answer the third research question: authors' relationship to participants, control or comparison group, data gathering, and data analysis, including how the effects were measured or when the last measurement point to assess the training effects on cultural diversity beliefs was planned. Table 4 summarises each study reporting the main methodological features.

Table 4

Summary of study design and training evaluation in the reviewed studies

Reference	Authors' Relationship to Participants	Control or Comparison Group	Data Sources	Effect Size or Power	Triangulation	Reliability
Acquah and Commins (2013)	Course instructor	No	Survey, learning journals, focus group, written reflections, pre and post definitions of multicultural terms	Not reported	Yes	Yes
Acquah and Commins (2015)	Course instructor	No	Survey, learning journals, focus group, written reflections, pre and post definitions of multicultural terms	Not reported	Yes	Yes
Akiba (2011)	Course instructor	No	Survey	Yes	-	Yes
Almarza (2005)	Course instructor	No	Portfolios		Yes	Yes
Amatea et al. (2012)	Course instructor	No	Survey	Not reported	-	Yes
Baldwin et al. (2007)	Course instructor	Yes	Written reflections, interviews, observations	-	Not reported	Yes
Bales and Saffold (2011)	Course instructor	No	Interviews, participant-observations, document analysis, pedagogy teaching case, reflections about classroom-based field experience	-	Not reported	Not reported
Bennett (2013)	Independent researcher	No	Written reflections, written field notes, observation teacher-student, individual interviews, focus groups	-	Yes	Not reported
Bleicher (2011)	Course instructor	No	Open-ended survey, group interviews with alumni, written reflections	-	Yes	Yes
Bravo et al. (2014)	Independent researcher	Yes	Survey, observations	Not reported	Yes	Yes
Carter Andrews (2009)	Course instructor	No	Interviews	-	-	Yes
Cho and Cicchelli (2012)	Course instructor	No	Survey	Not reported	-	Yes

Cicchelli and Cho (2007)	Course instructor	No	Survey	Not reported	-	Yes
Conaway et al. (2007)	Course instructor	No	Open-ended survey	-	-	Yes
Cone (2012)	Independent researcher	Yes	Interviews	-	-	Yes
Conner (2010)	Course instructor	No	Open-ended questions, written reflections, interviews	Not reported	Yes	Yes
Cooper (2007)	Course instructor	No	Autobiographies, fast writes, responses to reflection wheels, written reflections, group interview, field notes, group visual representations	Not reported	Not reported	Not reported
Dotger (2010)	Course instructor	No	Survey, standardized tests (scenario instrument), video record interactions, written reflections	Yes	Not reported	Yes
Fitchett et al. (2012)	Course instructor	No	Survey	Yes	-	Yes
Frederick et al. (2010)	Course instructor	No	Open-ended survey, course assignments (initial and final teaching philosophies), observation project	-	Not reported	Not reported
Frye et al. (2010)	Course instructor	No	Survey, reflective journals, post written comments	Not reported	Not reported	Not reported
Han (2013)	Course instructor	No	Initial and final written responses, varying written responses to different texts and activities, end of course student evaluations	-	Not reported	Not reported
Han et al. (2015)	Course instructor	Yes	Open-ended survey	-	Not reported	Yes
Harris and Clarke (2011)	Course instructor	No	Open-ended survey, interviews	-	Not reported	Yes
Kambutu and Nganga (2008)	Independent researcher	No	Open-ended survey, interviews, reflective journal	-	Not reported	Not reported
Kyles and Olafson (2008)	Independent researcher	No	Survey, reflective journals	Not reported	Not reported	Yes
Malewski et al. (2012)	Course instructor	No	Interviews, focus group, reflective journal, formal and informal classroom discussions, course	-	Yes	Yes

			assignments, researchers' observations, field notes			
Milner (2005)	Course instructor	No	Course assignments, class discussions, interviews, open-ended feedback	-	Yes	Yes
Mueller and O' Connor (2007)	Course instructor	No	Open-ended survey, interviews, reflective journals, educational autobiographies	-	Yes	Yes
Pohan et al. (2009)	Course instructor	No	Survey, reflective journal	Yes	Not reported	Yes
Sbazo and Anderson (2009)	Course instructor	No	Survey	Not reported	-	Yes
Souto-Manning (2011)	Course instructor	No	Survey, open-ended questions, course assignments, reflective journal	Not reported	Not reported	Yes (quantitative) No (qualitative) (continued)
Spalding et al. (2007)	Course instructor	No	Reflective journal, pre-trip essay and questionnaire, book reviews, individual monthly dialogue journal, portfolios, field notes	Not reported	Yes	Yes
Waddell (2013)	Course instructor	No	Written reflections, course assignments	-	Not reported	Yes
Walker-Dalhouse and Dalhouse (2006)	Course instructor	No	Survey	Not reported	-	Yes
Wiggins et al. (2007)	Course instructor	Yes	Survey	Not reported	-	

2.3.4.1 Authors' relationship to participants

Most studies that were considered had a high risk of bias. The majority of the bias fell under authors' conflicts of interests ($n = 31$). The evaluation of the intervention was often not blinded, especially in the case of qualitative studies that were conducted by the author and researcher who wrote the paper. Few studies reported the researchers' role and positionality and possible implications for the evaluation of training effects (e.g., Baldwin, Buchanan, & Rudisill, 2007; Han, 2013; Souto-Manning, 2011; Milner, 2005). Although checking their own practices and the effects of teacher training practices is imperative, few teacher educators described their role in the intervention, explaining the possible implications of being both the

instructor and researcher evaluating the effects of a training. Bennett (2013) explicitly asked participants of the course and field experience offered whether the instructor influenced participants' understanding and beliefs about culturally responsive teaching. Although this question was asked during an interview and the answers might be biased, it helped to better understand the potential benefit during the intervention provided by 'one-to-one student teacher interactions' (Bennett, 2013, p. 28). Milner (2005) described potential conflicts of interest in his discussion of the results highlighting how participants' responses in the interview could have been biased because of his double-role of researcher and course instructor. Therefore, there is a need to address these potential conflicts of interests more clearly.

2.3.4.2 Control or comparison group

Only a few studies (*n* = 5) had a control or comparison group. The control or comparison group was tested with a different school placement, urban versus rural (Baldwin, Buchanan, & Rudisill, 2007; Cone, 2012; Han, Madhuri, & Scull, 2015), following trainings with a different length (Wiggins, Follo, & Eberly, 2007) or attending another teacher training (Bravo, et al., 2014). A study by Han, Madhuri, and Scull (2015) indicated that dispositions towards diversity changed differently for the two groups of pre-service teachers that underwent the same training but did the field experience in different areas (urban versus rural). Whereas pre-service teachers in urban areas developed more positive beliefs towards diversity, pre-service teachers' beliefs in rural areas were more resistant to change. Conversely, Baldwin, Buchanan, and Rudisill (2007) reported that pre-service teachers in both settings (urban and rural) realised the value of their respective experiences. A control or comparison group may help to clarify mixed results.

2.3.4.3 Assessment of training effects

To investigate the effects of training on cultural diversity beliefs, most of the studies employed a qualitative approach (*n* = 18), followed by studies adopting a mixed-methods design (*n* = 10), and quantitative design (*n* = 8). As a strength, most of the studies under investigation employed a large variety of methodologies to assess beliefs, such as reflection journals, fields notes, focus groups, course assignments, vignettes, and diaries. As a weakness, however, most studies did not measure pre-service teachers' beliefs in relation to teaching behaviour. Only a few studies (*n* = 4) attempted to explore this relation by including observations to assess the relation between pre-service teachers' beliefs and teaching

behaviours in the classroom. In other words, across the reviewed studies, effects of a training on cultural diversity beliefs and, consequently, on teaching behaviours were rarely assessed. Using a quasi-experimental design, Bravo and colleagues (2014) investigated the effects of coursework on self-efficacy beliefs about culturally responsive science pedagogy. By video observing pre-service teachers in their practicum, the authors investigated intervention effects on beliefs in action. Results from the self-report data showed that the course had an impact on beliefs about the efficacy of culturally responsive practice in teaching science. In contrast, observations showed that participants failed to implement instructions that supported the learning of culturally diverse students. To shed light onto the effects of a training on beliefs, and on the links between beliefs and practices, we therefore need to integrate teaching observations in the evaluation of a training.

2.3.4.4 Data analysis

A coding feature of data analysis revealed another methodological weakness of the reviewed studies. Accordingly, few quantitative and mixed-methods studies (e.g., Dotger, 2010) reported additional statistical indices independent of sample sizes such as effect size and power, leading to an unclear magnitude of the effect of a training on beliefs. Similarly, some qualitative and mixed-methods studies did not report how data were triangulated or did not provide any inter-rater reliability indications (e.g., Frye, Button, Kelly, & Button, 2010). Finally, most of the studies were based on only two measurement points, regardless of the study design (quantitative, qualitative or mixed-methods), with the effects assessed at the last meeting or measured after the end of the intervention. Notably, no studies further investigated long-term effects of trainings, namely if the effects lasted when teachers entered their profession. Thus, future research assessing how long the effects of a training last on teacher beliefs about cultural diversity should follow participants for a longer period of time and assess whether the effects of training are washed out by classroom practice (Kagan, 1992).

2.4 Discussion

The present study reviewed 36 articles, reporting the effects of teacher trainings on pre-service teachers' beliefs about cultural diversity in education. Although we are aware that there will never be a one-size-fits-all training for all pre-service teachers, we attempted to capture the most promising components in teacher trainings for examining and challenging

cultural diversity beliefs, their effects, and the methodological strengths and weaknesses of these studies. Our goal for this section is to offer teacher educators and researchers in cultural diversity in education some practical implications from this review.

2.4.1 Implications for teacher training

Addressing the first research question, our review indicated that researchers based their teacher training on a wide array of educational theoretical perspectives. This result corroborates previous reviews on preparing teachers for cultural diversity (Gay, 2015; Trent, Kea, & Oh, 2008). We call for an integration of educational and psychological perspectives to be implemented in teacher trainings and the assessment of beliefs about cultural diversity. To put it differently, when addressing teacher beliefs, teacher educators and researchers should provide more theoretical support for their training programmes and operationalisation borrowing, for example, from psychological theories, including Bandura's social cognitive theory (1997), or the contact hypothesis (Allport, 1954), in combination with theories derived from the field of multicultural education, such as culturally responsive teaching (Gay, 2010).

Our review showed that teacher trainings targeting cultural diversity beliefs are mainly implemented with a standalone approach as part of a more general teacher preparation programme. Although we cannot compare the effects of a standalone approach with an integrative programme due to the limited number of the latter, a standalone training may suggest that cultural diversity is also often treated in isolation and not fully integrated into teacher education curriculum (Milner, 2010). This is an important finding, which suggests that teacher educators should integrate cultural diversity in a comprehensive curriculum of teacher education. Future studies should also compare the effects of integrated training with standalone trainings on pre-service teachers.

2.4.2 Accounting for the multidimensionality of cultural diversity beliefs

Our review indicated that beliefs about cultural diversity are operationalised in many ways. This finding is in line with previous syntheses about teachers' beliefs (Hoffman & Seidel, 2015). Acknowledging the complexity of teacher beliefs (Fives & Buehl, 2012), as for cultural diversity, seems to be an important aspect when teacher educators design their programme and training. Results from this review offer researchers and teacher educators an overview of different aspects of cultural diversity beliefs that might be taken into account when preparing pre-service teachers for cultural diversity. This is an important finding

because past reviews mostly employed a more general operationalisation of cultural diversity beliefs.

Because we took a comprehensive approach to examining trainings that operationalised beliefs about cultural diversity in different ways, we are able to assess which areas of cultural diversity beliefs are often addressed. In general, we found that focusing on beliefs towards culturally diverse students and their families was a goal of many studies reviewed. However, we recommend a multidimensional examination of cultural diversity in teacher trainings. Teacher trainings should explore and target beliefs in different dimensions, and not be limited to one area of beliefs about cultural diversity. For example, trainings can target culturally responsive teaching self-efficacy beliefs and explore their relation to beliefs about culturally diverse students and their families.

2.4.3 Training effects on cultural diversity beliefs

To answer the second research question regarding the effects on cultural diversity beliefs, most studies reviewed in our synthesis showed positive effects on pre-service teachers' cultural diversity beliefs. This finding illustrates the dynamic nature of teachers' beliefs (Thompson, 1992), and, in turn, the crucial role of multicultural teacher training (Gay, 2010; Milner, 2010). An important direction for future research will be to understand how beneficial effects of teacher training on cultural diversity beliefs relate to culturally responsive practices and, ultimately, with student outcomes as well.

We found that experiential learning in the format of field experience and service learning is often indicated as beneficial in teacher preparation programmes. One possible explanation of these positive effects might be that contact between groups under certain conditions can improve intergroup relations (Allport, 1954). However, across the reviewed studies these experiences differed greatly in how they were situated in teacher preparation programmes. Thus, it is essential that researchers report in greater detail contextual variables of their training (e.g., length, learning activities) that might explain and support their practices.

We encourage teacher educators and scholars to be vigilant about measuring, evaluating, and reporting the effects of trainings with an experiential feature on cultural diversity beliefs. The best advice we can offer is to assume that different areas of cultural diversity beliefs can be targeted differently. For example, trainings with an experiential component may have greater potential for one area of beliefs which require engaging with

culturally diverse students and communities than for other areas of cultural beliefs. On a related note, we urge teacher educators and researchers to better examine opportunities for pre-service teachers to critically discuss and self-reflect on the issues of culture during coursework or in support of experiential learning. Results across the reviewed studies were mixed. Hence, the potential benefits and limitations of such activities are yet to be determined and would provide the basis for future research.

2.4.4 Future research directions for study design and training evaluation

Answering the third research question, the current synthesis identified numerous weaknesses in the study design and evaluation of these teacher trainings. To address these methodological issues, there are at least five strategies that may improve study evaluation and, ultimately, the accuracy of decisions that are made in teacher preparation programmes to examining cultural diversity beliefs.

First, we encourage teacher educators to continue their own evaluation of the effects of trainings on cultural diversity beliefs. However, it often remains unclear what the effects of teacher educators' personal beliefs about cultural diversity are, such as social justice orientation, as well as the effects of teacher educator demographics (e.g., age, gender, or cultural background). As such, it would be helpful in future research to document how teacher educators' own beliefs contribute to the interpretation of study findings as well as on pre-service teachers' beliefs about cultural diversity.

Second, most of the studies reviewed reported a small sample size. This finding has emerged in another recent review of the literature about cultural diversity beliefs (Gay, 2015), as well as in a less recent review of teacher preparation for cultural diversity (Hollins & Torres-Guzman, 2005). To overcome this issue, studies should aim at assessing prospective teachers' beliefs about cultural diversity throughout teacher preparation, assessing pre-service teachers in multiple classes and not only participants who attended a standalone training.

Third, across the reviewed studies that have compared or used a control or comparison group, results provided mixed evidence. Thus, study designs that include a control or comparison group is recommended (Creswell, 2013). Although it is not always easy to include a control or comparison group when examining teacher trainings, it is important to acknowledge its presence or absence in the limitation section (e.g., Fitchett et al., 2012).

Fourth, a combination of quantitative and qualitative measures may allow a more nuanced and comprehensive assessment of different areas of cultural diversity beliefs and their development over time (Hoffman & Seidel, 2015). Hence, especially when assessing the

effects of a training on cultural diversity beliefs, quantitative measures can estimate the effects of trainings, whereas qualitative measures can identify which aspects were considered effective. Finally, to strengthen their conclusions about the effects of a training, teacher educators and researchers should more frequently use video observations to document the reciprocal relationships between cultural diversity beliefs, behaviours, and classroom context.

2.5 Limitations

This review contains some limitations. Although we conducted a systematic search of the literature, it is possible that studies which could have been included in the review were not identified. This synthesis included only journal articles published in English and this may be one additional reason why we may have overlooked studies conducted outside the USA. However, we initially retrieved studies that were carried out in other culturally diverse English-speaking countries (e.g., Mills & Ballantyne, 2010) and European countries (e.g., Damini, 2014), but they were successively excluded because they did not meet one or more inclusion criteria of our review. Finally, we only included studies with a longitudinal evaluation of training effects on beliefs, however, we cannot draw causal conclusions because we included studies based on a simple pre-test- post-test design with and without a control group or diary studies.

2.6 Conclusions

While many studies presented positive effects of teacher programmes on pre-service teachers' beliefs about cultural diversity, the multidimensionality and complexity of cultural diversity beliefs are rarely accounted for during the trainings reviewed. Experiential learning in the form of field experience and service-leaning community is largely used in these programmes with encouraging results. Despite these promising findings, the field of teacher beliefs about cultural diversity should provide more evidence for a more systematic evaluation of the effects on beliefs in combination with teaching behaviours, and improve the study design. For the rapid increase of cultural and ethnic diversity in education worldwide, teacher preparation programmes should insist on targeting and challenging pre-service teachers' beliefs to assure equitable education to culturally diverse students.

- Chapter 3 -

Validierung einer deutschen Version der "Culturally Responsive
Classroom Management Self-Efficacy Scale"

Zusammenfassung

Die *Culturally Responsive Classroom Management Self-Efficacy Scale* (CRCMSES; Siwatu, Putman, Starker-Glass & Lewis, 2015) stellt ein neues Instrument zur Erfassung der Selbstwirksamkeit hinsichtlich kultursensiblen Classroom Managements von Lehrkräften dar. Die vorliegende Studie hat zum Ziel, die eindimensionale Struktur einer deutschsprachigen Version des CRCMSES mit Hilfe von explorativen und konfirmatorischen Faktorenanalysen zu bestätigen. Dazu wurde das Instrument von 504 Lehramtsstudierenden aus zwei Universitäten in Deutschland beantwortet. Die Ergebnisse zeigen, dass sich die CRCMSES gut im deutschsprachigen Kontext replizieren lässt. Gleichzeitig zeigt sich im Vergleich zur Einfaktorenstruktur der Originalversion des Fragebogens ein besserer Modellfit einer Zweifaktorenstruktur (Faktor1: Anpassungen von Unterricht und Beziehungen; Faktor 2: Kooperatives Lernen). Deutlich werden zudem negative Zusammenhänge zwischen den beiden identifizierten Subskalen und empfundenem Stress in Zusammenhang mit kultureller Vielfalt. Die Ergebnisse bestätigen gute psychometrischen Eigenschaften der deutschen Version des CRCMSES.

 Schlagwörter: Kulturelle Vielfalt, Selbstwirksamkeit, Classroom Management, Culturally Responsive Teaching

Chapter 3

3.1 Theoretischer Hintergrund

Die Rolle von Selbstwirksamkeitsüberzeugungen von Lehrkräften steht zunehmend im Fokus der Lehrerbildung. Dabei wird Selbstwirksamkeit als wichtige Eigenschaft von Lehrkräften verstanden, welche in Zusammenhang mit effektiven Lehrerhandeln im Klassenraum steht (Zee & Koomen, 2016) sowie mit der Fähigkeit, Lernende hinsichtlich Bildungsergebnissen, z.B. akademischem Erfolg und Motivation, zu fördern (Tschannen-Moran & Woolfolk Hoy, 2001). Lehrkräfte mit einer hohen Selbstwirksamkeit berichten zudem eine hohe Berufszufriedenheit (Caprara, Barbaranelli, Borgogni, & Steca, 2003) und sind weniger häufig von Stress- und Burnout betroffen (Klassen & Chiu, 2010).

Vor diesem Hintergrund wurden Selbstwirksamkeitsüberzeugungen von Lehrkräften in großen internationalen Bildungsvergleichen, unter anderem dem *Teaching and Learning International Survey* (TALIS) aus dem Jahr 2013 (OECD, 2014), untersucht. Gleichzeitig gibt es nur wenige Forschungsergebnisse bezüglich spezifischer Aspekte von Selbstwirksamkeit, wie z.B. der Fähigkeit, Lernende mit unterschiedlichen kulturellen Hintergründen zu stärken und zu unterrichten. Das Ziel dieser Studie ist es, die Selbstwirksamkeitsüberzeugungen bezüglich eines kultursensiblen Unterrichts von Lehrkräften zu untersuchen und die psychometrischen Eigenschaften (Reliabilität und Validität) einer für den deutschsprachigen Raum adaptierten Skala zu untersuchen.

Ausgehend von der sozialkognitiven Lerntheorie Banduras (1997, 2006) werden Selbstwirksamkeitsüberzeugungen in der Regel als individuelle Wahrnehmungen der eigenen Fähigkeiten verstanden, spezifische Verhaltensweisen zu planen und durchzuführen (O'Mara, Marsh, Craven, & Debus, 2006). Unterschiedliche Selbstwirksamkeitsüberzeugungen können dabei ein Ergebnis unterschiedlicher Lernumgebungen und – herausforderungen sein. Aus diesem Grund wurden Maße entwickelt, die domänenspezifische Aspekte der Selbstwirksamkeit von Lehrkräften berücksichtigen. Die Spezifität der Situationen, in der die Lehrkraft in der Lage sein sollte bestimmte Verhaltensweise zu zeigen, wurde so erhöht. In Studien, in denen solche Maße zum Einsatz kamen, zeigten sich prädiktive Zusammenhänge domänenspezifischer Aspekte der Selbstwirksamkeit von Lehrkräften mit der Leistung der Schüler und Schülerinnen (Tschannen-Moran & Woolfolk, 2001), deren Motivation (Schiefele & Schaffner, 2015), und dem Engagement der Lehrkräfte (Avanzi et al., 2013). Trotzdem werden domänenspezifische Aspekte von Selbstwirksamkeit nur selten

in Forschung und Lehrerbildung berücksichtigt (Chesnut & Burley, 2015). In dieser Studie soll ein Maß validiert werden, welches Selbstwirksamkeitsüberzeugungen von Lehrkräften erfasst, die sich speziell auf kultursensibles Classroom Management beziehen.

3.1.1 Kultursensibles Classroom Management

Classroom Management bezeichnet mehr als nur das Aufrechterhalten von Ordnung und Disziplin im Klassenraum (Gay, 2006). Fähigkeiten des Classroom Managements umfassen das Verstehen und Erkennen von Bedürfnissen der Lernenden, das Gestalten und Individualisieren effektiver Instruktionen auf individueller wie auch Gruppenebene und das Entwickeln einer Klassengemeinschaft (Emmer & Stough, 2001). Auch wenn bestehende Arbeiten zum Classroom Management wesentlich dazu beitragen, dass Lehrkräfte ein besseres Verständnis über mögliche Gestaltungen von lernförderlichen Lernumgebungen entwickeln können, existieren zum jetzigen Zeitpunkt nur wenige empirische Arbeiten zur Gestaltung von Lernumgebungen in Gruppen von Schülern und Schülerinnen mit unterschiedlichen kulturellen Hintergründen (Siwatu et al., 2015). In diesem Zusammenhang kann das Konzept des *Culturally Responsive Teaching* (CRT) wichtige Einblicke in mögliche Zugänge zu den Bedürfnissen von multikulturellen Schülergruppen liefern. CRT ist ein multidimensionales Konstrukt, welches curriculare Inhalte, Lernkontexte, Klassenklima, Unterrichtsmethoden und Leistungserfassung umfasst (Gay, 2010). Im Kontext des CRT ist ein wesentliches Element, die unterschiedlichen kulturellen Hintergründe der Schüler und Schülerinnen durch unterschiedliche Unterrichtsmethoden und multikulturelle Curricula wertzuschätzen (Gay, 2010). CRT ist dabei nicht nur eine Sammlung unterschiedlicher Unterrichtsmethoden: Vielmehr erfordert es Einstellungen von Lehrkräften, die sich von einer defizitären Perspektive auf Schüler und Schülerinnen und ihrer familiären Hintergründe lösen (Gay, 2015). Kultursensible Lehrkräfte entwickeln eine positive und einfühlsame Beziehung zu Schülerinnen und Schülern (Weinstein, Curran, & Tomlinson-Clarke, 2003) und gestalten eine Lernumgebung, in der Diversität wertgeschätzt und Respekt gegenüber unterschiedlichen Kulturen im Klassenraum gefördert wird (Anonymus, 2016).

Siwatu und Kollegen (2015) kombinieren in der *Culturally Responsive Classroom Management Self-Efficacy Scale* (CRCMSES) die Erfassung von Selbstwirksamkeit und Fähigkeiten eines kultursensiblen Unterrichts. Die CRCMSES umfasst Items, die sich den Prinzipien des CRT zuordnen lassen, jedoch auch den Empfehlungen Banduras zur Erfassung von Selbstwirksamkeit folgen. Die visuelle Analogskalen umfassen eine mögliche

Antwortspanne von 0-100 und ermöglichen den Befragten somit größere Antwortvariabilität im Vergleich zu einer 5-Punkt-Skala. Zudem verhindern solche visuellen Analogskalen die Auswahl von extremen Antwortwerten, welche zu einer ungenauen Bestimmung von hoher Selbstwirksamkeit führen kann (Bandura, 2006). In einer Validierungsstudie berichten Siwatu und Kollegen (2015) eine Einfaktorenstruktur für die CRCMSES, welche 52% der Varianz erklärte. Gleichzeitig berichten die Autoren keine weiteren Validierungsschritte, wie z.B. konfirmatorische Faktorenanalysen.

3.1.2 Vorliegende Studie

Gegenwärtige Bemühungen, kultursensible Lehrkräfte in Deutschland auszubilden, betonen die Wichtigkeit kultursensiblen Classroom Managements. Eine aktuelle Metastudie zeigte, dass Selbstwirksamkeitsüberzeugungen von Lehramtsstudierenden späteres berufliches Commitment ebenso gut vorhersagen, wie dies für Lehrkräfte der Fall war (Chesnut & Burley, 2015). Die Bedeutung der Selbstwirksamkeit von Lehramtsstudierenden für die zukünftige Unterrichtspraxis sollte daher nicht übersehen werden.

Das Hauptanliegen dieser Studie ist die Validierung einer deutschsprachigen Version der *Culturally Responsive Classroom Management Self-Efficacy Scale* (CRCMSES). Die Skala soll für den Einsatz im deutschsprachigen Raum mit Lehrkräften und Lehramtsstudierenden nutzbar und zugänglich gemacht werden. Zusätzlich sollen durch die Überprüfung der externen Validität der in den USA entwickelten Skala Möglichkeiten aufgezeigt werden die Skala als solches und die CRT Perspektive insgesamt im deutschsprachigen Raum zu etablieren (für eine CRT Übersichtsarbeit siehe Aronson & Laughter, 2016).

3.2 Methode

3.2.1 Stichprobe

Die Stichprobe umfasst 504 Lehramtsstudierende (76% weiblich, M = 24.1 Jahre, SD = 5.2) aus zwei Universitäten in unterschiedlichen Regionen (n = 400 und n = 104) in Deutschland. Unter 5% der Lehramtsstudierenden haben einen Migrationshintergrund (mindestens ein Elternteil, der außerhalb Deutschlands geboren wurde). Fast alle Studierenden wurden in Deutschland geboren (97%). Die Mehrheit der Studierenden (66%) hat schon einmal Kurse zum Thema Inklusionspädagogik und Multikulturalismus besucht, wovon 54% einen Umfang von 5 bis 60 Stunden angaben.

3.2.2 Maße

Die Originalversion des CRSCMSES (Siwatu et al., 2015) umfasst 35 Items. In einem ersten Schritt wurden aufgrund von Überlappungen der Inhalte 13 Items ausgeschlossen. Die verbliebenen 22 Items wurden übersetzt und dem deutschsprachigen Kontext angepasst (z.B. von "English Language Learners" zu "Deutsch-Sprachschüler"). Die Teilnehmenden sollten beurteilen, inwiefern sie sich in der Lage sehen, eine Reihe von Aufgaben erfolgreich zu bewältigen, welche im Zusammenhang mit Selbstwirksamkeit bezüglich eines kultursensiblen Classroom-Managements stehen. Der Grad des Zutrauens wurde durch eine visuelle Analogskala erfasst, welche zwischen 0 (*überhaupt keine Sicherheit*) und 100 (*uneingeschränkt sicher*) beantwortet werden konnte.

Zur Überprüfung der Konstruktvalidität der CRCMSES, wurden bivariate Korrelationen zwischen der Skala und empfundenem Stress im Zusammenhang mit kultureller Vielfalt berechnet. Stress im Zusammenhang mit kultureller Vielfalt spiegelt das Ausmaß wieder, in welchem das persönliche und professionelle Wohlbefinden von Lehrkräften durch den täglichen Umgang mit einer multikulturellen Lerngruppe negativ beeinflusst wird. Stress im Zusammenhang mit kultureller Vielfalt wurde durch eine Adaption der fünfstufigen *Cultural Diversity-Related Stress Scale* erfasst (Tatar & Horenczyk, 2003; 5 Items, $\alpha = .81$, z.B. "Täglich mit Schüler/innen mit unterschiedlichen kulturellen Hintergründen zu arbeiten, verschafft mir viel Erfüllung."; Antwortniveau: 1 (*trifft überhaupt nicht zu*) bis 5 (*trifft völlig zu*)). Dicke et al. (2014) konnten zeigen, dass Stress von Lehramtsstudierenden eher durch niedrigen Selbstwirksamkeit im Classroom Management bedingt ist, als durch andere Belastungen wie z.B. niedrige Schülerleistungen oder das Unterrichten neuer Themen (Friedman, 2006). In diesem Sinne ist ein negativer Zusammenhang zwischen Selbstwirksamkeit im kultursensiblen Classroom Management und erlebtem Stress durch kulturelle Vielfalt zu erwarten.

3.2.3 Auswertung

Explorative und konfirmatorische Faktorenanalysen (EFA; CFA) wurden unter Nutzung von zwei Paketen in dem Programm R durchgeführt (*psych*, Rewelle, 2014; *lavaan*, Rosseel, 2012). Zur Ermöglichung getrennter konfirmatorischer und explorativer Faktorenanalysen wurde die Stichprobe per Zufall in zwei Teilstichproben ($n = 304$ und $n = 200$) aufgeteilt. Dadurch konnten adäquate Stichprobengrößen für die EFA (mindestens 300 Fälle; Comrey & Lee, 2013) und CFA (minimales Verhältnis von Stichprobe und Item 5:1; Gorsuch, 1983)

gewährleistet werden.

Da in der CRCMSES ordinale Variablen erfasst werden, wurde zur Modellschätzung die Methode der diagonal gewichteten kleinsten Quadrate (WLSMV) gewählt. Beim WLSMV handelt es sich um einen robusten gewichtete kleinste Quadrate Schätzer (Flora & Curran, 2004). Zur Überprüfung der Gesamtmodellpassung wurden mehrere Indizes genutzt. Eine akzeptable Modellpassung liegt dabei vor, wenn: Comparative Fit Index (CFI) > .90, Tucker-Lewis Index (TLI) > .90, Root Mean Square Error of Approximation (RMSEA) < .08 (Kline, 1998) und Weighted Root Mean Square Residual (WRMR) < .90 (Schreiber, Nora, Stage, Barlow, & King, 2006) sind. Zur Überprüfung der Frage, ob die ursprüngliche Einfaktorenstruktur bzw. eine alternative Faktorenstruktur besser dazu geeignet ist das Messmodell zu beschreiben, wurde die Güte der Modellpassung verglichen sowie ein Wald-Test durchgeführt.

3.2.4 Ablauf

Die Stichprobe setzt sich aus Lehramtsstudierenden zusammen, die am *Inclusive Teaching Professionalization Panel* (InTePP) teilnahmen. Das InTePP hat zum Ziel, die Entwicklung professioneller Kompetenzen im Lehramtsstudium zu erfassen und findet an zwei verschiedenen Universitätsstandorten in Deutschland statt.

Der Fragebogen umfasste einen Abschnitt, in dem demographische Informationen (wie z.B. Geschlecht, Geburtsort, Geburtsort der Eltern, bisherige Erfahrungen mit Inklusionspädagogik und Multikulturalismus) erfasst wurden. Obwohl es sich nicht um eine zufällig gezogene Stichprobe handelt, spiegelt die Struktur der Stichprobe (in Bezug auf Geschlecht, Alter, Migrationshintergrund) die Struktur der Lehrerschaft des Bundeslandes wieder. Zum Vergleich der Stichproben beider Universitäten wurden Chi-Quadrat-Tests durchgeführt. Die Ergebnisse zeigen, dass sich beide Stichproben nicht signifikant hinsichtlich der Geschlechterverteilung, Migrationshintergrund und bisheriger Erfahrungen mit Inklusionspädagogik und Multikulturalismus unterscheiden.

3.3 Ergebnisse

3.3.1 Explorative Faktorenanalyse

Vor Durchführung der Analysen wurde der Datensatz auf fehlende Werte überprüft. Insgesamt fehlten weniger als 1% aller Werte. Die EFA wurde zunächst unter Berücksichtigung aller 22 Items durchgeführt. Das Kaiser-Meyer-Olkin (KMO) Maß der Stichprobeneignung dokumentierte eine angemessene Eignung der Daten für die

Durchführung einer EFA (Beavers et al., 2013), sowohl im Hinblick auf das Kriterium (KMO = .92) als auch die KMO-Werte für die Einzelitems (.90). Die Auswertung des Scree-Plots rechtfertigte die Annahme einer Zwei- bzw Dreifaktorenstruktur. Unter der Annahme korrelierender Faktoren wurden beide Alternativen mit einer obliquen Rotation untersucht. Beide alternativen Faktorenstrukturen zeigen ausreichende Eigenwerte der Faktoren (> 1). Aufgrund statistischer sowie theoretischer Überlegungen wurde in den abschließenden Analysen ein Zwei-Faktoren-Modell spezifiziert.

Faktorladungen der Items über .40 wurden als akzeptabel eingestuft. Wie von Worthington and Whittaker (2006) vorgeschlagen, wurden Kommunalitäten zwischen den Items untersucht. Vor den beschriebenen Kriterien wurde ein Item ("Hohe Erwartungen an das Verhalten der Schüler zu stellen, um die Schüler zu ermutigen, gute Leistungen zu erbringen.") ausgeschlossen, da eine niedrige Faktorladung (.25) sowie niedrige Kommunalität (< .30) vorlag.

3.3.2 Konfirmatorische Faktorenanalysen.

Für das Zwei-Faktoren-Modell wurden anhand der zweiten Stichprobe ($n = 200$) konfirmatorische Faktorenanalysen durchgeführt. In der Konsequenz wurden weitere sechs Items ausgeschlossen, da diese außergewöhnlich hohe Korrelationen mit anderen Items zeigten (z.B. "Meine Kenntnisse über den kulturellen Hintergrund der Schüler einzusetzen, um eine kulturell angepasste Lernumgebung zu schaffen." und "Mein Wissen über den kulturellen Hintergrund der Schüler anzuwenden, um eine effektive Lernumgebung zu entwickeln.", oder "Teile des Klassenraums so abzuändern, dass sie mit Aspekten der Heimatkulturen der Schüler zusammenpassen." und "Den Klassenraum so zu gestalten, dass er den kulturellen Hintergrund der Schüler widerspiegelt."). Das endgültige Zwei-Faktoren-Modell beinhaltet 15 Items und wird durch einen guten Modellfit bestätigt ($\chi^2(89) = 92.644$, $p = .375$, RMSEA = .014, 90% CI = [0.000, 0.042]; CFI = .990; TLI = .988; WRMR = .485). Zudem wird ein besserer Modellfit im Vergleich zur Einfaktorenstruktur der originalen Skala deutlich ($\chi^2(90) = 163.720$, $p < .001$, RMSEA = .064, 90% CI = [0.048, 0.080]; CFI = .797; TLI = .763; WRMR = .792). Im Wald-Test konnte gezeigt werden, dass diese Unterschiede als statistisch signifikant einzuordnen sind ($\chi^2(1) = 71.076$, $p = < .001$).

Die finale Version des CRCMSES erfasst zwei Facetten von Selbstwirksamkeit: Faktor 1 beinhaltet acht Items und wurde als Anpassung von Instruktionen und Beziehungen bezeichnet, da sich alle Items auf Strategien beziehen, welche das Erkennen der Wichtigkeit

von Berücksichtigung kultureller Vielfalt und dem Verbessern der Beziehungen mit den Eltern der Lernenden beinhalten. Faktor 2 umfasst sieben Items und wird in der Folge als Anpassungen zum kooperativen Lernen bezeichnet, da sich alle Items auf die Förderung kooperativen Lernens zwischen den Lernenden beziehen. Die Faktorenmatix sowie die Reliabilitätskennwerte der finalen Version der CRCMSES sind in Tabelle 1 zu finden.

Tabelle 1

Explorative Faktorenanalyse der Culturally Responsive Classroom Management Self-Efficacy Scale (CRCMSES)

Faktor/Item	Ladung	
I. *Anpassung von Unterricht und Beziehungen*		
1. Mit Eltern von Schülern zu kommunizieren, deren Muttersprache nicht Deutsch ist.	.76	
2. Mein Wissen über den kulturellen Hintergrund der Schüler anzuwenden, um eine effektive Lernumgebung zu entwickeln.	.76	
3. Teile des Klassenraums so abzuändern, dass sie mit Aspekten der Heimatkulturen der Schüler zusammenpassen.	.75	
4. Unterrichtsroutine für Deutsch-Sprachschüler zu gestalten.	.73	
5. Das Unterrichtsverhalten der Schüler aus einer kulturübergreifenden Perspektive zu analysieren.	.70	
6. Eine Lernumgebung zu schaffen, die Respekt vor den Kulturen aller Schüler der Klasse befördert.	.70	
7. Erfolgreichen Unterricht zu entwickeln, der auf meinem Wissen über den familiären Hintergrund der Schüler beruht.	.69	
8. Einen Konflikt aktiv zu minimieren, der auftritt, wenn ein kultur-bezogenes Verhalten eines Schülers nicht mit den Schulregeln zu vereinbaren ist.	.66	
II. *Kooperatives Lernen*		
9. Schüler gegebenenfalls zu ermutigen, bei Schulaufgaben zusammenzuarbeiten.		.82
10. Den Schülern beizubringen, wie man zusammenarbeitet.		.81
11. Den Lehrplan so zu verändern, dass Gruppenarbeit möglich ist.		.76
12. Vorgehensweisen auszuarbeiten, die die Schüler veranlassen für ein gemeinsames Lernziel zusammenzuarbeiten.		.70
13. Unterrichtspläne so zu modifizieren, dass die Schüler während der ganzen Unterrichtszeit bzw. Unterrichtsstunde aktiv beteiligt bleiben.		.63
14. Kritisch abzuschätzen, ob ein bestimmtes Verhalten schlechtes Benehmen auslöst.		.61
15. Die Lernumgebung so zu gestalten, dass sich alle Schüler wie ein geachtetes Mitglied der Lerngemeinschaft fühlen.		.60
Prozent aufgeklärter Varianz	25	22
Eigenwert	4.07	3.13
α	.86	.87

Anmerkungen: *n* = 304.

Konstruktvalidierung. Zur Konstruktvalidierung der beiden Subskalen der CRCMSES wurden, unter Nutzung der gesamten Stichprobe, bivariate Korrelation mit dem empfundenen Stress im Zusammenhang mit kultureller Vielfalt berechnet. Wie erwartet stehen die aggregierten Werte der Subskalen in einem zwar niedrigen, jedoch signifikant negativen Zusammenhang mit Stress durch kulturelle Vielfalt (siehe Tabelle 2).

Tabelle 2

Deskriptive Statistik und bivariate Korrelation zwischen den Faktoren der CRCMSES und Stress im Zusammenhang mit kultureller Vielfalt

Variable	*M*	*SD*	1	2	3
1. Faktor 1 (0-100)	65.35	16.48	-		
2. Faktor 2 (0-100)	79.62	12.69	.60***	-	
3. Stress im Zusammenhang mit kultureller Vielfalt (1-5)	2.29	.75	-.23***	-.19***	-

Anmerkungen: N = 504. Faktor 1 = *Anpassungen von Unterricht und Beziehungen*, Faktor 2 = *Kooperatives Lernen.* **$p < .01.$ ***$p < .001.$

3.4 Diskussion

Vorhergehende Forschung stellt die Bedeutung der Selbstwirksamkeit von Lehrkräften für die Schulleistung und die Motivation von Lernenden und für das Engagement der Lehrkräfte selbst dar. Gleichzeitig werden häufig Fragebögen zur Erfassung der Selbstwirksamkeit eingesetzt, welche sich auf allgemeine Aspekte der selbigen beschränken und spezifische Domänen der Überzeugungen von Lehrkräften hinsichtlich der Wirksamkeit ihres Handelns außer Acht lassen. In dieser Studie sollte dieses Desiderat adressiert werden. Die Validität und Reliabilität einer deutschen Übersetzung einer Skala zur Erfassung der Selbstwirksamkeit hinsichtlich eines kultursensiblen Classroom Managements von Lehrkräften, der CRCMSES, sollte überprüft und somit ein Instrument zur Erfassung einer solchen spezifischen Selbstwirksamkeit zur Verfügung gestellt werden.

In den Analysen zeigte sich in der CFA und EFA eine Zweifaktorenstruktur des Konzepts der Selbstwirksamkeit hinsichtlich kultursensiblen Classroom Managements. Diese Faktoren umfassen sowohl Anpassungen von Instruktionen und Beziehungen als auch

Anpassungen zum kooperativen Lernen. Auch wenn diese beiden Subskalen distinkte Merkmale abbilden, zeigen sich in den Ergebnissen starke statistische Zusammenhänge zwischen diesen Fähigkeiten kultursensiblen Classroom Managements. Die gesamte CRCMSES bzw. die einzelnen Subskalen können eine wichtige Unterstützung in der Lehrerbildung und Forschung darstellen und als kurzes und valides Maß eingesetzt werden um die Selbstwirksamkeitsüberzeugungen von Lehrkräften bei der Implementierung kultursensiblen Classroom Managements zu erfassen. In zukünftigen Forschungsarbeiten wäre es von Interesse, die CRCMSES in Verbindung mit weiteren Maßen zu Kompetenzen von Lehrkräften, insbesondere auch Unterrichtsbeobachtungen, zu bringen. Zudem wäre interessant, ob die Ergebnisse in der CRCMSES in einem Zusammenhang mit persönlichen Überzeugungen und Einstellungen hinsichtlich kultureller Vielfalt im Bildungswesen stehen (z.B. Multikulturalismus, Egalitarismus, *"colourblind"*-Ansatz*)*.

In dieser Studie wird deutlich, dass die Studienteilnehmenden weniger Vertrauen in die Implementation von Strategien im Umgang mit individuellen kulturellen Hintergründen zeigten als hinsichtlich der Implementation kooperativen Lernens. Die Lehramtsstudierenden haben dementsprechend eine stärkere Überzeugung in der Lage zu sein, kooperatives Lernen umzusetzen als auf die individuellen kulturellen Hintergründe einzugehen. Die validierte Form der CRCMSES kann Lehrerbildner dabei unterstützen, solche Komplexitäten zu erfassen und ermöglicht eine Identifizierung von Domänen, welche weitere Ausbildung, Unterstützung und Förderung benötigen. Dies erscheint von hoher Bedeutung, da Selbstwirksamkeit, wie von Bandura (1997, 2006) beschrieben, ein psychologischer Mechanismus ist, welcher gut gefördert und trainiert werden kann. Individuelle Zweifel an der eigenen Wirksamkeit während der Ausbildung können dabei zudem eine fördernde Wirkung auf Motivation und Lernfortschritt haben (Woolfolk-Hoy & Spero, 2005). Die negativen Zusammenhänge zwischen den Subskalen der CRCMSES und dem empfundenen Stress im Zusammenhang mit kultureller Vielfalt deuten zudem auf eine mögliche Pufferwirkung von Selbstwirksamkeit hin, welche unerfahrene Lehrkräfte vor einem frühen Ausscheiden aus dem Beruf schützen kann (Friedman, 2006).

Eine solche Pufferwirkung von Selbstwirksamkeit stand im Fokus vorheriger Studien mit Lehrkräften (Dicke, 2014; Hong, 2012). Für den Bereich der domänenspezifischen Selbstwirksamkeitsüberzeugungen, wie z.B. hinsichtlich kultursensiblen Classroom Managements, konnten jedoch bis zum jetzigen Zeitpunkt nur wenige unterstützende Befunde aufgezeigt werden. Unter Berücksichtigung dieser Ergebnisse erscheint es von großer

Bedeutung, bereits mit Beginn der Lehramtsausbildung, eine Umgebung zu schaffen, in welcher Lehrkräfte ein möglichst resilientes Profil entwickeln können (Gay, 2010).

Vor dem Hintergrund weltweit wachsender kultureller Vielfalt, ist es unabdingbar zu untersuchen, inwieweit Lehrkräfte, insbesondere zu Beginn ihrer Berufslaufbahn, ihre Fähigkeiten hinsichtlich eines sensitiven Umgangs mit kultureller Vielfalt einschätzen. Psychologische Eigenschaften und Charakteristika von Lehrkräften (z.B. Selbstwirksamkeit), aber auch andere Aspekte des Schulklimas (z.B. Unterstützung durch die Schulverwaltung) spielen eine entscheidende Rolle im Umgang mit kultureller Vielfalt in Schulen.

- Chapter 4 -

Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study

This chapter is based on:

Abstract

The current study investigates two types of cultural diversity approaches at school, namely (1) fostering equality and (2) promoting cultural pluralism. Adopting a mixed-methods design, this study assesses teachers' ($n = 207$) and students' ($n = 1,644$) self-reported perceptions of descriptive norms and evaluates school practices and artefacts in the physical and virtual environment of 22 secondary schools in south-west Germany. Results showed that in all schools under investigation teachers and students perceived descriptive norms fostering mostly equality. A wide variety of practices and artefacts was found, revealing a third distinct cultural approach leaning towards endorsing the majority culture. Different practices and artefacts were linked to an emphasis on equality, cultural pluralism, and endorsing the majority culture. Implications for educational policy, as well as applied diversity research, are discussed.

Keywords: cultural diversity, school, equality, pluralism, mixed-methods

Chapter 4

4.1 Introduction

One inescapable aspect of a globalised world is the intensification of cultural diversity in society. For many countries, a crucial challenge is to develop a social climate where cultural diversity is respected and seen as a resource rather than a burden or a threat for peaceful coexistence. School is a key context that largely contributes to the creation of such a social climate (Motti-Stefanidi, Berry, Chryssochoou, Sam, & Phinney, 2012). However, there is little agreement about how schools around the world should aim at dealing with cultural diversity (Thijs & Verkuyten, 2014). Schools implement a wide range of practices (e.g., a theatre performance against racism), and artefacts (e.g., displaying images of diverse people in the posters on classroom walls) to address cultural diversity. These practices and artefacts are supposedly related to descriptive norms of the schools and together reflect the approach schools adopt for cultural diversity. The present study examines the descriptive norms and related practices and artefacts adopted to deal with cultural diversity in schools located in south-west Germany.

Although the increasing cultural diversity may represent a challenge for all stakeholders in education, teachers have a crucial role in ensuring students' social inclusion. The practices and artefacts teachers adopt in order to value cultural diversity are essential in developing a warm and supportive environment for students' individual needs (Gay, 2010), and are linked to positive academic adjustment, notably for immigrant and ethnic minority students (Aronson & Laughter, 2016). Practices and artefacts may reflect or be influenced by the descriptive norms shared in schools, which guide interactions between teachers and students (Horenczyk & Tatar, 2012). Descriptive norms are unwritten rules that serve important social functions, as they help individuals coordinate their social actions to achieve favourable outcomes (Gelfand & Harrington, 2015). Therefore, the first aim of the current study is to gain an understanding of how cultural diversity is addressed in German schools by investigating teachers' and students' perceptions of descriptive norms.

Teachers have greater control over daily tasks than students do (Mitchell, Bradshaw, & Leaf, 2010), and, although informally, possess more power than school administrators due to their proximity to students (Hanson, 2002). A number of other features qualify teachers as high-power individuals in school, including traditions of autonomy, professionalism, and

collegiality (Hargreaves, 2000). Collectively, teachers have the opportunity to manage schools' interaction patterns and activities, fostering the engagement of all students (Farmer, Lines, & Hann, 2011). It remains unclear how teachers' perceived descriptive norms regarding cultural diversity are expressed in practices and artefacts at school. Accordingly, the second aim of the study focuses on how teachers' and their students' perceived descriptive norms might be related to practices and artefacts manifested in the physical and virtual school environment.

4.1.1 School approaches to cultural diversity

Based on social psychological research on intergroup relations (Park & Judd, 2005; Plaut, 2002), and multicultural education perspectives (Banks, 2015; Gay, 2010), two approaches to cultural diversity may be distinguished: the first focuses on the promotion of equality, while the second values cultural pluralism. Schools may tend towards adopting one approach or combining elements of both (Anonymous, 2016; Hachfeld et al., 2011). Yet, there is little empirical evidence of how perceived descriptive norms and their related visible aspects (practices and artefacts) are reflected in different cultural approaches at school.

The emphasis of equality is primarily on promoting contact and cooperation across groups to undermine stereotyping and prejudice (Allport, 1954) and to restrict the direct expression of racism (Gaertner & Dovidio, 1986). Descriptive norms underlying the equality approach in school may be linked to practices, such as cooperative learning, or artefacts calling for respect and tolerance. An emphasis on equality gives little consideration to the diversity of students' cultural backgrounds (Hachfeld et al., 2011). On the other hand, the cultural pluralism approach acknowledges and promotes cultural differences, thereby seeing diversity as a resource and an added value (Banks, 2015). In the educational context, descriptive norms that are more cultural pluralism oriented may go hand in hand with school practices and artefacts that value cultural differences, such as organising school events where diversity is discussed or celebrated and adopting classroom material that is culturally sensitive (Gay, 2010).

To better understand what approach schools implement to deal with cultural diversity, previous research has emphasised the need to assess teachers' as well as students' perceptions of descriptive norms (Farmer et al., 2011), and to compare their level of congruence (Thijs, Westhof, & Koomen, 2012). One study found a marginally significant positive correlation between students' and teachers' perceptions of whether multicultural education was

implemented in classroom and school (Verkuyten & Thijs, 2002). Yet, in a study comparing six European countries, Fine-Davis and Faas (2014) found a mismatch between students' and teachers' perceptions of whether the presence of students from different cultural and ethnic backgrounds caused difficulties in the classroom, with teachers having greater estimates of difficulties posed by cultural diversity than students. The discrepancy concerning perceived descriptive norms might be related to the mismatch of cultural backgrounds between students and teachers (Van de Vijver & Leung, 1997). In contrast to most students, the majority of teachers in many parts of the world, including Germany, represents the cultural and ethnic majority (Sleeter, 2012). In addition, a lack of teacher preparation or negative beliefs towards cultural diversity may also largely contribute to the discrepancy between students' and teachers' multicultural views (Gay, 2010). Overall, then, teachers' and students' perceptions of descriptive norms may not necessarily correspond.

4.1.2 Practices and artefacts in the physical and virtual school environment

Practices and artefacts are the most tangible aspects of a school approach to cultural diversity. Practices refer to events or activities that are implemented in the school and classroom, whereas artefacts include all the visible products of an underlying set of school practices (Maslowski, 2006). Although practices and artefacts are distinct, they are closely interrelated. For example, reporting the list of values at the school entrance or on the school website is an artefact, but also implies that members of that school (i.e., teachers and students) have discussed these values. Practices and artefacts may develop from individually or collectively reinforced behaviour of teachers and school staff (Maslowski, 2006). Thus, both practices and artefacts contribute to our understanding of how cultural diversity is enacted in schools.

Although structural variables at the school level, such as school size or ethnic composition, are important to consider when examining cultural diversity approaches (Thijs & Verkuyten, 2014), other more visible aspects of a school that also might reflect practices and artefacts, are rarely investigated (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). For example, schools' public spaces (e.g., entrance hall) and classrooms' walls may reflect a school's cultural diversity approach. S. R. Harper (2015) took over 500 photos in 40 secondary schools located in a large metropolitan area in the United States. These pictures were taken mainly in the schools' entrance halls, principals' offices, schools' corridors, and classrooms. In complementary interviews, it was found that ethnic minority students who were exposed to messages fostering academic and personal success (e.g., banners from

prestigious universities), held higher postsecondary aspirations and were more likely to have applied for university. Similarly, Brown and Chu (2012) reported that multicultural artefacts, such as displaying culturally diverse images or messages in schools' public spaces (e.g., library), were positively associated with students' reduced perceptions of discrimination and ethnic identity, and moderated whether perceptions of discrimination and ethnic identity were related to attitudes about school and academic performance. Taken together, these findings imply that physical manifestations of practices and artefacts are a crucial element of cultural approaches at school.

Another element of the school context that is often omitted in research is the school website. The main purpose of a school website is to offer an overview of the school. Specifically, school websites can provide students and parents with a vast amount of information regarding ongoing practices and every aspect of institutional life (e.g., school schedule), as well as insights on educational values and school mission (Cohen, Yemini, & Sadeh, 2014). Although not examined in the empirical literature, it seems likely that descriptive norms may transpire in practices and digital artefacts conveyed on a school's website.

4.1.3 Cultural diversity in the German educational context

Since the end of Second World War, immigration has been a key policy issue for many European countries, such as the Netherlands, Belgium, France, Switzerland, and Germany. However, German politicians and policymakers have only recently acknowledged Germany being an immigration country (Faas, 2008a). Despite efforts to establish the prevention of racism and discrimination as an important educational goal after the Second World War, the German educational system is often considered to be reluctant in terms of its openness to cultural diversity (Auernheimer, 2005). As such, a pedagogy that favours assimilation as well as separation continues to be common (Faas, 2008a; Wegmann, 2014). Relatedly, Germany's selective tracked secondary school system has been identified as a key structural barrier to immigrants' school success (Pietsch & Stubbe, 2007), with children of immigrant background overrepresented in the lowest academic track (Kristen & Granato, 2007).

There are additional reasons why Germany provides an interesting case study. The academic achievement gap between children with and without an immigrant background remains one of the largest in Europe (OECD, 2012). Yet, Germany is currently the second

most popular immigration destination in the world (OECD, 2014). As a result, the educational demographic profile of students in Germany is likely to change in the near future more significantly than in other European countries. The present study focused on one of the most culturally diverse regions in south-west Germany (Federal Ministry of the Interior, 2016).

4.1.4 The current study

The present study addresses two research questions: (1a) what types of descriptive norms regarding cultural diversity (equality or cultural pluralism) are perceived by teachers and students with and without an immigrant background and (1b) what is their degree of congruence? (2) How are teachers' and students' perceptions of descriptive norms about cultural diversity related to practices and artefacts in the physical and virtual school environment? With regard to the first research question, given the emphasis in the German educational context on prevention of racism and discrimination (Auernheimer, 2005; Wegmann, 2014), (1a) we expected that teachers and students may perceive more equality than cultural pluralism oriented descriptive norms. Based on previous studies (Fine-Davis & Faas, 2014; Thijs et al., 2012; Verkuyten & Thijs, 2002), and due to expected ethnic incongruence between teachers and students, (1b) we expected that a stronger correlation between teachers and non-immigrant students than between teachers and students of immigrant background. For the second research question, two patterns were examined in an exploratory way. First, schools that implement practices and display artefacts in the physical and virtual environment that foster respect amongst cultures and combat racism may have teachers and students who perceived more equality oriented descriptive norms. Second, schools that encourage practices and present artefacts aiming at expanding cultural awareness may have teachers and students who perceived more cultural pluralism oriented descriptive norms. These predictions are based on the combination of intergroup relations theories (Allport, 1954; Gaertner & Dovidio, 1986), and multicultural education perspectives (Banks, 2015; Gay, 2010), and are supported by empirical findings in highly diverse schools (Brown & Chu, 2012).

4.2 Methods

4.2.1 Participants

Data for this study were collected from 207 teachers and 1,644 sixth-grade students within 22 multi-ethnic secondary schools in south-west Germany. Of the teachers included in the study ($M_{age} = 40.8$ years, $SD = 11.8$; 73% female), 14% had an immigrant background

(operationalized here as having at least one parent born outside of Germany). Time in service ranged from 1 to 32 years. Students' mean age was 11.5 years (SD = 0.67), and half (49.6%) were female. In contrast to the teachers, a majority (60%) of the students had an immigrant background. Of these, one-third reported being of Turkish heritage, the largest minority heritage group in Germany (Statistisches Bundesamt, 2014). The 22 schools included in the sample represented the tracked German secondary school system with nine low and seven medium vocational track schools both allowing an apprenticeship upon graduation, and six academic track schools that allow university entry. An overview of the schools, including their ethnic composition, is provided in Table 1.

Table 1

An overview of schools' characteristics

School ID	School track	n	%	Teacher per school	Students-teachers ratio
1	Low	370	92	35	10.6
2	Med	513	71	36	14.3
3	Low	268	61	30	8.9
4	Aca	600	37	51	11.8
5	Low	175	68	20	8.8
6	Low	119	49	15	7.9
7	Voc	545	24	41	13.3
8	Med	365	84	27	13.5
9	Aca	500	49	40	12.5
10	Aca	475	84	50	9.5
11	Med	295	78	24	12.3
12	Aca	560	61	50	11.2
13	Low	163	78	19	8.6
14	Low	220	94	20	11.1
15	Low	210	70	25	8.4
16	Low	274	55	32	8.6
17	Med	520	48	42	12.4

18	Med	755	81	50	15.1
19	Med	537	56	37	14.5
20	Low	247	63	22	11.2
21	Aca	627	79	60	11.1
22	Aca	620	63	63	9.8

Note. $N = 22$. School track: Low = low vocational track (Hauptschule), Med = medium vocational track (Realschule), Aca = academic track (Gymnasium); n = number of students enrolled in each school; % = percentage of students with an immigrant background.

4.2.2 Measures

4.2.2.1 Quantitative measures

Quantitative measures of the descriptive norms included teacher and student self-report items that were partially adapted from existing measures and partially developed for the study. Student measures and the corresponding teacher scales were created to parallel one another as much as possible. Measures tapped into teachers' and students' perceptions of descriptive norms reflecting two approaches to cultural diversity: equality and cultural pluralism. Measures were piloted with a small number of students and teachers prior to the main study. Participants ranked responses on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), with high scores indicating perceptions conforming to either equality or cultural pluralism.

4.2.2.1.1 Equality

Measures of equality were adapted for the German context from the school interracial climate scale (Green, Adams, & Turner, 1988; Molina & Wittig, 2006). The teacher scale included three subscales: (1) equal treatment (seven items; "At this school, the same rules apply to all students, regardless of whether they have an immigrant background or not."), (2) support for contact and cooperation (five items; "At this school, teachers try to prevent students from segregating into small groups along ethnic boundaries during breaks."), and (3) strengthening school community (four items; e.g., "At this school, students often solve a joint task in small groups during class."). The student measure (Anonymous, 2016) was comprised of two subscales that mirrored teachers' perceptions: equal treatment (six items), and support for contact and cooperation (eight items).

4.2.2.1.2 Cultural pluralism

A new scale (Schachner, et al., 2016) was developed to measure teachers' and students' perceptions of cultural pluralism descriptive norms in school. The teachers scale included four subscales: (1) dealing with cultural diversity constructively (12 items; e.g., "When a student of immigrant background does not manage to keep up with the rest of class, teachers at this school make every effort to organise necessary support."), (2) teachers' interest in students' cultural background (five items; e.g., "At this school, teachers think it is important to learn something about the cultural background of their students."), (3) teaching and learning about intercultural relations (six items; e.g., "At this school, teachers ensure that culturally-related problems among students are openly addressed and resolved."), and (4) teaching and learning about multicultural topics (six items; e.g., "At this school, teachers offer a lot of opportunities to learn something about other cultures during class."). The student measure included three subscales: teachers' interest in students' cultural background (six items), teaching and learning about intercultural relations (three items), and teaching and learning about multicultural topics (five items).

4.2.2.2 Qualitative measures

Following visual sociology work (D. Harper, 1988; Pauwels, 2010), two research team members systematically took pictures of school interiors (hall and corridors) and sixth-grade classrooms' walls (n = 2,995) in the 22 participating secondary schools. Pictures were taken of any materials or artefacts with reference to cultural diversity or interethnic relations, as well as general reflections of descriptive norms. In addition, screenshots were taken from each school website (n = 6,499). The number of pictures per school ranged from 35 to 222 (M = 118, SD = 56), whereas screenshots of school websites ranged from 30 to 1,063 (M = 295, SD = 241). The number of screenshots was larger than the number of pictures because it included all webpages of each website, regardless of whether the content was relevant for our research or not. The main purpose for collecting these pictures and screenshots was to capture the manifestation of cultural diversity practices and artefacts in the school and sixth-grade classrooms as well as on the school website.

4.2.3 Procedure and data analysis

Sixth-graders and their teachers were surveyed as part of a larger investigation on acculturation and intergroup relations targeting multi-ethnic secondary schools in south-west

Germany. The survey was confidential and participants voluntarily and independently completed the questionnaires. Student participation was also subject to permission from school authorities and parents. School principals agreed that pictures and screenshots serve for research purpose and in published scholarship. Participation was high (80%) for teachers and students.

To answer the first research question, this study used a multi-informant approach, analysing teachers' and students' self-reports of descriptive norms, and measuring their level of congruence. Specifically, mean scores were calculated for each subscale and aggregated at school level in line with previous publications on organisational climate and culture (Chan, 1998; LeBreton & Senter; 2007; Schneider, Ehrhart & Macey, 2013). Due to slight differences in measures between groups, it was not possible to statistically assess mean differences between teachers and students on equality and cultural pluralism. For students with and without an immigrant background, multivariate analysis of variance (MANOVA) was performed on five dependent variables (two subscales for equality, and three subscales for cultural pluralism). Bivariate correlations were used to measure congruencies between teachers' and students' perceptions scales, including only subscales that were administered to both teachers and students (two subscales for equality, and three subscales for cultural pluralism). Students' ratings were aggregated separately for those with and without an immigrant background. Due to the limited number of teachers (n = 27) with an immigrant background in the study sample, scores for teachers with and without an immigrant background were not calculated separately.

For the second research question, we employed a sequential mixed-methods design (Hanson, Creswell, Clark, Petska, & Creswell, 2005), with quantitative data analysis (step 1) preceding the qualitative analysis (step 2). In step 1, teachers' aggregated scores for equality and cultural pluralism at school level were rank ordered separately. In step 2, based on extreme groups analysis (Creswell, 2013), schools at the top and at the bottom of the rankings, on either or both approaches (i.e., schools where teachers' perceived norms showed a stronger or weaker endorsement of either equality or cultural pluralism), were selected and analysed. Relying primarily on teachers' perceptions of descriptive norms was prioritised because there is a need to support teachers understanding of strategies concerning cultural diversity that facilitate student academic adjustment. For students with and without an immigrant background, aggregated scores for equality and cultural pluralism at school level were also rank ordered to further check the degree of congruence with teachers.

Two research assistants manually coded images and screenshots of all schools using the qualitative data analysis software Atlas.ti (Friese, 2013). Images and screenshots that did not contain cultural diversity content were excluded (e.g., classroom rules). The analysis of the images and screenshots was informed by intergroup relations theories, multicultural education perspectives, and a grounded theory approach (Glaser & Strauss, 2009). Discrepancies in the coding system assessment were discussed on a regular basis in the research team (research assistants, first and second author) and resolved through consensus as recommended by Bradley, Curry, and Devers (2007).

4.3 Results

4.3.1 Quantitative findings

4.3.1.1 Preliminary analysis and scale reliabilities

        Prior to analysis, patterns of missing values were examined for the quantitative data. Amongst teachers, 21 cases were excluded due to missing values on more than 20% of responses, leaving 186 cases for further analysis. Amongst students, 53 cases were excluded, with 1,591 cases in the final analysis. Little's MCAR test suggested that the values in the remaining student sample were not missing completely at random. However, as only 2.5% of values were missing in the final sample, these were imputed using the expectation-maximization-procedure in SPSS, which does not require values to be missing completely at random. The internal consistencies of the scales were good, with Cronbach's alphas ranging from .68 to .89 (Table 2).

4.3.1.2 Descriptive statistics, mean differences and correlations

        Means and standard deviations for all study variables for teachers and students are reported in Table 2. Across the schools under investigation, both teachers and students perceived descriptive norms to be more strongly oriented to equality than to cultural pluralism. The MANOVA revealed significant differences between students only for the equal treatment subscale, with students without immigrant background perceiving higher equality treatment norms than students with an immigrant background ($M = 4.53$ versus $M = 4.10$), $F(1, 1589) = 92.33$, $p < .001$, $\eta_p^2 = .06$.

        Bivariate correlations were calculated between teachers' and students' self-reported perceptions at school level. To account for unequal sample size, teachers' individual scores were log transformed and weighted prior to aggregation (Sapsford, 2006). Teachers'

perceptions of equality (equal treatment: $r(22) = .41$, $p = .05$; and support for contact and cooperation: $r(22) = .51$, $p = .01$) were only correlated with perceptions of students without an immigrant background (support for contact and cooperation). This suggests that the level of congruence for descriptive norms that are more equality oriented is higher for teachers and students without an immigrant background. Teachers' and students' perceptions of cultural pluralism, regardless of their immigrant background, were marginally correlated and did not reach statistical significance, indicating a small degree of congruence.

Table 2
Descriptives and reliability scores by scales for teachers and students

	Teacher Perceptions (n = 186)	
Diversity Approach	*M (SD)*	*α*
Equality		
Equal treatment	4.62 (1.85)	.73
Support for contact and cooperation	3.39 (0.38)	.80
Strengthening class community	4.20 (0.24)	.68
Cultural Pluralism		
Teachers' interest in students' cultural background	2.28 (0.32)	.76
Teaching and learning about intercultural relations	3.93 (0.41)	.86
Teaching and learning about multicultural topics	3.42 (0.37)	.82
Dealing with cultural diversity constructively	3.85 (0.29)	.89

	Student Perceptions		
	Immigrant (n = 965)	Non-immigrant (n = 626)	
	M (SD)	*M (SD)*	*α*
Equality			
Equal treatment	4.10 (0.43)	4.53 (0.34)	.73
Support for contact and cooperation	3.50 (0.21)	3.48 (0.35)	.80
Cultural Pluralism			
Teachers' interest in students' cultural background	3.50 (0.73)	3.46 (0.46)	.76
Teaching and learning about intercultural relations	3.77 (0.32)	3.82 (0.46)	.85
Teaching and learning about multicultural topics	3.13 (0.23)	3.19 (0.51)	.82

4.3.1.3 Rank order of schools by endorsement of diversity approaches

Prior to rank ordering schools according to teachers' perceptions, intra-class correlations (ICC) were calculated on overall dimensions equality and cultural pluralism based on individual self-reports to assess the amount of shared variance at the school level. Teachers in the same schools agree more strongly on cultural pluralism, with a medium effect [ICC = .13]. For equality, instead agreement was weaker [ICC = .03]. At school level, students with and without an immigrant background agreed mostly on equality [ICC = 13. and ICC = .14] followed by cultural pluralism [ICC = .12 and ICC = .11].

Teachers' rank orders for equality and cultural pluralism overall scores in the present sample are reported in Table 3. Top schools reported high scores in both approaches, whereas bottom schools were particularly low in just one of the two. Specifically, one school ranked first in both cultural approaches (school 13). Two other schools had similar scores to school 13 (schools 16 and 1). At the bottom of the rank order, three schools reported low scores for either equality (schools 5 and 19) or cultural pluralism (school 6). Similarly to teachers, students' self-reported perceptions in schools 13, 16 and 1 scored high, whereas school 5 was the lowest in both cultural approaches, equality and cultural pluralism (see Table 4). In the students' findings, the position of schools 6 and 19 did not completely overlap with the teachers' data, although the mean scores were similar. These six schools (13, 16, 1, 5, 6, and 19) were purposefully selected for their position in the rankings.

Table 3

Rank order of schools based on teachers' perceptions of descriptive norms

	Equality		Cultural Pluralism	
Rank Order	*M*	*School ID*	*M*	*School ID*
1	4.63	**13**	3.89	**13**
2	4.49	**16**	3.77	**1**
3	4.45	**1**	3.76	12
4	4.29	15	3.73	**16**
5	4.23	21	3.68	15
6	4.19	12	3.67	3
7	4.19	3	3.66	**6**
8	4.17	18	3.63	14
9	4.16	14	3.61	22
10	4.13	20	3.60	20
11	4.10	2	3.59	11
12	4.09	**5**	3.50	10
13	4.08	22	3.49	**19**
14	4.07	10	3.45	2
15	4.07	17	3.41	18
16	4.00	9	3.34	4
17	3.98	11	3.34	7
18	3.98	8	3.26	8
19	3.97	4	3.25	17
20	3.92	7	3.24	21
21	3.84	**19**	3.24	9
22	3.79	**6**	3.12	**5**

Note. Schools in bold are described further in the text.

Table 4

Rank order of schools based on students' perceptions of descriptive norms

| | Equality | | | | Cultural Pluralism | | | |
| | Immigrant | | Non-Immigrant | | Immigrant | | Non-Immigrant | |
Rank Order	M	School ID	M	School ID	M	School ID	M	School ID
1	4.18	10	4.40	**13**	3.91	**16**	4.84	**1**
2	4.13	**16**	4.40	**1**	3.85	**1**	4.06	10
3	4.12	18	4.30	18	3.80	**6**	3.97	**13**
4	4.05	15	4.21	12	3.66	9	3.74	18
5	4.03	7	4.18	22	3.64	**13**	3.68	**16**
6	3.99	**1**	4.16	15	3.61	2	3.65	9
7	3.94	9	4.11	**16**	3.61	18	3.58	15
8	3.83	12	4.10	9	3.59	20	3.57	8
9	3.81	2	4.10	11	3.50	15	3.56	**19**
10	3.80	4	4.04	7	3.49	10	3.51	2
11	3.80	11	4.03	2	3.42	11	3.45	12
12	3.79	**13**	3.97	**19**	3.39	17	3.36	11
13	3.79	17	3.94	4	3.36	**19**	3.33	7
14	3.73	**19**	3.94	10	3.33	7	3.33	17
15	3.70	**6**	3.93	17	3.32	22	3.33	22
16	3.69	8	3.83	3	3.31	21	3.29	21
17	3.69	22	3.79	21	3.24	4	3.28	**6**
18	3.63	14	3.78	8	3.19	12	3.22	20
19	3.54	3	3.59	**6**	3.15	8	3.13	4
20	3.46	21	3.56	14	3.11	3	3.13	3
21	3.30	20	3.47	20	3.09	**5**	2.98	14
22	3.27	**5**	3.35	**5**	3.07	14	2.57	**5**

Note. Schools in bold are described further in the text.

4.3.2 Qualitative findings

4.3.2.1 A third approach to cultural diversity

Across the 22 schools, the combined analysis of images and screenshots revealed that equality and cultural pluralism approaches were meaningful for clustering diversity practices

and artefacts in schools. However, there were also school practices and artefacts found that appeared to be different from the present study's conceptualization of equality and cultural pluralism. These were clustered as representing an additional, distinct approach to cultural diversity, namely: endorsing the majority culture. The school practices and artefacts coded as endorsing the majority culture mainly referred to one aspect (religion) of the cultural majority group. Table 5 illustrates the three cultural diversity approaches, with sources (school interiors/classrooms' walls or school website) and associated school practices and artefacts examples.

Equality, cultural pluralism, and endorsing the majority culture often co-existed in the same school, with practices and artefacts reflecting all three approaches. Whereas other schools markedly embraced one approach, showing seldom practices and artefacts supporting other ways of dealing with cultural diversity. Overall, schools at the top of the rankings (schools 13, 16 and 1) showed a stronger correspondence between the approach perceived in the school and practices and artefacts dealing with cultural diversity than schools at the bottom (schools 5, 6 and 19).

Table 5

Cultural diversity approaches, sources, and associated school practices and artefacts

Diversity Approach	Source	Practices and Artefacts
Equality	1	Poster about respecting each other with hands of different skin colours
	2	School award for musical project for respect and tolerance[*]
	2	Musical project for courage against racism and discrimination
Cultural Pluralism	1	Advertisement for ethnic exposition in a museum
	1	Poster with students' profile including their country of origin[*]
	2	School band performed songs from several countries in Africa
Endorsing the Majority Culture	1	Poster advertising Christmas events[*]
	2	School cooperation with religious youth group[*]
	2	Charity event sponsored by a local church

4.3.2.1.1 School number 13: Highest in equality and cultural pluralism

Based on teachers' perceptions gathered by questionnaires, school 13 (87% of students with an immigrant background) was first in equality and cultural pluralism. For students, school 13 was also high in cultural pluralism and ranked first in equality but only for students without an immigrant background. In this school, numerous practices and artefacts resembling equality and cultural pluralism were found in the school's hall, classrooms' walls and on the website, supporting the quantitative findings. Figure 1 shows a poster in the hall that called for respect, showing hands with different skin colours (equality); a German-Turkish forum, in which dialogue between these two cultures is promoted (cultural pluralism). There were also practices and artefacts in relation to endorsing the majority culture: projects or initiatives linked with one of the biggest religious groups in Germany (e.g., a Protestant youth group).

Figure 1. A poster with classroom rules, fostering respect and tolerance amongst

students, coded as *equality.*

Figure 2. A decoration in the school's hall with the biggest monotheistic religions' symbols coexisting in peace, coded as *cultural pluralism.*

Figure 3. A map in a classroom's wall with pins for students' countries of origin, coded as cultural pluralism.

4.3.2.1.2 School number 16: High in equality and cultural pluralism

School 16 (55% of students with an immigrant background) appeared to have a strong endorsement of equality as well as cultural pluralism based on the teachers' perceptions. Interestingly, this school also ranked high in equality and cultural pluralism according to students with an immigrant background. Numerous initiatives and awards this school had received in the recent past were displayed in different parts of the school building (e.g., entrance hall, school corridors) and above all on the school website. Special attention was given to religious aspects of cultural diversity: Figure 2 shows a decoration in the hall with the biggest monotheistic religions' symbols coexisting in peace (cultural pluralism). Religion was also the focus of initiatives in relation to endorsing the majority culture, e.g., students attending religious events in the local church. Arts, in particular music performances and poetry competitions (e.g., winner of a musical project for respect and tolerance and against violence), were used as a means to promote equality as well as cultural pluralism.

4.3.2.1.3 School 1: High in equality and cultural pluralism

School 1 (92% of students with an immigrant background) ranked high in equality and cultural pluralism by teachers as well as students without an immigrant background. Events and initiatives dealing mainly with religious aspects of cultural diversity were promoted in this school (e.g., a project conducted with several classes that dealt with the topic of Islamophobia; students and teachers singing Christmas carols together on the stairs and in the corridors during school time), reflecting equality and endorsing the majority culture respectively. To overcome language barriers, the school offered courses to improve German (endorsing the majority culture) along with opportunities to cultivate students' native languages (e.g., a theatre event with poems from students' countries of origin; cultural pluralism).

4.3.2.1.4 School 5: Lowest in cultural pluralism

Based on teachers' perceptions, school 5 (68% of students with an immigrant background), reported the lowest mean score in cultural pluralism. Similarly, students with and without an immigrant background perceived school 5 to be low in both equality and cultural pluralism. Only two images taken in the school's hall and in one classroom captured cultural diversity practices and artefacts. Although both pictures were coded as cultural pluralism, these reflected more marginal artefacts that did not directly endorse a celebration of cultural diversity. Specifically, the first picture showed information sheets about one of the

largest cities in Turkey, while the second image showed a poster entitled "where we live", illustrating several parts of the same city (e.g., monuments, bridges). On the school website, a screenshot illustrating "About us" information highlights the commitment of this school to boosting respect and tolerance amongst students with diverse cultural backgrounds (equality). No practices or artefacts with a reference to endorsing the majority culture were found.

4.3.2.1.5 School 6: Lowest in equality

School 6 (49% of students with an immigrant background) reported the lowest mean based on the teachers' equality perceptions. Accordingly, none of the pictures or screenshots was coded as promoting equality. Conversely, teachers' perceived descriptive norms (cultural pluralism oriented) were relatively high compared to other schools in the sample. The qualitative data partially supported this finding. For example, on the walls of one classroom, a world map was displayed with arrows pointing at students' countries of origin (Figure 3). Yet, the predominant approach which emerged from practices and artefacts was endorsing the majority culture: advertisements of regular school church services or concerts with Christian representations (e.g., music events) were repeatedly found in the school's hall and on the school website.

4.3.2.1.6 School 19: Low in cultural pluralism

School 19 (56% of students with an immigrant background) was perceived low in cultural pluralism by teachers. Although from the analysis of the pictures and screenshots numerous practices and artefacts were coded as promoting cultural pluralism, these were mainly focused on and limited to discrete aspects of cultural diversity such as including international or Mediterranean food in the school canteen or pictures showing different countries with the corresponding flag visited by students during school holidays. On the other hand, there were several examples for endorsing the majority culture that referred to Christian religion, such as religious events or a school club promoting religious initiatives, which were reported on the website. Another example for endorsing the majority culture was a poster showing a football player with an immigrant background who invited students to learn German.

4.4 Discussion

The aim of this study was twofold. First, we investigated what types of descriptive norms regarding cultural diversity (equality or cultural pluralism) are perceived by teachers and students with and without an immigrant background. Second, we explored how teachers' and students' perceived descriptive norms can be related with practices and artefacts in the physical and virtual school environment.

4.4.1 Perceived descriptive norms about cultural diversity

A key finding of this study is that descriptive norms fostering equality were most strongly perceived by both teachers as well as students with and without an immigrant background. This result is consistent with previous research, investigating either teachers' or students' perceptions about cultural diversity that used similar instruments or qualitative interviews (Anonymous, 2016; Horenczyk & Tatar, 2002; Sinkkonen & Kyttälä, 2014; Walton et al., 2014). Equality has been considered as a necessary condition for cultural pluralism (Banks, 2015). Yet, the equality approach does not attend to diverse students' cultural background in the learning context. Thus, equality may not be sufficient and needs to be accompanied by cultural pluralism (Gay, 2015). For example, if schools are rigidly equality oriented, and systematically avoid talking about cultural differences in order to reduce the fear of discrimination, it may turn into a colorblind approach (Anonymous, 2016). Students might then feel that having a diverse cultural background is unimportant or a risk. This can lead them to disengage from their ethnic culture, which is an important resource for socio-emotional adjustment (Motti-Stefanidi et al., 2012; Schachner, Van de Vijver, & Noack, 2014), and ultimately negatively affect school belonging and academic achievement (Celeste, Baysu, Meeussen, Kende, & Phalet, 2016). On the other hand, cultural pluralism puts more emphasis on cultural diversity, seeing diversity as an added value (Banks, 2015). As many German schools such as the ones in our sample are highly diverse, acknowledging the presence of students with a diverse cultural background in German schools is imperative. At the same time, cultural pluralism brings challenges associated with promoting cultural awareness (Gay, 2010), such as learning new instructional strategies for teachers and dealing with potential threats like perceived discrimination. Hence, the primary implication for schools is that cultural pluralism along with equality should be further encouraged and supported.

In line with previous studies (Fine-Davis & Faas, 2014; Verkuyten & Thijs, 2002), results showed only small congruencies between teachers and students with an immigrant background in perceived cultural diversity descriptive norms. This result might be explained

by the mismatch of cultural backgrounds between students and teachers. However, students without an immigrant background seemed more aware when the equality approach was predominant. This result was further supported by the finding that students without an immigrant background reported higher scores on the equal treatment subscale than students with an immigrant background. In addition, schools perceived by teachers as high in both equality or cultural pluralism (schools 13, 16 and 1) were also at the top of the students' rank orders, regardless of their immigrant backgrounds. Both of these cultural diversity approaches have been indicated as important amongst students with and without an immigrant background and were associated with better interethnic relations (Slavin & Cooper, 1999), integration and adjustment of students with an immigrant background (Anonymous, 2016), as well as better academic skills (Aronson & Laughter, 2016; Johnson, Johnson, & Stanne, 2000). This further speaks for a combination of equality and cultural pluralism, which may be beneficial for students with and without an immigrant background alike.

The small congruence found between teachers and students, particularly for cultural pluralism, reaffirms the need to measure teachers' as well as students' perceptions in relation to what types of descriptive norms are promoted in the school environment (Thijs et al., 2012). Although this small congruence should be considered with caution given the methodological differences of the instruments (e.g., the number of subscales) and different age of respondents (e.g., early adolescents versus adults), this finding indicates that it is useful to employ a multi-informant approach when investigating school cultural diversity approaches.

4.4.2 Contextualising the cultural diversity approaches at school

By applying a mixed-methods design, this study demonstrated how a large variety of practices and artefacts are used amongst schools to deal with cultural diversity. These myriads of practices and norms revealed three different approaches to cultural diversity, including equality, cultural pluralism, and endorsing the majority culture. This result indicates that equality and cultural pluralism might not be exhaustive when studying cultural diversity approaches at school. Previous studies conducted in Germany and other European countries on teachers' understandings of cultural diversity and teaching methods showed evidence of these three diversity approaches (Agirdag, Merry, & Van Houtte, 2016; Celeste et al., 2016; Faas, 2008b). Although dealing with cultural diversity implies the recognition of all different groups (including students without an immigrant background), approaches focusing only on

cultural aspects of the ethnic majority groups (endorsing the majority culture) may have some important limitations. As it was shown in the demographic current sample, the biggest group of students with an immigrant background were of Turkish heritage. By emphasising Christian traditions as one aspect of the majority culture, this makes the majority culture inaccessible for non-Christian immigrants, which may fail to acknowledge the heterogeneous nature of cultural diversity in southwestern German schools.

The qualitative findings provide additional insights into characteristics of the sample under investigation; more specifically about the way cultural pluralism is usually implemented. For instance, the top schools for endorsing cultural diversity approaches in the present sample, which were also perceived by teachers and students as high in cultural pluralism (schools 13, 16, and 1), revealed practices and artefacts that aim at a more holistic understanding of cultural differences (e.g., a school award for a project about ethics in various cultures). By contrast, school practices and artefacts identified as promoting cultural pluralism in the three bottom schools (5, 6 and 19), focus on celebrating special events (e.g., multicultural breakfast), holidays (e.g., a poster with postcards and flags of the countries visited by students), and food (e.g., international dishes in the canteen). The use of these practices and artefacts to promote cultural pluralism could lead to "exotic or folkloristic presentations" of different cultures (Portera, 2008, p. 485), and thus support the assumption that students with an immigrant background are not an integral part of mainstream society. This approach may also lead to the reinforcement of cultural stereotypes and misconceptions and convey the message that cultural diversity is irrelevant in learning (Banks, 2015).

In addition, consistent with prior studies (Agirdag et al., 2016; Faas, 2008b; Ortloff, 2011), practices and artefacts coded as promoting cultural pluralism often referred to other European or Western cultures (e.g., student visits to the United States with the specific aim of "exploring another culture"; a visit to the European Parliament; and invitations to learn English). Binding cultural pluralism to European or Western cultures may also imply that valuing cultural diversity is constrained within certain cultural groups (mainly Europeans). Although schools, and teachers in particular, may be unaware of this form of ethnocentrism, cultural pluralism limited to European and/or Western values can hamper the focal scope of valuing diversity (Portera, 2008), and brings new forms of discriminations, where non-European values are ignored or seen as suspect.

4.4.3 Linking perceived descriptive norms with practices and artefacts

Our second research question addressed the relation between perceived descriptive norms, practices, and artefacts. We hypothesized that schools in which teachers and students perceived descriptive norms more equality oriented would be more likely to implement and display practices and artefacts in the physical and virtual environment that foster respect amongst cultures and combat racism, whereas schools in which teachers and students perceived descriptive norms as favouring cultural pluralism would present practices and artefacts aiming at expanding cultural awareness.

The extreme group analysis in which we selected six schools by levels of endorsement of equality and cultural pluralism (high vs. low) supported our hypothesis and provided greater insight into the nature of the relation between descriptive norms, practices, and artefacts. Specifically, schools in which teachers' and students' perceptions were low in either or both equality and cultural pluralism norms, practices, and artefacts dealing with cultural diversity were seldom found in either the physical or virtual school environment and mainly referred to the third approach (endorsement of majority culture). Conversely, in the schools in which teachers' and students' self-reported perceptions of descriptive norms were high in either or both equality or cultural pluralism, practices and artefacts reflecting equality or cultural pluralism could indeed be traced. In other words, these two groups of schools are following very distinct approaches to dealing with cultural diversity, and this difference is reflected in the different association of perceived descriptive norms with practices and artefacts observed.

Taken together with the results of the quantitative questionnaire, the two different associations of descriptive norms with practices and artefacts suggest that equality, cultural pluralism and endorsing of majority culture can coexist in the same school. At the same time, the lack of association of descriptive norms with practices and artefacts in the schools at the bottom of the rankings may point at a different approach to cultural diversity. In the current study, the analysis of qualitative data revealed that in the schools perceived low in both equality and cultural pluralism, only the third approach (endorsement of majority culture) was identified. It is plausible that culturally very heterogeneous schools that rarely implement cultural diversity practices or display artefacts may ignore cultural differences altogether. Ignoring cultural diversity may be an approach, distinct from equality, which tends towards assimilation (Faas, 2008b). This finding may further justify the need to go beyond investigating just the two approaches of equality and cultural pluralism. Future studies should

also help to further disentangle the direction of the relation between norms, practices, and artefacts (i.e., descriptive norms predicting practices and artefacts or vice versa).

For educational practitioners, the associations between descriptive norms with practices and artefacts suggest the importance of making visible the cultural diversity approach in the physical and virtual learning environment. Preferably, teachers should support cultural diversity by combining equality and cultural pluralism approaches. Moreover, practices and artefacts aiming at dealing with cultural diversity should not only aim at celebrating special events and holidays. The importance of linking descriptive norms with practices and artefacts is further supported by the findings regarding students' perceptions of descriptive norms. For students attending schools that were high in both equality and cultural pluralism, perceiving descriptive norms embracing equality and cultural pluralism were also higher than in students in schools at the bottom of the rankings. These results indicate that students (with and without an immigrant background) are sensitive to the way in which cultural diversity is addressed in the school.

4.5 Limitations

This study has some limitations, which have to be pointed out. First, the number of teachers in each school in the final analysis was rather small. Nevertheless, teachers were only one source of information besides student and qualitative data. The fact that there was a significant amount of shared variance between teachers in each school also suggests that our numbers were still adequate. Using rank orders may also be seen as a limitation because it implies that schools' overall scores are subject to the distribution of the sample of the study. However, as the study draws on 22 schools representing the three main German secondary school tracks from urban and rural areas in south-west Germany, the sample can be regarded as representative of culturally diverse secondary schools, at least in a German context.

Although a mixed-methods approach draws upon the strengths of both quantitative and qualitative methods, causal links between perceptions of descriptive norms and actual schools' practices and artefacts could not be established in this study. Another limitation of this study was that by analysing practices and artefacts by using images and screenshots, it was only partially possible to study the relation with descriptive norms regarding cultural diversity. In addition, practices and artefacts observed in the present study varied in terms of time, scope or frequency (e.g., annual versus weekly events), and characteristics of the task (e.g., a classroom versus school project), and were in some cases hard to decipher. For

example, Figure 3 shows a map with pins for students' countries of origin. We do not know if students just placed their pins or the creation of this artefact was accompanied by a rich discussion about different cultural backgrounds. In future studies, it would be important to expand data sources, using video observations in vivo, or systematically analysing classroom curriculum (e.g., textbooks, lesson plans). Doing so would provide a much richer account of the type of approach (perceived, manifest, and hidden) schools adopt to deal with cultural diversity.

4.6 Conclusions

This study makes a contribution to the theoretical and methodological field of cultural diversity research in the school context by highlighting the importance of incorporating perspectives from different stakeholders and fostering the use of multiple data sources. Our findings supported our proposal that perceived descriptive norms, practices, and artefacts linked to cultural diversity can be interrelated, and together shape the school cultural diversity approach. In conclusion, the results of our study underscore the importance of enhancing a school approach that fosters cultural pluralism along with equality to facilitate intergroup social interactions and maximise students' school adjustment.

- Chapter 5 -

The interplay between culturally responsive teaching, cultural

diversity beliefs, and self-reflection: A multiple case study

Abstract

This investigation examined the dynamic relation between culturally responsive teaching, teacher cultural diversity beliefs, and self-reflection on own teaching. A multiple case study with four ethnic German teachers was conducted using classroom video observations (3 lesson units X 2 raters) and post-observation interviews in a culturally and ethnically diverse high school. For these teachers there was a high congruence between culturally responsive teaching and cultural diversity beliefs. Yet their degree of cultural responsiveness and their beliefs differed across teachers. The teachers who were observed to be more culturally responsive also showed elaborated patterns of self-reflection on their own teaching.

Keywords: cultural diversity; culturally responsive teaching; teacher beliefs; self-reflection; case study.

Chapter 5

5.1 Introduction

Germany has a long history of immigration. From adjusting to the permanent settlement of former guest workers to facing the challenge of accommodating refugee newcomers, Germany has taken several steps to acknowledge itself as an immigration country (Faas, 2016; Wegmann, 2014). Yet, German schools frequently tend to stress similarities among cultures and assimilation of minority groups to the mainstream culture (Gogolin, 2002; Hüpping & Büker, 2014), limiting intercultural education to celebrating religious holidays and ethnic food (Civitillo, et al., 2017). Such approaches to cultural diversity in education are insufficient to promote equity and sustain cultural pluralism (Gorski, 2016; Portera, 2008). The inclusive framework of culturally responsive teaching (CRT; Gay, 2010a) provides insights into addressing the needs of students with diverse cultural and ethnic backgrounds. Culturally responsive teachers endorse positive beliefs about cultural diversity and act as reflective practitioners (Gay, 2010b; Gay & Kirkland, 2003). The present multiple case study examines culturally responsive teaching by using a validated classroom observation protocol, explores teachers' beliefs about cultural diversity, and gains insights into teacher self-reflection on their classroom practices in a culturally and ethnically diverse high school in a large urban area in Germany.

5.1.1 Culturally Responsive Teaching

Several scholars have contributed to the development of CRT (e.g., Gay, 2010a; Ladson-Billings, 2014; Nieto, 1992; Paris, 2012; Villegas & Lucas, 2002). Although there are differences in the way CRT is conceptualized, there is a general agreement that CRT uses students' cultural experiences and knowledge; supports students in maintaining their cultural identity, native language, and connections to their culture; provides multiple opportunities to demonstrate what students learn; incorporates different perspectives; and empowers student sociopolitical consciousness. Thus, CRT is a multidimensional construct and encompasses curriculum content, instructional strategies, achievement assessment, as well as classroom climate (Gay, 2010a). Accordingly, CRT stresses the importance of moving beyond isolated opportunities of attending to individual cultural differences in classrooms and schools toward a recognition of how culture impacts teaching and learning (Kumar, Zusho & Bondie, 2018;

Ladson-Billings, 2011).

A narrative review of qualitative studies has demonstrated that CRT benefits multiple kinds of student achievement across content subjects (Aronson & Laughter, 2016). Likewise, recent quantitative and longitudinal findings support the benefits of culturally content teaching strategies for students from various minority and traditionally marginalized groups (Dee & Penner, 2017; Matthews & López, 2018). Taken together, these results indicate that student cultural background should be considered as a resource in teaching and learning rather than as a problem to overcome or ignore (Gay, 2010a). However, a large body of literature on CRT reports evidence from one country, namely the USA (Sleeter, 2012). Recently, more efforts to study culturally responsive teaching have been made in other countries from Europe, Africa, and Asia (Acquah, & Commins, 2015; Arvanitis, 2018; Chu, 2013; Lehtomäki, Janhonen-Abruquah, & Kahangwa, 2017). Because learner populations are becoming increasingly culturally diverse around the globe, it is necessary to explore and describe how CRT is implemented in a major immigrant destination such as Germany.

As efforts to promote CRT increase, there is a need for translating the insights of CRT scholars into a cohesive representation of teaching and learning practices. Critics to CRT oftentimes highlight that it is difficult to understand what CRT means and how it looks in the classroom (Schmeichel, 2012; Sleeter, 2012). Correll and colleagues developed and validated a classroom observation protocol (Culturally Responsive Instruction Observation Protocol, CRIOP) that collects the efforts of different scholars advocating for CRT (Correll, Powell & Cantrell, 2015; Powell, Cantrell, Malo-Juvera & Correll, 2016). This observational protocol may be helpful for teachers' professional development because it offers educational researchers as well as teachers a tool for evaluating curriculum, instructional practices, and learning environments. The present study used the CRIOP to assess the use of culturally responsive teaching in a sample of German teachers.

5.1.2 The reciprocal relation between CRT and teachers' beliefs

As crucial stakeholders in education, teachers make personal and pedagogical sense of how cultural diversity should be incorporated into daily classroom activities and classroom climate. Accordingly, the role of teacher beliefs is crucial to explain the complexity of teacher instructional behaviors (Fives & Buehl, 2012). Following Bandura's theory of triadic reciprocal determinism (1997), beliefs are seen as individual cognitive conceptions in constant relation to behavior and the external environment. Bidirectional relationships exist

between personal beliefs, behavior, and the external environment (e.g., school and classroom characteristics), but their influence and reciprocal effects vary for different activities and under different circumstances. For example, school principals who support a vision of the school by fostering cultural responsiveness may promote conditions within a school in which cultural diversity is valued (Khalifa, Gooden, & Davis, 2016). This, in turn, may help teachers who value cultural diversity to act upon their beliefs in the classroom.

An important premise of CRT refers to teachers' beliefs about cultural diversity. CRT is indeed not only a set of teaching strategies but it requires teachers holding beliefs that consider cultural diversity as a positive attribute and valuable resource in teaching and learning (Gay, 2010b). Yet, research rarely specifies what types of beliefs are investigated beyond issues related to cultural diversity. Beliefs about cultural diversity should not be seen as a monolithic block but considered as a multidimensional and multi-layered construct (Civitillo, Juang, & Schachner, 2018). One area of teachers' beliefs about cultural diversity reflects teachers' views toward incorporating cultural diversity content into daily teaching and learning activities. More specifically, beliefs about cultural diversity content encompassed beliefs teachers have regarding the role of culture in the different bodies of knowledge they teach (e.g., teaching history regarding marginalized populations). As this area of beliefs may be reciprocally associated with teaching behavior, it is important to explore it in combination with enacted behavior.

Using classroom observations in combination with self-reported measures of teachers' beliefs (i.e., surveys), previous studies have shown incongruences between actual teaching behavior and teachers' beliefs. For example, Debnam and colleagues (2015) found a mismatch between teachers' self-assessment of cultural responsiveness and their teaching behaviors. Whereas teachers ranked themselves as engaging in high levels of cultural responsiveness, observational scores showed a consistently low use of culturally responsive teaching. Similarly, Guerra and Wubbena (2017) showed that only negative beliefs toward students from diverse backgrounds were associated with teaching practices denying diversity (e.g., no use of culturally relevant materials). Yet, teachers who expressed their beliefs of incorporating student background into daily classroom instructions adopted culturally responsive teaching only to a small extent. Thus, there are some inconsistencies between culturally responsive teaching and beliefs about cultural diversity, which deserve further investigation.

5.1.3 Color-evasive and multicultural beliefs

In the US context, color-evasion[3] and multiculturalism are among the most studied interethnic ideologies that have different implications for engaging with cultural diversity in educational settings (Plaut, Thomas, Hurd, & Romano, 2018; Rosenthal & Levy, 2010). Similarly, in the German context, these ideologies reflect teachers' beliefs as well as school policies, and classroom practices (Civitillo, et al., 2017; Hachfeld, Hahn, Schroeder, Anders & Kunter, 2015; Schwarzenthal, Schachner, van de Vijver, & Juang, 2018). Teachers may tend to hold beliefs that are in line with one ideology, color-evasive or multicultural, or combine elements of both (Hachfeld et al., 2015). Color-evasive and multicultural beliefs could relate differently to the implementation of CRT. In what follows, we review the color-evasion and multiculturalism literature, highlighting the specific ways they might contribute to understanding the relation between support of CRT and teachers' beliefs about cultural diversity.

Color-evasive beliefs seek to ignore diversity by de-emphasizing cultural differences (Apfelbaum, Norton, & Sommers, 2012). Teachers who tend to hold color-evasive beliefs reject the cultural capital that students bring into the learning environment (Ladson-Billings, 2014). For instance, in a questionnaire-based study with pre-service teachers in Germany, it was found that color-evasive beliefs were negatively related to the willingness of adapting teaching to culturally diverse students (Hachfeld et al., 2015). Color-evasive beliefs may take different forms (Rosenthal & Levy, 2010). Other research from Germany suggests that color-evasive beliefs may be inherent in a broader perspective of equality and inclusion (Author, 2017). The emphasis of equality and inclusion is primarily on promoting equal treatment and contact across groups to undermine stereotyping and prejudice in order to combat racism and discrimination. This also implies emphasizing between-group similarities and downplaying differences (Park & Judd, 2005). While ethnic and cultural differences might be recognized and embraced to some extent, color-silent[4] - another related form of color-evasion - actively uses implicit and explicit approaches to avoid talking about racism (Pollock, 2009; Walton et al., 2014). Castagno (2008) found that educators who held color-silent beliefs limited discussion about race, religion, and ethnicity because they felt uncomfortable and reluctant to deal with these topics in the classroom context.

Multicultural beliefs refer to the recognition of, and support for, culturally diverse

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[3] The original term *colorblindness* is not used in this manuscript to avoid any negative connotation regarding individual differences in visual capabilities.

[4] The original term *color-muteness* is not used in this manuscript to avoid any negative connotation regarding individual differences in auditory capabilities.

groups (van de Vijver, Bruegelmans, & Schalk-Soeker, 2008). In the educational context, multicultural beliefs may go hand in hand with teaching practices that see diversity as a resource and an added value, such as learning about cultural differences or adopting culturally sensitive classroom material (Verkuyten & Thijs, 2013). Van Middelkoop, Ballafkih, and Meerman (2017) reported that teachers who recognized diversity among students (multicultural beliefs) were more willing to use didactic and pedagogical approaches than teachers who firmly stressed the importance of ignoring cultural differences (color-evasive beliefs). Multicultural beliefs can also take different forms. For example, cosmopolitanism often ties cultural differences to mainly European or Western traditions and values (Delanty, 2014). Or, as it has been found in the German educational context, multiculturalism could also be implemented in a superficial manner (Civitillo, et al., 2017; Hüpping & Büker, 2014), with a focus on different food, customs, and traditions. All in all, these results shed light on how different orientations of cultural diversity beliefs may downplay or support culturally responsive teaching. However, these studies contained important limitations, including relying exclusively on self-report measures.

5.1.4 Culturally responsive teachers as reflective practitioner

For teachers, reflection refers both to a meaning-making process and a systematic way of thinking (Davis, 2006). This skill is positively related to the ability to teach students (Kersting, 2008). Teachers who do not engage in self-reflection are less likely to question their practices and change their beliefs about teaching (Sherin, 2003). While often pre-service teachers are offered self-reflection opportunities regarding their teaching behavior during teacher education (Blomberg, Stürmer, & Seidel, 2011; Santagata & Angelici, 2010), practicing teachers are less likely to conduct a critical type of reflection. Beyond time pressure, limited opportunities are offered to practicing teachers because self-reflection in the teaching profession is not generally associated with working but as an academic pursuit (Hatton & Smith, 1995). To this end, the current study explored self-reflection by encouraging practicing teachers' reflection.

Teacher self-reflection is seen as a crucial component for creating culturally relevant teaching practices (Howard, 2003; Ladson-Billings, 2011; Schmeichel, 2012). CRT is based on the premise that teachers should be critical, self-conscious, and analytical of their own beliefs about cultural diversity as well as own teaching behaviors (Gay & Kirkland, 2003). Research on CRT frequently highlights the need for teacher critical reflection of issues such as power, social justice, and white privileges (Acquah & Commins, 2015; Aronson, 2017;

López, 2017). Although this critical reflection of matters pertaining to diversity is of crucial importance, there is still a need to examine how teachers reflect on their own teaching practices.

Writing journals, case scenarios, online discussions, and peer discussions are just a few methods teacher educators and researchers have used to foster teacher self-reflection (Calandra, Gurvitch, & Lund, 2008). A growing number of studies showed that watching videos of real classroom events facilitates teachers' reflection (for a review see Gaudin & Chaliès, 2015). Video-based approaches, in fact, capture the complexity of classroom situations while giving the observer the possibility to step back from the moment and reflect on classroom activities (Sherin, 2003). To offer a more realistic example of a classroom situation, participants of the present study watched short videos of their own teaching. To provide direct data about the self-reflection process, watching videos was combined with a retrospective think aloud procedure (van Someren, Barnard, & Sandberg, 1994). In doing so, this study explored teacher self-reflection, offering the chance to watch videos displaying realistic classroom interactions, looking closely at what everyone does and reflects upon.

5.1.5 The current study

There are some important limitations in the present body of knowledge regarding CRT that the current study aims at reducing. The majority of studies examining CRT, cultural diversity beliefs, and self-reflection focused on pre-service teachers (Acquah & Commins, 2015; Gay, 2015; Siwatu, Chesnut, Alejandro, & Young, 2016). Although unsurprisingly, given that the origin of the field is deeply rooted in the USA, empirical findings draw mostly from White-American teachers and how they engage with African-American, Asian-American, Latino, and Native American students (Byrd, 2016). In this study, we explored CRT, cultural diversity beliefs, and self-reflection patterns of ethnic German teachers with their classrooms of students, including refugees, from different cultural and ethnic backgrounds. Finally, the present study is further distinguished by examining culturally responsive teaching by using a validated classroom observation protocol first and then exploring teachers' beliefs about cultural diversity, with the opportunity for participants to critically reflect on their classroom practices. To sum up, the present study addresses two research questions: (1) How does CRT relate to teachers' beliefs about incorporating cultural diversity content into daily teaching and learning activities? And (2) how does the level of teachers' self-reflection on their own teaching relate to CRT?

5.2 Methods

A case study methodology is particularly suitable for investigating the bidirectional relationship between teaching instructions and teachers' beliefs as they are manifested in the natural environment of the classroom, while accounting for classroom and school characteristics (Olafson, Grandy, & Owens, 2015). The present investigation adopted a multiple case study approach (Yin, 2013) as four teachers who work in the same school were examined and compared. This multiple case study was conducted over a short, intensive period of time, offering an in-depth view of four teachers and their respective classrooms in one high school located in a large urban area in Germany. Ethnographic methods (video-recorded classroom observations and post-observation interviews) were combined, using the potential relevance of both quantitative and qualitative analyses of the data.

Researchers of different gender (two females and two males), immigrant backgrounds (two newly arrived immigrants, one second-generation Moroccan-German, and one ethnic German without immigrant background) and educational experience (one with an educational psychology background, one with a clinical psychology background, and two with developmental and cross-cultural psychology backgrounds) composed the research team. Such diversity in the research team could be seen as enriching the data analysis because it allows for multiple readings of qualitative data (Syed & Nelson, 2015). The first and third authors were responsible for data collection and coding of all research materials. The second and fourth authors acted as external consultants, reviewing the study design and coding decisions.

5.2.1 Participants

The study's sample included four ethnic German teachers, meaning that they themselves and both of their parents were born in Germany. In this manuscript, we will refer to the four teachers as Iris, Boris, Nora, and Laura (pseudonyms). Table 1 shows an overview of participants' demographic and work-related characteristics. The participating teachers were selected because they had varying teaching experience and time spent in the school, they represented both female and male teachers, and taught two curricular subjects (German and Science) in three school grades (seventh, eighth, and ninth). The number of students in each classroom ranged from 24 to 26 (55% female across the four classes). As reported by teachers, on average 85% of the students across all four classes had an immigrant background.

In two of these four classes, there were students with a refugee status (three and one, in Iris's and Nora's classes respectively).

Table 1

Teacher Demographics and Work-Related Characteristics

Teacher Pseudonym	Gender	Age	Years of Teaching Experience	School grade	Subject	Number of Students with an immigrant background
Iris	Female	49	10	7th	German	25 out 26
Boris	Male	56	22	9th	German	20 out 25
Nora	Female	37	10	8th	German	20 out 25
Laura	Female	51	25	7th	Science	21 out 24

Note. Students with an immigrant background operationalized here as born outside of Germany or having at least one parent born outside of Germany.

School setting. Participants worked in a large integrated high school. This school combines different school tracks (academic and vocational) into a comprehensive school type, and offers all school leaving certificates. Located in a large urban area of Germany, this school serves students with diverse cultural and ethnic backgrounds. At the onset of the study, there were approximately 980 students attending the school. The school was chosen using purposeful sampling (Patton, 2002). More specifically, the school showed a strong interest about cultural diversity by participating in a previous larger investigation (Civitillo, Juang, & Schachner, 2018). Furthermore, the large degree of cultural and ethnic diversity of this school suggested it would be a rich information source for the present study.

Procedure

With the principal's support, an information session was held to discuss the study in order to recruit teachers. Teachers were told that their classroom teaching behaviors were being observed for three lesson units of 45 minutes each. No specific instruction was given in terms of a topic to be discussed or dealt with in the lesson units being observed. For each teacher, two members of the research team (the first and third authors) visited the first lesson without a camera to become familiar with the students and the teacher. The second and third lesson units were video observed, placing two cameras, one following the teacher and the second (fixed) observing the whole classroom. The choice of carrying out three observations

for each participant derives from the assumption that CRT could be understood as content-independent (Gay, 2015), and thus, to vary only to a little extent between lesson units of a specific teacher (Praetorius, Pauli, Reusser, Rakoczy, & Klieme, 2014). Furthermore, three observations for each teacher were considered sufficient to ensure credibility of the data (Morrow, 2005).

Approximately one month after the classroom observations, the same members of the research team who conducted the classroom observations met each teacher for individual interviews, assuring full confidentiality. The audio-recorded interviews ranged from 46 to 57 minutes. The four interviews were transcribed and coded using MAXQDA 11 software by both researchers. Information about the study and separate written consent were obtained from teachers and parents of students in the four classrooms. Approval of an institutional review board was also obtained.

5.2.2 Materials

Culturally responsive instruction observation protocol. The CRIOP (Correll, Powell, & Cantrell, 2015) was used to measure teachers' degree of cultural responsiveness. The CRIOP contains six holistic dimensions of culturally responsive teaching rated on a 4-point scale (1 = Not at all, 2 = Occasionally, 3 = Often, 4 = To a great extent): classroom relationships (four items; e.g., 'The teacher creates a learning atmosphere that engenders respect for one another and toward a diverse population.'), assessment practices (three items; e.g., 'Students are able to demonstrate their learning in a variety of ways.'), instructional practices (six items; e.g., 'Instruction is contextualized in students' lives, experiences, and individual abilities'), critical discourse (four items; e.g., 'The teacher promotes active student engagement through discourse practices.'), and socio-political consciousness (three items; e.g., 'The curriculum and planned learning experiences provide opportunities for the inclusion of issues important to classroom, school, and community.'). For each item, the CRIOP contains responsive and non-responsive teaching instructional examples which help to assign ratings. The sixth dimension included in the CRIOP (family collaboration) was not used because it does not measure teacher observed behavior but self-reported practices.

Post-observation interviews. The goal of the post-observation interview was twofold: first, we examined teacher self-reflection, and second, we explored teachers' beliefs toward incorporating cultural diversity content into daily teaching and learning activities. The first part of the interview resembles the video-stimulated interview described by van Tartwijk, den Brok, Veldman, and Wubbels (2009). Accounting for time constraints, teachers watched four

short video clips (2 to 3 minutes) selected from the two video observations (second and third) of their lesson units. A fifth written episode from the first lesson (without camera) was read aloud by the teacher. Both the four video clips and the written episodes were mainly selected because they tapped into the five dimensions of the CRIOP, and additionally because they presented important moments in class and therefore provided rich teaching and learning opportunities for the teachers and interesting prompts for analysis. These videos and the written episode depicted either teacher helping behavior and interaction with a single student or with a whole classroom. To investigate teacher self-reflection we used mixed instructions. After watching each video and the written episode, teachers were asked an open-ended question: 'How did you experience this scene?' Next, participants were asked to rate themselves for each clip on a four-point Likert scale by using two selected items of the respective CRIOP dimension. While teachers reasoned about their ratings, they were asked to think aloud during the process to illustrate how they came to their conclusion.

The second part of the interview was semi-structured (Cohen & Crabtree, 2006) and explored teachers' beliefs about culturally responsive practices. Semi-structured interviews were chosen as they allow flexibility to the interview process and further exploration of classroom events previously observed. Three open-ended questions were asked: 'How do you see cultural diversity in classroom?', 'How can you incorporate cultural diversity in your teaching and learning activities?', 'Could you provide some examples of teaching methods you have used in the past or currently use to incorporate cultural diversity into your teaching?'.

5.2.3 Data analytic strategies

A four-step data analysis procedure was followed. First, classroom observations were analyzed by rating each dimension of the CRIOP. Two raters (first and third authors) coded all video materials independently. Two-way random intraclass correlation coefficients (ICC) were calculated to establish interrater agreement for classroom observations. ICC values ranged from 0.70 to 0.95, supporting high intercoder reliability (Fleiss, 1981).

Second, for assessing teachers' self-reflection on their own behaviors, we analyzed verbalized responses to video prompts watched and written episodes read aloud during the post-observation interview. Building off previous empirical findings (e.g., Blomberg et al., 2014; Blomberg, Stürmer, & Seidel, 2011), researchers conceptualize teacher self-reflection by distinguishing three different levels of analysis of self-reflection: description, evaluation,

and integration. In the least elaborated category (description) the teacher describes the scene observed without making any further judgments. At the evaluation level, the teacher infers the consequences of an observed event for students' learning, including evaluations of content observed. In the third and most elaborated level of reflection (integration), the teacher is able to connect an observed event to professional knowledge, making inferences about their own teaching experiences and develop further questions and hypotheses. After the first and third authors had coded the self-reflection responses according to their level of elaboration, disagreements were resolved via consensus. We calculated the relative frequency of each dimension of self-reflection by dividing them by the total number of phrases of each teacher.

Third, to analyze open-ended questions related to teachers' beliefs about cultural diversity, we used a thematic analysis with a theoretical top-down approach (Braun & Clarke, 2006). After pulling all responses to the three questions, we categorized specific phrases representing two different orientations of cultural diversity beliefs, namely color-evasion and multiculturalism. However, given the different forms both beliefs can take (Rosenthal & Levy, 2010), we also considered if the data provided sufficient indications of subthemes. After finishing the coding individually, results were compared, discussing discrepancies and, if needed, each segment of analysis was renamed or recoded.

Fourth, we combined the data from different sources to create case profiles. We then conducted a cross analysis to explore similarities and differences across the four teachers. The four cases are presented in the sections that follow, along with the cross case analysis.

5.3 Findings

5.3.1 Case 1 - Iris

Culturally responsive teaching practices. As Table 2 indicates, across the three lesson units Iris was rated low in four of the five dimensions of the CRIOP, showing that the different multidimensional elements of culturally responsive teaching were rarely seen in Iris's class. Particularly in the socio-political consciousness dimension Iris received a score close to one, suggesting that she provided few curriculum learning experiences related to real-world issues or did not encourage critical thoughts or questioning. During the first observation, for example, a small group of students gave a presentation of the US education system. The discussion and questions by Iris following this presentation were exclusively focused on relatively marginal aspects of the presentation such as the slides' readability. Comparing different school systems (in Germany and in the USA) could have helped students to think about and discuss differences and similarities between the two countries. Classroom

relationship was the only dimension in which Iris was rated just above two. This dimension, however, remained controversial. For example, across the three lesson units, Iris assigned an individual task to her students and asked to compare answers afterward. On the one hand, Iris walked around and checked if students had questions or needed clarification while working on the task. On the other hand, with some students, she often made negative comments or used management techniques that did not work for some students. In the third observation, Iris told a student to move to a different table to sit alone. Iris's class also included three refugee students. These students were isolated in the class, for example they sat in one corner of the room. In addition, in the first and second observations, while they talked to each other, Iris reminded them to talk only German. At the moment of the observation, no additional materials (e.g., a dictionary) or translated instructions were offered to these students.

Table 2

Descriptive statistics for the CRIOP dimensions aggregated over lesson units as well as separately for each lesson unit

	Iris		Boris		Nora		Laura	
Dimensions of CRIOP	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Classroom Relationship	**2.25**	**0.53**	**3.04**	**0.19**	**2.58**	**0.98**	**2.38**	**0.34**
First lesson unit	1.75	0.46	3.00	0.76	3.50	0.53	2.13	0.35
Second lesson unit	2.75	0.71	3.13	0.64	1.38	0.52	2.63	0.52
Third lesson unit	2.25	0.46	3.00	0.76	2.88	0.64	2.38	0.52
Assessment Practices	**1.77**	**0.45**	**2.89**	**0.27**	**2.59**	**0.76**	**2.28**	**0.25**
First lesson unit	1.50	0.55	3.00	0.63	2.83	0.75	2.40	0.55
Second lesson unit	2.00	0.63	3.00	0.00	1.66	0.52	2.33	0.52
Third lesson unit	1.83	0.75	2.67	0.52	2.83	0.41	2.17	0.41
Instructional Practices	**1.86**	**0.25**	**2.86**	**0.80**	**2.81**	**0.74**	**2.05**	**0.41**
First lesson unit	1.67	0.49	2.08	1.00	2.75	0.62	2.00	0.45
Second lesson unit	2.08	0.79	3.42	0.67	2.08	0.67	1.83	0.89
Third lesson unit	1.83	0.84	3.08	0.67	3.58	0.67	2.33	0.78
Critical Discourse	**1.92**	**0.54**	**2.71**	**0.33**	**2.71**	**1.01**	**1.79**	**0.37**
First lesson unit	1.50	0.53	2.38	0.74	3.12	0.64	1.63	0.52
Second lesson unit	2.50	1.07	3.00	0.53	1.50	0.76	2.12	0.64
Third lesson unit	1.75	0.89	2.75	0.46	3.50	0.53	1.63	0.52
Socio-political Consciousness	**1.05**	**0.12**	**2.61**	**0.85**	**2.50**	**1.22**	**1.17**	**0.28**
First lesson unit	1.16	0.41	1.67	0.82	2.80	0.45	1.33	0.52
Second lesson unit	1.00	0.00	3.33	1.03	1.00	0.00	1.00	0.00
Third lesson unit	1.00	0.00	2.83	0.75	3.67	0.52	1.16	0.41

Note. The five dimensions of the culturally responsive instruction observation protocol (CRIOP) were rated on a 4-point scale (1 = *Not at all*, 2 = *Occasionally*, 3 = *Often*, 4 = *To a great extent*). The length of each lesson unit was 45 minutes. *M* = Mean (two independent raters), *SD* = Standard deviation (two independent raters).

Teacher beliefs toward incorporating cultural diversity content. Iris's beliefs about cultural diversity were organized into four subthemes, two of them reflecting multicultural beliefs (acknowledging diversity and promoting different perspectives and practices), and two subthemes closely linked to color-evasive ideology (color-silent and limited influence of cultural diversity). In response to the first question, Iris noted: 'In our classroom, we have different cultures, nationalities as well as different socioeconomic statuses' (acknowledging diversity). However, Iris repeatedly stated that such diversity has a limited influence on her teaching: 'It does not play a role, whether your parents cannot talk German' or 'You cannot

always say to yourself: "I have to think about diversity"'. A different, albeit related subtheme of color-evasion that emerged from coding Iris's reported beliefs was color-silent. For instance, Iris described an episode of a discussion she had had with her students in which she had limited the discussion of a controversial cultural-related issue. Iris noted:

> There are some situations that are at the edge. For example, two months ago, a girl came into the classroom and suddenly had a headscarf on. How to react on that? These are moments in which you either talk about that or you say: 'Students, it's her choice. She made this decision with herself and her family. We do not discuss this here.' And I have stopped the discussion around this issue.

When Iris was asked explicitly about practices that included cultural diversity, she provided examples of (school) practices that endorsed cultural diversity only marginally such as multicultural breakfasts and celebrations of religious events. At the same time, she made other examples of classroom practices during her German lessons that encouraged a deeper level of understanding of diversity, such as examining poems written by Turkish authors.

Teacher self-reflection. Table 3 shows that Iris engaged in relatively more evaluation self-reflection than description. At the same time, Iris only showed integration to a small extent. Our findings indicate that in terms of the depth of self-reflection, Iris reported some difficulties in reflecting deeply on her own teaching behavior. For the first open question (i.e., how did you experience this scene?), Iris mainly described what was reproduced in the scene without further critical elaboration. She also had some difficulties specifically in reflecting on the items of the CRIOP used as further prompts. Iris remained on a more superficial level of description and evaluation, linked to how the students behaved in the scenes. In other words, Iris mainly reflected on students' behavior and only to a small extent critically reflected on her response. For instance, when she watched the video clip of a conflicting interaction with students (i.e., a male student with immigrant background was asked to move to a different table due to his behavior), she stressed how important it was for her in that scene to primarily convey the content of the lesson.

Table 3

Descriptive statistics (in percentage) of the three reflection categories coded in the post-observation interviews

	Description	Evaluation	Integration
Iris	32.1	50.6	17.2
Boris	10.3	51.7	38.0
Nora	16.4	55.1	28.6
Laura	29.5	45.5	25.0

Note. Relative frequencies were calculated dividing the total number of segments by the relative numbers of each category. The total number of segments was first extracted and then coded during the self-reflection process of the five selected episodes for each teacher.

5.3.2 Case 2 - Boris

Culturally responsive teaching practices. Across the three lesson units, Boris was consistently rated above two point five for the five dimensions of the CRIOP (see Table 2), suggesting a strong support of culturally responsive teaching. He showed empathy and understanding, with a continuous dedication to embrace diversity and maintain high expectations (classroom relationships). For example, during the first lesson observed, Boris spent time discussing how to deal with the fear and anxiety related to preparation of an important exam. In the second observation, when students performed a simulation of a part of this exam, Boris's behavior aligned with culturally responsive instructions (assessment practices), providing opportunities for student self-assessment. Topics offered by Boris during German lessons touched on important issues related to discrimination, and racism, inviting his students to repeatedly engage in perspective taking. Particularly when it comes to critical discourse and socio-political consciousness, in all the three lesson units, Boris offered links to other cultures (reading about experiences of the first wave immigrants in the city where the school is located), real-life examples related to the community in which the school is located (first and second observations), and critical perspective taking (reading some parts of The Diary of Anne Frank, third observation). Some students in Boris's class, though, were less involved and less called on compared to others. This seemed to lead some students to be less engaged in the class, and when being called on, Boris did not consistently listen or follow up.

Teacher beliefs toward incorporating cultural diversity content. Regarding Boris's beliefs three subthemes were identified: acknowledging diversity, promoting different perspectives and practices, and accepting the challenge of diversity, all identified as part of a

multicultural ideology. Boris acknowledged diversity in all its forms: 'My students do not only differ in terms of cultural background, but also nationalities, religious beliefs, and socioeconomic status.' Boris not only acknowledged diversity, but also endorsed beliefs that showed a willingness to explore different cultures and perspectives, recognizing, at the same time, his own limited knowledge. For example, Boris also acknowledged that he grew up in a place that was not as culturally and ethnically diverse as the city and school where he lives and works today. He described the struggle of getting to know this reality. Boris noted: 'For example, although I work with many students that are Muslims, I know very little about them.' When asked to report classroom strategies that endorsed cultural diversity, Boris pointed at strategies that create connections with different cultures present in the classroom. Boris stated:

> I ask my students, because I am interested: 'How do you see that?' And often
> I am very surprised what their answers are. I never thought that in doing so I
> could gather so many new ideas and knowledge. That is why I'm very curious
> and just ask the students.

This showed a motivation to get to know his students better (e.g., experience, religious beliefs) and to not only limit the discussions of diversity to isolated school and classroom occasions such as a multicultural breakfast (promoting different perspectives and practices).

Teacher self-reflection. When self-reflecting on his own teaching, Boris extensively engaged in evaluation and integration, and only to a small extent in description. Specifically, Boris's responses were coded for description the lowest and for integration the highest among the four teachers (Table 3). During the self-reflection phase, Boris's thoughts were often very critical regarding his teaching behavior. Boris expressed the wish to improve, anticipating that students could have benefitted to a greater extent if a strategy, activity, or clarification would have been done differently. Accordingly, Boris rated himself consistently low across the CRIOP items presented as further prompt during the post-observation interview. That this critical self-reflection was oriented especially toward his own behavior and not to students' reaction is indeed linked with the third and deepest level of self-reflection, namely integration.

5.3.3 Case 3 - Nora

Culturally responsive teaching practices. On average, Nora's observed scores were above two point five in the first and third lesson units, while in the second observation, she

was rated below two in all five dimensions of the CRIOP (Table 2). This highlighted some inconsistency of her culturally responsive teaching behavior across the three observed lesson units. During the second observation in which she was rated rather low, the lesson plan was different from the first and third units. Students had to work on a task individually and then checked their responses with Nora. During the post-observation interview after watching a selected video clip of the second lesson, Nora (without a direct question) explained that this lesson was atypical from her style of teaching. In the first and third unit lessons, Nora was observed providing multiple opportunities for students' critical argumentations and perspective taking, in line with the dimensions of critical discourse and socio-political consciousness. For example, the third lesson was mainly focused on learning how to build an argument. Nora found some topics close to students' experience that were used to learn how to build an argument (i.e., pros and cons of wearing a school uniform, pros and cons of having mixed gender lessons). Finally, during the first lesson in which two members of the research team were in the class without a camera, Nora was the only teacher among the participants who explicitly asked the whole classroom about the meaning of cultural diversity. This offered her students an opportunity to debate about different elements of a culture (e.g., heritage, language, religion).

Teacher beliefs toward incorporating cultural diversity content. With regard to Nora's beliefs about CRT, three subthemes were identified: acknowledging diversity, promoting different perspectives and practices, and accepting the challenge of diversity. Particularly, the latter subtheme (accepting the challenge of diversity) was very predominant in her discourse around diversity. She stressed her personal experience of migration, moving from the south to the north of Germany, and openly recognizing the process of acculturation she went through in this part of the country and in the school where she currently works. Nora noted:

> It was very difficult for me in the first and second year of teaching at this
> school. It was hard to understand my students and this has to do mainly with
> their different cultural backgrounds.

This finding highlights how Nora's positioning was open to discover diversity, as she did in the past, she felt she had to do it today with her students. Furthermore, Nora pointed out that this diversity of cultural backgrounds and experiences were also sometimes a reason for conflicts in the school. For instance, she reported how at her school often families with Serbian and Croatian heritages are in conflict and will not talk to each other. Nora found it difficult to understand how this could happen two decades after the wars in the Former Yugoslavia. Nevertheless, she underlined how a teacher should be aware of this issue in this

school (acknowledging diversity and accepting the challenge of diversity) through getting to know students and their families. Finally, when asked about teaching practices that accounted for cultural diversity in the classroom, Nora reported a range of practices from valuing the native language to being aware of families' situations. For example, Nora stated:

> We have a student whose parents are often going back to their country
> of origin. Then the student has to take care of her younger siblings and duties
> at home. Having that in mind, I prefer not to give the student homework, but
> keep her in school during an extra hour, to offer her a quiet workspace, more
> time and the opportunity to ask questions to me.

Teacher self-reflection. In the post-observation interview, Nora's main reflection pattern was evaluation (Table 3), followed by integration. Similar to Boris, Nora was often critical in seeing herself in the video. At the same time, she also pointed out aspects of her teaching captured in the video clips that she considered positive. This pattern of reflection, highlighting what according to her were both negative and positive aspects of her teaching behavior, was somewhat unique compared to the other three teachers.

5.3.4 Case 4 - Laura

Culturally responsive teaching practices. The subject taught by Laura was science, and thus different from the other three teachers that all taught German. Across the three lesson units, Laura's observed teaching behavior was rated below two in two dimensions of the CRIOP, critical discourse and socio-political consciousness, and slightly above two for the three remaining dimensions. This results showed that some dimensions of the CRIOP (i.e., assessment practices, and instructional practices) were easier to be observed than others in her class. In all the three lesson units, Laura focused on promoting independent work, scaffolding students' learning by walking and checking whether students needed help or support. Laura showed also some tense relationships with some students. These tensions resulted in a conflict with one student in particular (second and third lessons). This student (male, with immigrant background) did not complete the task assigned, and at the end of the lesson when he asked for clarification, Laura firmly refused to provide any help at that point.

Teacher beliefs toward incorporating cultural diversity content. Laura's beliefs about CRT converged in four subthemes, two related to multiculturalism, namely acknowledging diversity and promoting different perspectives and practices, and two related to color-evasion, color-silent and limited influence of cultural diversity. Laura acknowledged that her students

come from different cultural and ethnic backgrounds. However, she made a clear distinction between lesson time and breaks. For example, Laura affirmed: 'During breaks, we do talk about diversity', later saying, 'I am not sure, if school is the right place to embrace diversity.' Similarly, Laura acknowledged and shared this conscious decision of embracing cultural diversity in certain moments only (color-silent):

> There are certain moments in which we deal with cultural diversity in school. But often it is not the case and I consider my students to be all equal – which is not necessarily true.

> When she was asked about classroom strategies to address diversity in class, Laura could not think about any classroom practices, but mentioned practices such as multicultural breakfast and religious events that took place in the school. She emphasized that she could not think about teaching practices that embrace students' differences in her subject (science), highlighting a sort of hierarchy of school subjects. Laura noted:

> During German lessons it is easier to incorporate cultural diversity than in history lesson, because history is so far away from students' everyday life. In German lessons, when you talk about literature, you are more likely to talk about cultural diversity and have the students telling something from their own personal life. On the other hand, in science lessons, it is hard to incorporate cultural diversity.

Thus, on the one hand, Laura lacked explicit knowledge of culturally responsive practices for her subject, and on the other hand, she also considered cultural diversity not crucial in science (limited influence of cultural diversity).

Teacher self-reflection. Table 3 depicts Laura patterns of self-reflection. Her responses were coded mainly as evaluation, followed by integration and description. Laura's self-rating was rather mixed, indicating that for the scene related to critical discourse, her rating was low, but for other dimensions of the CRIOP (e.g., instructional practices) her rating was high. These ratings were in line with the overall evaluation scored by the two raters.

5.3.5 Cross-case synthesis

Although we acknowledge the variation between the four teachers, we rated Iris and Laura lower in the CRIOP compared to Boris and Nora, especially in two dimensions of the CRIOP, namely critical discourse and socio-political consciousness. There were also important differences between Iris and Laura, and between Boris and Nora. Laura incorporated culturally responsive teaching more than Iris in assessment and instructional

practices. For example, Laura was observed encouraging students conversations with their peers and offerring various learning activities. Nora reported high scores in the first and third lesson units but not in the second one that had a different format (only individual work with minimum teacher support). Boris culturally responsive teaching behavior was assessed relatively high across the all three observation.

Iris and Laura endorsed beliefs that were in line with color-evasive ideology. Although they recognized cultural diversity, Iris and Laura stressed how students' backgrounds have a limited influence on their teaching, and mentioned only occasions (school practices) that highlight more superficial aspects of being culturally diverse. Conversely, Boris and Nora, beyond recognizing diversity, reported that cultural diversity was embraced on a daily basis and adopted teaching practices that endorsed cultural diversity at a deeper level. In addition, Boris and Nora acknowledged some crucial challenges of cultural diversity. This became apparent when admitting their insufficient knowledge about some other groups or reporting their experience of internal migration, which made them feel they were different from the cultural majority in this part of Germany. The beliefs they shared were in line with multicultural ideology, and their practices as captured by the CRIOP were in line with culturally responsive teaching.

A comparative analysis of teachers self-reflection on own teaching showed that overall evaluation was the category most coded among the four teachers' responses to open questions and self-reflection prompts. Unlike Iris and Laura, Boris and Nora showed also a deep level of self-reflection, with a higher frequency of integration than for description. An additional difference noted in Boris's and Nora's reflection patterns was a strong focus on the links between their teaching and students' responses as captured in the videos and written episodes. Iris and Laura questioned mainly students' responses and experienced some difficulties exploring their own practices.

5.4 Discussion

The current investigation provides insights into the relation between culturally responsive teaching, beliefs about incorporating cultural diversity content, and level of self-reflection on participants' own teaching. We implemented a multiple case study approach, gathering data through classroom observations and post-observation interviews, with four ethnic German teachers who worked in the same highly diverse high school in Germany.

5.4.1 Research question 1: How does CRT relate to teachers' beliefs about incorporating cultural diversity content into daily teaching and learning activities?

The results of this study indicate a high degree of congruence between CRT and teachers' beliefs. These patterns were consistent across the four teachers, but varied regarding the direction. As the observed practices indicated, Boris and Nora were observed using culturally responsive teaching, while reporting beliefs that were multicultural oriented. Iris and Laura were rated low, especially in two dimensions of the CRIOP (i.e., critical discourse and socio-political consciousness) and expressed beliefs in line with a color-evasive ideology. Thus although no previous study of which we are aware has examined the association between culturally responsive teaching and teachers' beliefs using the CRIOP, our results are quite consistent with theoretical propositions and previous empirical findings stressing how CRT relates differently with color-evasive and multicultural beliefs (Gay, 2010b; Hachfeld et al., 2015; Ladson-Billings, 2014; van Middelkoop, Ballafkih, & Meerman, 2017).

The congruence between culturally responsive teaching and teachers' beliefs about cultural diversity partially contrasts with the findings of studies that combined self-report measurements and classroom observation protocols (Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015; Guerra & Wubbena, 2017). One reason for this mismatch could be related to the different study design and measures used to assess culturally responsive teaching and teachers' beliefs. Self-report questionnaires and interviews both offer an understanding of teachers' beliefs. However, a case study allows a closer and in-depth examination of the relation between practices and enacted beliefs (Olafson, Grandy, & Owens, 2015). Additionally, we investigated first teaching behavior and then teachers' beliefs, limiting the influence for participants to act favorably (i.e., in line with socially desirable beliefs) during the lesson units observed. More research is however needed to support our findings. We suggest that the observation protocol adopted in this case study (CRIOP; Correll, Powell & Cantrell, 2015) represents a valuable instrument for measuring culturally responsive teaching.

When investigating teachers' beliefs about cultural diversity and, more in detail, culturally responsive practices, it is important to consider that the effects of the two forms of ideologies toward cultural diversity (color-evasion and multiculturalism) are best understood when considering closely related forms of them (Rosenthal & Levy, 2010). Indeed, Iris and Laura did not ignore cultural diversity completely, but thought cultural diversity has a limited influence on teaching and learning and thus opted for including it to a smaller extent than

Boris and Nora. In other words, the little use of culturally responsive teaching in the lesson units observed could be not only due to negative beliefs about cultural diversity (Guerra & Wubbena, 2017), nor to a strong color-evasive beliefs (van Middelkoop, Ballafkih, & Meerman 2017; van Tartwijk et al., 2009), but to other related forms such as color-silent (Pollock, 2009). Color-silent beliefs can also in part explain Iris's and Laura's challenges related to implement two dimensions of the CRIOP in particular (i.e., critical discourse and socio-political consciousness). Use of students' own native language, confronting stereotypes, and dealing with sensitive issues in the classroom are central in CRT and indeed included as two dimensions of the CRIOP. Similar challenges for implementing these two dimensions of the CRIOP were identified in previous studies as well (Powell et al., 2016). Future investigations should further explore how beliefs about cultural diversity may support all different, albeit related, dimensions of CRT.

Although the four teachers worked in the same school and thus shared some important work-related characteristics (i.e., school and classroom ethnic composition, school size, school principal, colleagues, broader school community), their degrees of culturally responsiveness and their beliefs differed from one another. This finding illustrates that although teachers within the same school may tend to hold shared beliefs (Castagno, 2008; Walton et al., 2014), close examination of personal beliefs and classroom practices reveal different patterns. Indeed, in our study, when dealing with issues perceived uncomfortable within schools, Iris and Laura reported very different ways to respond compared to Boris and Nora. This is an important finding that has implications for how research is conducted with practicing teachers from culturally and ethnically diverse schools. While there may be a collegial emphasis (or ignorance) of cultural diversity to a certain extent within the same school, studying the interplay between practices and personal beliefs is crucial to understand how cultural diversity is supported in the classroom. Thus, further investigations should account for both individual and school levels, for example, by disentangling the additional influence of shared school characteristics (e.g., school principal support for multiculturalism) and individual characteristics (e.g., culturally responsive teaching self-efficacy) on teacher cultural responsiveness.

Our findings also showed that one of the teachers (Laura) who was rated low in CRT taught science. Laura reported having difficulties to think about teaching strategies that were relevant to students' cultural background, making some comparisons with other school subjects like German and history. This difficulty to implement culturally responsive teaching

in subjects like science and math has been highlighted in previous studies as well (Bonner & Adams, 2012; Debnam et al., 2015; Shumate, Campbell-Whatley, & Lo, 2012). However, a recent review of the literature suggested that also in science and math, culturally responsive teaching could be implemented (Aronson & Laughter, 2016). Thirteen studies contained in this review (i.e., five for science, and eight for math) provided some indications regarding classroom instructions raising critical analysis and socio-political consciousness, and how these approaches positively helped students' achievement. Additional research is however needed to assess how culturally responsive teaching could be implemented in school subjects, like math and science, often considered culture-free and objective by nature (Matthews & López, 2018).

Finally, while three teachers received consistent ratings across the three lesson units, one teacher (Nora) reported similarly high scores in the first and third lesson units but not in the second one. As this lesson unit was observed having a different format (only individual work) from the other two units observed, this could indicate that CRT is content-independent (Gay, 2015). Nevertheless, even for teachers who endorsed multicultural beliefs implementing CRT on a daily basis presents some challenges. That being said, more exploration of the consistency of CRT and its dimensions as captured by the CRIOP is warranted.

5.4.2 Research question 2: How does the level of teachers' self-reflection on their own teaching relate to CRT?

All four teachers showed experienced patterns of self-reflection, notably the most frequent category coded across participants' responses was evaluation. The four practicing teachers included in this investigation are indeed all experienced teachers, with teaching experience ranging from ten to twenty-five years. A recent study showed that experienced teachers possess advanced processing capacity when dealing with challenging school-based scenarios (Kim & Klassen, 2018). In addition, it could be plausible to assume that the methodology used to foster self-reflection in the present case study (video-based approach in combination with a think-aloud procedure) was helpful to help participants to reflect on their own teaching. This speaks in favor of using video-based approaches for teacher professional development (Gaudin & Chaliès, 2015; Sherin, 2003).

Although evaluation was predominant across the four teachers, our findings also showed important differences among participants. Teachers with high scores in the CRIOP dimensions (Boris and Nora) reported higher self-reflection (low in description, high in

integration), whereas teachers with low scores in the CRIOP (Iris and Laura) reflected less critically about their own strategies (high in description, low in integration). This finding shows Boris' and Nora's deep level of self-reflection, an indispensable ingredient of culturally responsive teaching (Gay & Kirkland, 2003; Howard, 2003; Siwatu et al., 2016). The importance of understanding the relation between self-reflection and CRT is not limited to pre-service teachers, and it needs to widen the assessment of critical self-reflection to teaching behavior and classroom practices.

5.5 Limitations

This study contains some limitations that must be noted. Although a multiple case study is a time intensive methodology and provides a rich description of the phenomena under investigation, this study examined four teachers working in one school, limiting the transferability of the results to theoretical propositions and other teacher populations. A second limitation concerns the fact that the data do not investigate the relation between different implementations of culturally responsive teaching, beliefs, self-reflection and student achievement. Adding the latter variable could have provided valuable insights regarding the students' perceptions of what teacher behaviors are beneficial for their learning, personal cultural enrichment, and positive cultural identity development. An additional limitation could be ascribed to the post-observation interviews technique (think aloud procedure) which for the self-reflection part, might have elicited some self-defensive mechanisms, since participants could have felt that their teaching behavior was closely examined. It is worth to report though that all four participants expressed gratitude for giving them the opportunity to reflect on their teaching.

5.6 Implications and conclusion

Although this study provides a detailed description of four individual cases, the empirical findings suggest that teachers need to reflect on the relation between classroom practices and personal beliefs because of their reciprocal and bidirectional effects. When integrated with past studies of practices and beliefs, the present findings support the assumption that CRT requires teachers holding beliefs that consider cultural diversity as a valuable resource in teaching and learning. Hence, teachers at an early stage, namely during

teaching preparation programs, should be confronted with beliefs that reject students' cultural capital (Civitillo, Juang, & Schachner, 2018). Next, teacher educators should encourage the inclusion of culturally responsive practices in the teaching curriculum, so that teachers become more aware of what constitutes CRT. Indeed, teachers may change their beliefs but not adjust their practices if they lack knowledge of CRT. Continuous efforts should be directed to offer practicing teachers more possibilities to critically reflect on own teaching behaviors. These efforts should be cultivated throughout the whole teacher career and not limited to initial teacher preparation. Video observations with a think-aloud procedure could be used to facilitate self-reflection with practicing teachers and could be adopted as a resource for teaching about CRT in teaching preparation programs. All in all, it is the interplay between culturally responsive teaching, cultural diversity beliefs, and self-reflection that constitutes teacher cultural responsiveness.

- Chapter 6 -

General discussion and conclusions

Chapter 6

General Discussion and Conclusions

6.1 Review of the research questions

The cultural and ethnic profile of student populations is rapidly changing in many parts of the world, including Germany. This has occurred in response to unprecedented levels of forced and voluntary migration (UNHCR, 2018). Although the increasing cultural diversity in society and education requires the involvement of multiple stakeholders (Severiens, Wolff, & van Herpen, 2014), teachers' responsibility to prepare all students adequately is greater than ever. According to Gay (2010), teaching diverse students starts from embracing beliefs that recognise the strength of cultural diversity. Yet, teachers need to translate those positive beliefs about cultural diversity into culturally responsive practices in their daily teaching. Therefore, cultural diversity beliefs and culturally responsive practices became the focus of this dissertation.

I addressed teachers' cultural diversity beliefs and culturally responsive practices by looking at the role of initial teaching preparation (Chapter 2), their motivation to implement culturally responsive practices (Chapter 3), the actual practices teachers adopt in schools and classrooms (Chapter 4), and at the complex relation between them (Chapter 5). I developed four studies with narrow research questions. Each of those studies contributes to understanding some crucial, yet little investigated aspects of the complex relation between beliefs and practices in teaching highly diverse student populations. More specifically, the four research questions and related sub-questions that I attempted to answer in the individual chapters of this thesis are:

1. *What are the most promising components in teacher trainings for examining and challenging pre-service teachers' cultural diversity beliefs, the effects of these trainings, and the methodological strengths and weaknesses of the evidence presented?* (Chapter 2)

2. *How do psychometric properties of a validated scale measuring culturally responsive teaching self-efficacy beliefs hold in the German context?* (Chapter 3)

3. What types of school approaches related to practices and artefacts in the physical and virtual school environment regarding cultural diversity are implemented in German schools? How are these school approaches are perceived by teachers and students with and without an immigrant background and what is their degree of congruence? (Chapter 4)

4. How does culturally responsive teaching relate to teachers' beliefs about incorporating cultural diversity content into daily teaching and learning activities, and to teachers' self-reflection on their own teaching? (Chapter 5)

To answer these research questions, I gained insights from international research evidence (Chapter 2), and examined two culturally and ethnically diverse regions in Germany (Chapters 3, 4, and 5). I conducted two studies with pre-service teachers who still receive training and two studies with in-service teachers who have already developed their individual teaching routines. In the following sections, I summarise the main findings of the systematic literature review and of the three empirical studies included in this thesis. Doing so, I describe how these contributions answer the multiple research questions addressed and how they contribute to the overall framework of this dissertation. In the second part of this chapter, I highlight the main theoretical implications for the field of research on the relation between teachers' beliefs about cultural diversity and culturally responsive practices, offering some links to the German context. I then conclude with practical recommendations for future studies, and implications for educational policymakers, teacher educators, and practitioners.

6.2 Main findings

In Chapter 2, I reviewed a total of 36 studies reporting trainings effects targeting cultural diversity beliefs with pre-service teachers. All 36 studies were published in international peer-reviewed journals between 2005 and 2015. In contrast to previous literature reviews on this topic (e.g., Castro, 2010; Trent et al., 2008), I aimed to include studies published in English in any geographical area. However, most of these empirical investigations were conducted in the USA ($n = 33$), two in Finland, and one in the United

Kingdom. Notably, none of these studies included in the final pool of studies reviewed was published in Germany.

The most frequently used theoretical frameworks in these trainings included theories on teaching and learning, such as culturally responsive teaching (Gay, 2010). These trainings differ considerably on the way cultural diversity beliefs were operationalised. Studies targeted mostly teachers' beliefs about culturally diverse students and their families, and less frequently addressed beliefs towards cultural content or knowledge (e.g., history or science). Across the reviewed studies, the approach of the training was mainly a standalone unit, either a course or a field experience, or a combination of both, as a part of an initial teaching preparation (ITP) curriculum. Relatedly, almost one-fourth ($n = 8$) of these trainings were elective and thus not compulsory for all pre-service teachers. The length of the reviewed trainings was in many cases a semester-long ($n = 28$).

Two training components seemed particularly promising for developing openness and receptivity for cultural diversity: an experiential component, and the opportunity for self-reflection and critical discussion about cultural diversity. More specifically, field experience and service-learning community experience were reported nearly always as effective in targeting beliefs about cultural diversity. In addition, critical discussion and self-reflection were elements that seemed to be particularly helpful for participants as a meaningful method to critically review their own beliefs about cultural diversity.

With regard to the methodological strengths and weaknesses of these studies, I found some critical aspects that partially hinder the external and internal validity of their conclusions. Only a few studies ($n = 5$) had a control or comparison group. Moreover, few quantitative and mixed-methods studies reported additional statistical indices independent of sample sizes such as effect size and power, leading to an unclear magnitude of the effect of a training on beliefs. Similarly, some qualitative and mixed-methods studies did not report how data were triangulated or did not provide any inter-rater reliability indications. In all studies reviewed, training effects were measured on two measurement points, with the effects assessed in the last meeting or immediately after the end of the intervention. Most importantly, only a few studies reviewed attempted to explore the effects of training on cultural diversity beliefs by also measuring changes in the actual teaching behaviour. In the context of the overall framework of the thesis, the systematic literature review (Chapter 2) highlights the relevance of initial teaching preparation in targeting and shifting cultural diversity beliefs, but also the need for more rigorous ITP interventions with pre-service teachers.

In Chapter 3, I adapted and validated a German version of a scale measuring culturally responsive classroom management self-efficacy beliefs (CRCMSES; Siwatu, et al., 2015). The German version of the CRCMSES showed good psychometric properties, with an overall two-factor structure, presenting a better fit compared to a one-factor solution of the original scale. The German version of the CRCMSES includes the following self-efficacy facets: Factor 1 consisted of eight items and was named *instructional and relational adaptations* because each item focused on strategies aiming at recognizing the importance of cultural diversity in teaching and learning (e.g., 'Develop an effective classroom management plan based on my understanding of students' family background.'). Factor 2 consisted of seven items. I named this factor *cooperative learning activities* because the items of this subscale reflected tasks that foster cooperation amongst students (e.g., 'Design activities that require students to work together toward a common academic goal.').

To assess the construct validity of the two subscales included in the CRCMSES, I ran additional analyses, calculating bivariate correlations between the two subscales and the Cultural Diversity-Related Stress Scale (Tatar & Horenczyk, 2003). The direction and size of the correlations were similar, with both, although small, negative correlations. In the first empirical study of this dissertation (Chapter 3), I thus made available a validated instrument to measure culturally responsive teaching self-efficacy beliefs in the German context.

In Chapter 4, I investigated types of school approaches related to practices and artefacts in the physical and virtual school environment regarding cultural diversity and (congruence of) perceptions of those approaches by teachers and students with diverse cultural backgrounds. I found that in all schools under investigation teachers and students perceived descriptive norms fostering mostly *equality*. Only in a small number of schools, teachers and students perceived school approaches resembling *cultural pluralism* to a similar extent of *equality*. There were also many school practices and artefacts found in the 22 schools under investigation that appeared to be different from the present study's conceptualization of *equality* and *cultural pluralism*. These practices and artefacts were clustered as representing an additional, distinct approach to cultural diversity, namely: *endorsing the majority culture*. These practices and artefacts coded as *endorsing the majority culture* mainly referred to one aspect (religion) of the cultural majority group. Taken together, the results of this study (Chapter 4) contribute to a better understanding the actual school approaches and school environment and how they are reflected in teachers' and students' perceptions, as well as in teaching practices of in-service teachers.

In Chapter 5, I conducted a multiple case study to investigate the relation between culturally responsive teaching and beliefs about incorporating cultural diversity content into daily teaching and learning activities. In post-observation interviews, I also examined the relation between culturally responsive teaching and teachers' self-reflection on their own teaching. I found a high degree of congruence between CRT and teachers' beliefs. These patterns were consistent across the four teachers, but varied regarding the direction. As the observed practices indicated, two teachers were observed using culturally responsive teaching, while reporting beliefs in line with a *multicultural* ideology. On the contrary, two teachers, who were rated low in their culturally responsive teaching behaviour, held beliefs in line with a *colour-evasive* ideology.

All four teachers showed experienced patterns of self-reflection. For example, while watching themselves in the video clips, all four teachers were able to infer the consequences of their behaviour for students' learning. However, in the overall self-reflection process, the teachers who were rated more culturally responsive also showed higher self-reflection patterns than teachers who less frequently showed culturally responsive teaching practices. In the context of the overall framework on the relation between beliefs about cultural diversity and culturally responsive teaching this study was the one, which most sharply focused on the quality of the relation between the two. This in-depth multiple case study supported the relation between cultural diversity beliefs and culturally responsive practices, but it also brought up new insights and hints on the role of teacher self-reflection.

6.3 Theoretical implications

The systematic literature review and the three empirical studies included in this dissertation have important implications in relation to existing theories and past empirical research. The first theoretical implication refers to how cultural diversity beliefs are operationalised in the literature. In Chapter 2, I built on a chapter (Fives & Buehl, 2012) included in the *Handbook of Educational Psychology*, in which the authors referred to the complexity of teachers' beliefs as one of the more prevalent themes to emerge in the research literature. I addressed this complexity to cultural diversity beliefs, by organizing the review on each of the five areas identified by Fives & Buehl's framework (i.e., 1, beliefs about own cultural self-efficacy; 2, beliefs about cultural context and environment; 3, beliefs about cultural content or knowledge; 4, beliefs about culturally sensitive teaching practices and approaches; and 5 beliefs about culturally diverse students and their families). I suggest that

researchers not overlook the value of the different dimensions of cultural diversity beliefs, for example, by assessing the role of conceptually related measures of each dimension (see Chapter 3), or exploring how these different beliefs dimensions relate to teaching behaviour (see Chapter 5).

Another theoretical implication of this dissertation addresses the stability versus malleability of teachers' beliefs. On the one hand, teachers' beliefs are considered dynamic and prone to change or, in contrast, they are thought to be relatively stable and resistant to alter (Kagan, 1992; Richardson, 2003; Thompson, 1992). The majority of the studies reviewed in Chapter 2 support the first theoretical proposition, that is, teachers' beliefs are considered dynamic and prone to change. However, I only reviewed available research studies, that are more likely to be published when a training shows to be effective (known as publication bias effect, Petticrew & Roberts, 2006). Thus, further investigations and teacher educators should not automatically imply that teachers' beliefs are always susceptible to change during related trainings, either positively or negatively.

In the validation study (Chapter 3), I found that a scale built on culturally responsive teaching insights (Gay, 2010) showed good psychometric properties. This implies that the theoretical framework of culturally responsive teaching can be further considered and explored in the German context. Additionally, as past research has shown, teachers with high self-efficacy are more likely to endorse positive work attitudes (e.g., job-satisfaction), and support their students to achieve excellence (see for a review Zee & Koomen, 2016). When studying teacher self-efficacy, in line with previous theoretical intuitions (e.g., Siwatu, 2007), I recommend to address the context- and task specificity of self-efficacy, as captured in the concept of culturally responsive teaching self-efficacy beliefs.

Results from Chapter 4 converge with theoretically driven cultural diversity school approaches investigated in the German context, namely *equality* and *cultural pluralism*. However, in the physical and virtual environment of 22 schools included in my sample, there were also school practices and artefacts found that appeared to be different from the present study's conceptualization of *equality* and *cultural pluralism*, namely *endorsing the majority culture*. Previous studies conducted in the German school context using different methodologies found similar school approaches in line with *equality* and *cultural pluralism* (Schachner, et al., 2016; Schwarzenthal, Schachner, van de Vijver, & Juang, 2018), but also for more assimilation tendencies (Faas, 2008; Gogolin, 2002). For the overall theoretical framework of this dissertation, Chapter 4 highlights one relevant aspect: teacher practices can

shape the school diversity approach implemented for dealing with cultural diversity. This also underscores that teachers' cultural diversity beliefs (although not directly investigated in Chapter 4) may be focused on stressing similarities or aiming to reduce diversity by expecting minorities to adapt to the dominant culture.

The multiple case study (Chapter 5) for the limited number of participants examined does limit the transferability of the results to other teacher populations. However, the results of this study suggest congruence between cultural diversity beliefs and culturally responsive teaching practices. This finding contradicts earlier studies that found cultural diversity beliefs and culturally responsive teaching practices were incongruent (Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015; Guerra & Wubbena, 2017). I assume that such distinct results from earlier studies have been obtained because of a different research design was chosen in Chapter 5. Especially changing the traditional order of assessment (assessment of classroom behaviour first and examination of teachers' beliefs second) limited the influence for participants to act favourably during classroom observations. Besides the design of the study, in contrast to previous studies (e.g., Guerra & Wubbena, 2017), I used a validated observation protocol that is closely built on the theoretical framework of culturally responsive teaching (CRIOP; Powell et al., 2016). This observation protocol could be further upgraded by improving the theoretical and practical operationalization of culturally responsive teaching.

When investigating the relation between teachers' beliefs about cultural diversity and culturally responsive practices, two forms of ideologies towards cultural diversity are often discussed in the German context (*colour-evasiveness* and *multiculturalism*; Hachfeld, et al., 2011; 2015). However, in the multiple case study, I extend these theoretical propositions, offering some insights into additional ideological beliefs such as *colour-silent* (Pollock, 2009). In contrast to colour-evasiveness, *colour-silent* ideology acknowledges cultural and ethnic differences to some extent, but it translates in practice that actively uses implicit and explicit approaches to avoid talking about ethnic and cultural differences. Thus research on teachers' cultural diversity beliefs should further consider other forms of ideologies that may be related to the most studied (i.e., *colour-evasion* and *multiculturalism*).

The final theoretical implication refers to the combination of different theoretical perspectives when studying teachers' cultural diversity beliefs and culturally responsive practices. As I attempted to do across all the studies included in this dissertation, I call for an integration of educational and psychological perspectives. For example, the concept of culturally responsive teaching self-efficacy beliefs (Chapter 3) merges Bandura's social cognitive theory with the teaching framework of culturally responsive teaching (Gay, 2010).

Similarly in Chapter 5, next to social cognitive theory and culturally responsive teaching, I included social psychology insights (Rosenthal & Levy, 2010).

6.4 Implications for future research

Although this thesis provided original insights on the role of teachers' cultural diversity beliefs and culturally responsive practices, there are some questions that remain open and needed to be addressed in future studies. The systematic literature review of teacher trainings highlights one understudied aspect when addressing pre-service teachers' beliefs: what is the role of university-based teacher educators' beliefs? Pre-service teachers' beliefs are unlikely to be challenged if other significant educational stakeholders (e.g., teacher educators) themselves hold beliefs that are in line with a colour-evasive ideology or embrace a deficit-perspective on diversity. Teacher educators with a deficit-perspective on diversity are inclined to attribute differences in educational outcomes between majority and minority students to cultural stereotypes, inadequate socialisation, or lack of motivation and initiative on the part of the students (Bensimon, 2005). As a result, teacher educators who endorse colour evasive or deficit-oriented beliefs about cultural diversity were found less eager to adopt inclusive teaching practices in universities and ITPs (Aragón, Dovidio, & Graham, 2017; Wassell, & Kerrigan, & Hawrylak, 2018). Therefore, in addition to examining pre-service teachers' beliefs, more research is needed to investigate the cultural diversity beliefs of those who teach them.

The CRCMSES adapted and validated in Chapter 3 measures teacher self-efficacy beliefs in using culturally responsive teaching practices. Future studies should not only rely on self-report measures. For instance, the German version of CRCMSES could be used in combination with additional measures of teaching behaviours such as observational validated protocols. The observation protocol (CRIOP; Correll, Powell & Cantrell, 2015) adopted in the multiple case study (Chapter 5) represents a valuable instrument for measuring culturally responsive teaching, and it is built on the same theoretical framework of the CRCMSES. Future research is also needed to determine whether teachers' CRCMSES scores are associated with personal ideological beliefs about cultural diversity (e.g., *multicultural*, *colour-evasiveness*), and with other related constructs, such as teacher intercultural competence.

In Chapter 4, in addition to examining teachers' and students' perceptions of cultural diversity school climate, I assessed school practices as they manifest in the physical and

virtual school environment. Future studies should insist on incorporating multiple perspectives from different actors (e.g., students, teachers, school administration), including other educational stakeholders, such as parents. Parents, especially those who grew up and attended schools in a different country before settling in another, can have different expectations, not meeting those of teachers in the dominant culture (Antony-Newman, 2018). Accordingly, it is worthwhile to understand how parents perceive and understand what teachers implement in the school context to support *equality* and *cultural pluralism*, or other cultural diversity approaches.

As implemented in Chapter 4, fostering the use of multiple data sources is advisable for future investigations. It would be important to systematically analyse teaching materials and curriculum resources such as textbooks. School textbooks are not neutral educational tools that convey objective knowledge, but they express subjective and interpretations of reality reported by the dominant cultural groups (Gay, 2010).

In Chapter 5, I followed four teachers in their daily teaching, and investigated their cultural diversity beliefs and offered them opportunities to reflect on their own practices. Additional research might also explore what personal experiences and values have triggered in-service teachers to develop *multicultural* or *colour-evasive* beliefs. Furthermore, what needs to be done in future research is to assess the connections between culturally responsive teaching and student outcomes. As it was shown in a narrative synthesis (Aronson & Laugther, 2016), CRT could benefit students not only in terms of academic achievement but also enhancing motivation, school belonging, and intercultural competence.

There is also additional research needed to expand the field of culturally responsive teaching by looking at the school principal support for cultural diversity. School leaders are responsible for ensuring that their teachers are culturally responsive (Khalifa, et al., 2016). For example, principals that invest in school policies that fight racism and discrimination, support on-going in-service teacher trainings for diversity, and involve parents and communities in the process of creating a culturally relevant curriculum can create the premise for a culturally responsive school environment (Santamaria, 2014).

Future research might also further conduct both small-scale in-depth studies and large-scale investigations for assessing the relation between teachers' cultural diversity beliefs and culturally responsive teaching. In this dissertation, I systematically reviewed qualitative and quantitative studies, administered questionnaires, borrowed visual sociology techniques, carried on classroom observations, and conducted video-stimulated interviews. The combination of mixed methods can help increase the knowledge regarding cultural diversity

beliefs and culturally responsive practices, as they manifest and interact at different levels and forms.

6.5 Implications for educational policymakers, teacher educators, and practitioners

In this section, I summarise the main implications of this thesis for initial teaching preparation, and offer some practical suggestions for teachers who already entered the profession. The research of this thesis has supported the assumption that it is during initial teaching preparation that beliefs are susceptible to change. ITP should be seen as the principal vehicle to ensure from the very beginning that teachers acknowledge and challenge their own beliefs about cultural diversity in education. Pre-existing beliefs that future teachers endorse towards cultural diversity can function as filters to learning (Fives & Buehl, 2012). As such, during initial teaching preparation, pre-service teachers that endorse *colour-evasive* beliefs may be less likely to show openness to learn culturally sensitive approaches.

Although there is international research evidence on teacher trainings targeting cultural diversity beliefs, I found no studies conducted in the German context. This is not surprising, given that recent national findings showed that not all federal regions in Germany have committed to include diversity-related content within ITP across different school grades and subjects (Monitor Lehrerbildung, 2016). On the one hand, ITP in Germany should put into action and work on curricula that embrace cultural diversity. On the other hand, it is important to address cultural diversity beliefs of the new generations of teachers, reporting teacher trainings that show promising results. In Chapter 3, I showed that pre-service teachers in two German universities showed relatively low levels of culturally responsive teaching self-efficacy beliefs. What this study also shows is that pre-service teachers who feel less self-efficacious are more exposed to cultural diversity-related stress. Teacher educators and researchers can choose to use either the entire scale or one of the two subscales to verify the activity domain on which to focus further training.

The results of the systematic literature review have demonstrated that experiential learning in the format of field-based experience and service-learning community is frequently indicated as beneficial in ITP. In field-based experiences offered during ITP, however, it is difficult to control for certain moderating factors (i.e., group status, contact quantity) than for other equally valuable aspects of field-based experience (i.e., the valence of the contact or content quality). Given that field-based experiences differed greatly in how they are situated

in ITP, it is essential that researchers and teacher educators report in greater detail contextual variables of the field-based experience (e.g., mentoring support, pre- or post reflections on the experience) that might explain and support their practices.

Service-learning community, namely being immersed in students' communities and interact with diverse socio-cultural groups, was also found as a meaningful approach for shifting pre-service teachers' cultural diversity beliefs. In these community-based experiences pre-service teachers reflect upon, discuss, and negotiate strategies and solutions with other educational stakeholders, including students' families. This, in turn, can help teachers experience and foster a shared and collective responsibility, as well as critically examine teachers' own assumptions and biases (Baldwin, Buchanan, & Rudisill, 2007; Conner, 2010). However, community-based experiences require a consolidated partnership between ITP, school, and community that is often built after a good deal of work (Sleeter, 2001), as well as a non-hierarchical interplay between academic, school staff, and community expertise (Zeichner, 2010). Yet, as for field-based experience, service-learning community needs a research-based approach that assesses and supports their effectiveness.

Results of Chapter 4 have demonstrated that most of the schools under investigation put a strong emphasis on stressing similarities between students, as well as on promoting assimilation to the majority culture. School practices that only tend to assimilate have detrimental effects for culturally diverse students (Celeste, et al., 2016). In contrast, culturally diverse students who perceive their school environment valuing diversity also hold more positive attitudes about their school (Brown & Chu, 2012). Preferably, teachers should implement practices that support more than one school approach towards diversity, stressing similarities between cultures, and, at the same time, valuing students' cultural diversity background (Schwarzenthal, et al., 2018).

Another important implication of this study refers to the importance of making visible the cultural diversity approach in the physical and virtual learning environment. These can be made in several ways. For instance, in the school website teachers can report the school vision and mission statements that openly encourage cultural diversity; displaying culturally diverse message or images; making use of materials (e.g., textbooks) that account for diversity in class.

The empirical findings of Chapter 5 suggest that there is a high congruence between teachers' cultural diversity beliefs and culturally responsive practices implemented in the classroom context. For this proximity of teachers' beliefs to instructional behaviour, educational policymakers that demand that schools function as acculturative and development

contexts for culturally diverse students must attend to teachers' beliefs as part of educational reforms. Requiring teachers holding beliefs that consider cultural diversity as a valuable resource in teaching and learning is not an easy task, especially from educators who have many years of teaching experience. However, as it was shown in Chapter 5, teachers who accumulated similar years of teaching experience endorse different cultural diversity beliefs. As such, it should not be implied that teachers with more experience automatically hold more *colour-evasive* beliefs than pre-service or novice teachers. On a related note, teachers - regardless of their experience - need opportunities to consider how their beliefs shape the learning environment, facilitate or hinder their current practices, and foster academic school achievement.

In addition, the results of this study imply that in-service teachers should receive more possibilities to critically reflecting on own teaching behaviours. The possibilities of critically reflect on own teaching behaviour should be offered throughout the whole teacher career and not limited to initial teacher preparation. Educational researchers can make use of video observations to document the reciprocal relationships between cultural diversity beliefs, culturally responsive teaching, and self-reflection. I provided a technique resembling a video-stimulated interview that uses a combination of own video-recorded classroom behaviours with a think-aloud procedure (van Tartwijk, den Brok, Veldman, & Wubbels, 2009). This tool can be used to facilitate self-reflection with in-service teachers and adopted as a resource for teaching about culturally responsive teaching in initial teaching preparation.

6.6 Conclusions

In the face of rapidly increasing multi-ethnic population in Germany, there is a demand for teachers of all subjects and school grades to be well prepared to teach in culturally diverse classrooms. Pre- and in-service teachers need both support to formulate their beliefs regarding the role of cultural diversity in education, and guidance in their attempts to implement culturally responsive teaching. Results from my thesis offer an overview of promising international teacher trainings for targeting pre-service teachers' cultural diversity beliefs (Chapter 2), and a validated tool for assessing and enhancing culturally responsive teaching self-efficacy beliefs in the German context (Chapter 3). In line with previous studies, but also adding unique methodological insights, this dissertation extends research on school and classroom practices for dealing with cultural diversity. It was shown how in-service

teachers' practices reflect school approaches for dealing with cultural diversity, and how students perceive them in a large sample of German schools (Chapter 4). Finally, findings from Chapter 5 shed light into the dynamic relationship between culturally responsive teaching, beliefs about incorporating cultural diversity content into daily teaching and learning activities, and own self-reflection.

As this research on teachers' cultural diversity beliefs and culturally responsive teaching expands also in the German context, it raises an exciting set of questions. Can minority teachers be more likely to endorse *multicultural* beliefs? How does initial teaching preparation build a conceptual coherence and practical coordination for providing the competencies needed to be a cultural responsive practitioner? How and to what extent should be teaching and learning contents reflect each student's cultural background present in class? Can promoting cultural pluralism through teaching practices in school provoke fear and anger that deepen cultural differences? Examining these questions and other related issues regarding teachers' cultural diversity beliefs and culturally responsive practices will make diversity discourse in school richer, better able to capture the importance of teacher's role, and ultimately more inclusive.

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Pages 156-159 contain personal data. Hence, they are not part of this online publication.

Selbstständigkeitserklärung

Ich erkläre, dass die Arbeit mit dem Titel '*Teachers' cultural diversity beliefs and culturally responsive practices*' selbständig und ohne Hilfe Dritter verfasst wurde und bei der Abfassung alle Regelungen guter wissenschaftlicher Standards eingehalten wurden.

Potsdam, 21.11.2018   Sauro Civitillo