MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

Conditions for Culturally Responsive Teaching among In-Service and Pre-Service Teachers

Dissertation

zur Erlangung des Grades

Doktor der Philosophie (Dr. phil.)

vorgelegt

der Philosophischen Fakultät III

der Martin-Luther-Universität

Halle-Wittenberg

von Frau Maria Jolina Ulbricht

Halle (Saale), den 06.05.2025

Datum der Verteidigung: 18.08.2025

Gutachter*innen:

Prof. Dr. Maja K. Schachner

Prof. Dr. Anne-Kathrin Lindau

Prof. Dr. Philipp Jugert

Abstract – English

Background. With the growing cultural diversity in German schools, teachers face increasing demands to meet the needs of all students. Culturally responsive teaching (CRT) offers a promising framework for examining the intraindividual processes of pre-service and in-service teachers in culturally diverse educational contexts. Key components of CRT include critical reflection, diversity-related attitudes and beliefs, and CRT self-efficacy. This dissertation investigates how contextual conditions and psychological interventions are related to these components among pre-service and in-service teachers.

Methods. This dissertation comprises three empirical studies: 1) a quantitative study investigates the association between contextual conditions, diversity-related attitudes, and CRT efficacy among in-service teachers; 2) a qualitative, quasi-experimental study using thematic analysis investigates the development of critical reflection, cultural diversity beliefs, and CRT efficacy in pre-service teachers; and 3) a qualitative study using grounded theory methodology explores intraindividual processes that facilitate changes in White pre-service teachers' cultural diversity beliefs.

Results. The findings indicate that school climate and the proportion of students of immigrant descent are important contextual conditions associated with diversity-related attitudes, and CRT efficacy among in-service teachers. The qualitative studies suggest that the Identity Project enhances pre-service teachers' quality of critical reflection, fosters valuing cultural diversity beliefs, and promotes CRT efficacy. In addition, critical reflection on identity and White cultural identity development are important intraindividual processes in developing White pre-service teachers' explicit and implicit cultural diversity beliefs.

Conclusion. This dissertation makes a significant contribution to teacher education in culturally diverse contexts in Germany by emphasizing the importance of linking theoretical knowledge, practical experience, and critical reflection on identity to support the development of culturally responsive teachers. It also highlights the essential role of contextual conditions such as the

proportion of students with immigrant backgrounds and an inclusive school climate in shaping teachers' CRT efficacy and beliefs.

Keywords: Culturally Responsive Teaching, Cultural Diversity Beliefs, Teacher Education

Abstract – Deutsch

Theoretischer Hintergrund. Angesichts der zunehmenden kulturellen Vielfalt an deutschen Schulen, stehen Lehrpersonen vor immer höheren Anforderungen, den Bedürfnissen aller Schülerinnen und Schüler gerecht zu werden. Culturally Responsive Teaching (CRT) bietet einen vielversprechenden Rahmen, um die intraindividuellen psychologischen Prozesse von (angehenden) Lehrpersonen in vielfältigen Bildungskontexten zu untersuchen. Zu den Schlüsselkomponenten von CRT gehören kritische Reflexion, diversitätsbezogene Einstellungen und Überzeugungen sowie CRT-Selbstwirksamkeit. Diese Dissertation untersucht, wie kontextuelle Bedingungen und psychologische Interventionen mit diesen Komponenten von CRT bei (angehenden) Lehrpersonen zusammenhängen.

Methoden. Die Dissertation umfasst drei empirische Studien: 1) eine quantitative Studie untersucht den Zusammenhang zwischen kontextuellen Bedingungen, diversitätsbezogenen Einstellungen und CRT-Selbstwirksamkeit bei Lehrpersonen; 2) eine qualitative, quasi-experimentelle Studie untersucht mithilfe der thematischen Analyse die Entwicklung kritischer Reflexion, kultureller Überzeugungen und CRT-Selbstwirksamkeit bei angehenden Lehrpersonen; und 3) eine qualitative Studie, die mithilfe der Grounded Theory Methodology die Bedingungen und intraindividuellen Prozesse der Veränderungen von kulturellen Überzeugungen angehender Lehrpersonen untersucht.

Ergebnisse. Die Ergebnisse zeigen, dass das Schulklima und der Anteil der Schülerinnen und Schüler mit Migrationshintergrund wichtige kontextuelle Bedingungen sind, die mit diversitätsbezogenen Einstellungen und der CRT-Selbstwirksamkeit bei Lehrpersonen zusammenhängen. Die qualitativen Studien legen nahe, dass das Identitätsprojekt die Qualität der kritischen Reflexion von Lehramtsstudierenden verbessert, die wertschätzende kulturelle Überzeugungen fördert und die CRT-Selbstwirksamkeit erhöht. Darüber hinaus sind kritische Reflexion über Identität und die Entwicklung einer Weißen kulturellen Identität wichtige

IV

ABSTRACT

IV

intraindividuelle Prozesse bei der Entwicklung expliziter und impliziter kultureller Überzeugungen Weißer angehender Lehrkräfte.

Conclusion. Diese Dissertation leistet einen wichtigen Beitrag zur Lehrer*innenbildung in kulturell vielfältigen Kontexten in Deutschland, indem diese die Bedeutung der Verbindung von theoretischem Wissen, praktischer Erfahrung und kritischer Reflexion über Identität für die Entwicklung von Lehrpersonen hinsichtlich CRT hervorhebt. Die Ergebnisse der Dissertation unterstreichen auch die wesentliche Rolle von Kontextbedingungen wie dem Anteil von Schülern mit Migrationshintergrund und einem inklusiven Schulklima für die kulturellen Überzeugungen und die CRT-Selbstwirksamkeit von Lehrpersonen.

Schlagworte: Culturally Responsive Teaching, kulturelle Überzeugungen, Lehrer*innenbildung

Occasion and Acknowledgements

Ich bin zutiefst geehrt und überwältigt, an diesem Punkt meines Lebens angelangt zu sein. Dinge zu tun, die ich mir als kleines Mädchen nie hätte träumen lassen. Meine Motivation für diese Arbeit entspringt meiner tiefen Überzeugung, dass jedes Kind hochwertige Bildung verdient. Die Ungerechtigkeit in den Bildungschancen hat mich dazu motiviert, mich mit Themen wie *Culturally Responsive Teaching* und *Critical Consciousness* auseinanderzusetzen. Mit dieser Forschung möchte ich Lehrpersonen sowie Pädagoginnen und Pädagogen dabei unterstützen, zu Akteuren des sozialen Wandels zu werden, die aktiv gegen Diskriminierung und Rassismus eintreten, Vielfalt wertschätzen und ein Lernumfeld schaffen, das positive Beziehungen fördert, Identitätsentwicklung unterstützt, individuelle Stärken und Interessen fördert und dazu befähigt, kritisch über die Welt nachzudenken, Ungerechtigkeiten zu erkennen und sich für eine gerechtere Gesellschaft einzusetzen.

Meine Promotion wurde von einer wunderbaren Forschungsfamilie begleitet, und ich möchte zwei bewundernswerten Frauen meinen tiefsten Dank aussprechen: Prof. Dr. Maja Schachner und Prof. Dr. Anne-Kathrin Lindau.

Maja, Du bist meine Doktormutter, Du hast an mich geglaubt, und ich habe unglaublich viel von Dir gelernt. Vielen Dank für die unschätzbaren Möglichkeiten, nicht nur meine Forschungskompetenzen zu entwickeln, sondern auch mein Verständnis für kulturelle Vielfalt zu prägen, mein Engagement in der Lehrer*innenbildung zu stärken und mich für gerechte Bildungschancen einzusetzen. Die Arbeit an dieser Dissertation war dank unserer Zusammenarbeit eine große Freude. Ich habe Dein konstruktives Feedback sehr geschätzt, Deine Herzlichkeit, Dein Humor und Deine positive Haltung haben den gesamten Prozess nicht nur erleichtert, sondern auch bereichert. Es war mir eine Freude, diesen Weg mit Dir zu gehen.

Anne, ich bin Dir zutiefst dankbar, Du hast mich bereits seit meinem Studium begleitet. Ich schätze Deine Herzlichkeit und Dein Engagement sehr. Deine wertschätzenden,

ermutigenden Worte haben mir auf dem Weg zur Promotion enorm viel Kraft gegeben. Die gemeinsamen Erfahrungen, sowohl bei der Arbeit als auch außerhalb der Universität, haben mich darin bestärkt, weiterzumachen. Ich danke Dir für Deine akademische Unterstützung, Deinen kritischen Geist sowie die Möglichkeit, meine Forschung in Kolloquien zu präsentieren, an Workshops teilzunehmen und mich weiterzubilden. Vielen Dank auch für die Freiräume und die Entlastung in der Lehre, diese haben es mir überhaupt erst ermöglicht, die Dissertation abzuschließen.

Mein Dank gilt auch meinem Betreuer Dr. Sauro Civitillo. Sauro, ich bewundere Dich und Deine Forschung sehr. Ich danke Dir für Deine Unterstützung bei den Analysen, Dein kritisch-konstruktives Feedback, von dem ich in hohem Maße profitiert habe.

Ich danke Prof. Dr. Martin Lindner, der mich seit meinem Studium akademisch begleitet, motiviert und gefördert hat und mich eingestellt hat. Danke, Martin!

Ich möchte mich außerdem bei allen Co-Autorinnen und Co-Autoren bedanken: Prof. Dr. Linda Juang, Du bist eine so herzliche und inspirierende Wissenschaftlerin. Vielen Dank für Deine Unterstützung! Ebenso danke ich Dr. Anna Schnitzer und Prof. Dr. Peter Noack für das wertvolle Feedback. Mein Dank gilt auch Prof. Dr. Philipp Jugert, der sich die Zeit nimmt, diese Arbeit zu lesen und zu begutachten.

Ich danke dem gesamten Team der Pädagogischen Psychologie für die gemeinsamen Diskussionen, das Feedback zu meinen Arbeiten und die Begleitung auf meinem Weg. Ein herzlicher Dank geht auch an das Team der Didaktik der Geographie, das mit seiner Perspektive meine Forschung bereichert hat. Vielen Dank an Maximilian Breuer, Miriam Schöps, Mirjam Tuchscherer und Janna Enzmann.

Ich habe auf diesem Weg wundervolle Freundschaften gewonnen – insbesondere mit Dr. Julia Wenzing und Barbare Lomashvili, die mich nicht nur fachlich, sondern auch emotional unterstützt haben.

Publications

The present doctoral thesis is based on the following articles:

1. Ulbricht, J., Schachner, M. K., Civitillo, S., & Noack, P. (2022). Teachers' acculturation in culturally diverse schools - How is the perceived diversity climate linked to CRT efficacy?. *Frontiers in psychology*, *13*, 953068. https://doi.org/10.3389/fpsyg.2022.953068

2. Ulbricht, J., Schachner, M. K., Civitillo, S., & Juang, L. (2024). Fostering Culturally Responsive Teaching Through the Identity Project Intervention: A Qualitative Quasi-Experiment with Pre-Service Teachers. *Identity*, *24*(4), 307–330. https://doi.org/10.1080/15283488.2024.2361890

3. Ulbricht, J., Schachner, M. K., Schnitzer, A. (2025). How Do Pre-service Teachers' Cultural Diversity Beliefs Change Over the Course of a Practical Experience in Schools? – A Grounded Theory Study. PsyArXiv. https://doi.org/10.31234/osf.io/dz5qt_v1

Other publications:

3. Knauß, S., Ulbricht, J., & Lindau, A.-K. (2024). Werte der Natur als kritisch-emanzipatorischer Zugang zu Bildung für nachhaltige Entwicklung? Konfliktdynamik, *13*(4), 238–248. https://doi.org/10.5771/2193-0147-2024-4-238

4. Ulbricht, J., & Lindau, A.-K. (2024). Von der Kohle zur Kultur? Die Rolle des Tourismus im Strukturwandel des Mitteldeutschen Reviers. Praxis Geographie, *54*(11), 20-25.

5. Lindau, A.-K., & Ulbricht, J. (2024). Auf dem Weg zur klimaneutralen Schule? Durch partizipatives Handeln die eigene Schule reflektiert gestalten. Praxis Geographie, *54*(12), 48-53.

Table of Contents

List of Tables

List of Figures

German Summary

Einleitung

Angesichts der steigenden ethnischen und kulturellen Vielfalt in deutschen Schulen stehen Lehrpersonen vor der wachsenden Anforderung, einer zunehmend diversen Klasse gerecht zu werden. Laut Mikrozensus 2023 haben 42 % der Schülerinnen und Schüler an allgemein- und berufsbildenden Schulen in Deutschland einen Migrationshintergrund, darunter sowohl Kinder, die selbst zugewandert sind, als auch Nachkommen von Zugewanderten (Statistisches Bundesamt, 2023). Forschungsarbeiten verweisen seit Langem darauf, dass Bildungsergebnisse in Deutschland stark von sozioökonomischen und soziokulturellen Faktoren abhängen (Edele & Stanat, 2022; Schimpl-Neimanns, 2000; Schlicht, 2011). In der empirischen Bildungsforschung werden vielfältige Wirkungsmechanismen für ungleichen Bildungserfolg und ungleiche Bildungschancen benannt. Zentrale Erklärungsansätze für die Reproduktion von Bildungsungleichheit sind dabei Formen der institutionellen Diskriminierung (Gomolla, 2021) und des institutionellen Rassismus (Gomolla & Radtke, 2009; Phillips, 2011).

Aktuelle Studien zeigen, dass Lehrpersonen als Teil institutioneller Strukturen durch ihre kulturellen Einstellungen und Überzeugungen zur Entstehung ungleicher Bildungsergebnisse bei Schülerinnen und Schülern beitragen können (Makarova et al., 2019; Turetsky et al., 2021). Vor diesem Hintergrund gewinnt die Professionalisierung von Lehrpersonen in Bezug auf kulturelle Vielfalt durch gezielte Interventionen an Relevanz. Die Professionalisierung hinsichtlich kultureller Vielfalt zielt darauf ab, Lernprozesse anzuregen, in denen (angehende) Lehrpersonen Fähigkeiten, Kompetenzen sowie professionell reflektierte Überzeugungen und Einstellungen entwickeln, um kulturelle Vielfalt konstruktiv zu adressieren, ihr professionelles Urteilsvermögen und ihre Unterrichtspraxis weiterzuentwickeln und dadurch eine positive Wirkung auf ihre Schülerinnen und Schüler zu erzielen (Abacioglu et al., 2022; Hachfeld, 2013; Parkhouse et al., 2019). Obwohl die Professionalisierung von

Lehrpersonen in Deutschland ausführlich untersucht wurde, gibt es nur wenige Studien (z. B. Hachfeld, 2013), die sich speziell mit der Professionalisierung von Lehrpersonen im kulturell vielfältigen Kontext befassen und dabei internationale Diskurse einbeziehen. Die begrenzte Auseinandersetzung mit internationalen Debatten stellt in Deutschland ein besonderes Problem dar: Obwohl die Relevanz der kulturellen Herkunft für Bildungs- und Lernprozesse betont wird, werden damit einhergehende Privilegien und Benachteiligungen vernachlässigt. Die unzureichende Reflexion über Machtstrukturen und das fehlende Bewusstsein für soziokulturelle und sozioökonomische Ungleichheiten können erhebliche Hindernisse für die Auseinandersetzung mit systemischen Fragestellungen im schulischen Kontext darstellen. Insbesondere der internationale Diskurs über Rassismus wird in Deutschland wenig berücksichtigt, wobei explizite Diskussionen über Race häufig vermieden werden und oft als Tabu gelten (Juang et al., 2021). Die Vermeidung über Rassismus zu sprechen, könnte sprachlich sowie mit dem spezifischen sozio-historischen Kontext in Deutschland begründet sein: Während der Begriff "Rasse" im Deutschen historisch mit einer biologistischen Vorstellung menschlicher Gruppen sowie der Rassenideologie während des Holocausts verknüpft ist und keine wissenschaftliche Grundlage bietet, wird im Englischen das Wort "race" genutzt, um die gesellschaftliche Konstruktion von Rassialisierung sowie deren historische und gegenwärtige Auswirkungen zu beschreiben (Juang et al., 2021). Die unzureichende Auseinandersetzung mit Rassismus und Rassismuskritik in Deutschland kann zu systematischen Ungleichheiten im schulischen Kontext beitragen und Gruppen von Schülerinnen und Schülern marginalisieren (Castagno, 2008).

Der in den Vereinigten Staaten entwickelte Ansatz des Culturally Responsive Teaching (Gay, 2018) bietet einen kritischen Rahmen zur Neuausrichtung öffentlicher Diskurse über Unterricht in kulturell diversen Kontexten, insbesondere im Hinblick auf die Reflexion von Machtverhältnissen. Ein Literaturreview zeigt, dass dieser Ansatz einen positiven Einfluss auf die akademische Leistung, Motivation, schulische Zugehörigkeit und interkulturelle

Kompetenz von Schülerinnen und Schülern hat und somit eine zentrale Rolle in der Professionalisierung von Lehrpersonen spielt (Aronson & Laughter, 2016). Culturally Responsive Teaching (CRT) ist ein multidimensionales Konstrukt, welches curriculare Inhalte, Lernkontexte, Schul- und Klassenklima sowie Unterrichtsmethoden umfasst und das Ziel verfolgt, die Erfahrungen und Perspektiven verschiedener kultureller, ethnischer und rassistisch markierter Schülerinnen und Schüler zu integrieren, um diese effektiver zu unterrichten (Gay, 2002, 2015). CRT geht über die bloße Nutzung unterschiedlicher Unterrichtsmethoden hinaus und erfordert wertschätzende Überzeugungen von Lehrpersonen, die sich von einer defizitären Perspektive auf kulturell vielfältige Schülerinnen und Schüler distanzieren (Gay, 2015). Im Sinne des CRT-Konzepts bauen Lehrpersonen eine positive und einfühlsame Beziehung zu kulturell vielfältigen Schülerinnen und Schülern auf und reflektieren kritisch über Strukturen und Systeme, die Privilegien und Benachteiligungen im Bildungskontext aufrechterhalten (Gay, 2018). CRT bietet damit das Potential Konzepte wie Ideologie, Hegemonie, Widerstand, Macht, Wissenskonstruktion und Klasse in den Vordergrund zu rücken. Die bisherige Forschung zu CRT bezieht sich jedoch hauptsächlich auf den Kontext der Vereinigten Staaten, während Studien zu CRT in Deutschland kaum existieren. Darüber hinaus beschränken sich bisherige Untersuchungen oft nur auf eine Komponente (z. B. Überzeugungen), obwohl CRT mehrere Dimensionen (z. B. Selbstwirksamkeit, kritische Reflexion) umfasst (Civitillo et al., 2018). Die vorliegende Dissertation geht daher folgender übergeordneten Frage nach: Wie beeinflussen kontextuelle Bedingungen und psychologische Interventionen die Entwicklung der einzelnen Komponenten des Culturally Responsive Teaching bei (angehenden) Lehrpersonen?

Um die Forschungsfrage zu beantworten, bezieht sich die vorliegende Arbeit auf folgende intraindividuellen, psychologischen Schlüsselkomponenten professioneller Kompetenz von Lehrpersonen im Sinne des CRT-Konzepts: 1) *Kritische Reflexion*, definiert als die Fähigkeit, aktuelle soziale Realitäten kritisch zu analysieren und zu erkennen, wie

soziale, wirtschaftliche und politische Bedingungen den Zugang zu Chancen einschränken und Ungerechtigkeiten von Privilegien und Benachteiligungen aufrechterhalten (Diemer & Li, 2011; Gay, 2002), 2) *Diversitätsbezogene Einstellungen und Überzeugungen*, als kognitive Konzepte, die die Wahrnehmung, den Wert und den Umgang mit kultureller Vielfalt und Interaktionen in kulturell vielfältigen Kontexten bestimmen (Gay, 2015), 3) *Selbstwirksamkeit im kulturell vielfältigen Kontext*, d.h. der subjektive Glaube von Lehrpersonen an ihre eigenen Fähigkeiten und professionellen Kompetenzen (Tschannen-Moran & Hoy, 2001).

Zusammenfassend tragen drei Forschungsziele auf komplementäre Weise durch drei empirische Arbeiten zur Beantwortung der übergeordneten Forschungsfrage bei: Studie 1 untersucht quantitativ die Beziehung zwischen dem Schulklima und dem Anteil von Schülerinnen und Schülern mit Migrationshintergrund als kontextuelle Bedingungen in Bezug auf Akkulturationseinstellungen und die Selbstwirksamkeit von Lehrpersonen im kulturell vielfältigen Kontext. Studie 2 analysiert qualitativ die Wirkung einer schulpraktischen Intervention (das Identitätsprojekt) auf alle drei Schlüsselkomponenten von CRT: kritische Reflexion, kulturelle Überzeugungen und Selbstwirksamkeit im kulturell vielfältigen Kontext bei Lehramtsstudierenden. Studie 3 fokussiert auf die qualitativen Veränderungsmechanismen kultureller Überzeugungen bei Lehramtsstudierenden. Unterschiedliche methodische Zugänge ermöglichen dabei sowohl kontextuelle Bedingungen als auch individuelle Lern- und Entwicklungsprozesse im Hinblick auf die Professionalisierung im Sinne des CRT zu analysieren und die übergeordnete Forschungsfragen zu beantworten. Im Folgenden, werden nun die empirischen Arbeiten der Dissertation und ihre Zielsetzungen detaillierter beschrieben.

1. Forschungsziel

Studie 1 bezieht sich auf die Akkulturation von Lehrpersonen, definiert als die psychologischen Folgen eines regelmäßigen interkulturellen Kontakts. Ziel der Studie ist zu untersuchen, inwiefern die Akkulturationseinstellungen von Lehrpersonen die Auswirkungen

des wahrgenommenen Schulklimas auf die interkulturelle Selbstwirksamkeit in kulturell vielfältigen Klassenräumen vermitteln.

Während Akkulturationsforschung sich meist auf kulturell minorisierte[1] Gruppen konzentriert, wurde der kontextuelle Einfluss auf Lehrpersonen, die überwiegend der kulturell majorisierten Gruppe angehören, bisher nicht untersucht (Haugen & Kunst, 2017). Darüber hinaus ist wenig über die Rolle der institutionellen Bedingungen für die Professionalisierung von Lehrpersonen im Sinne des CRT bekannt. Durch die Untersuchung von Schuleigenschaften (z. B. Schulklima) und Eigenschaften von Lehrpersonen (z. B. Akkulturationseinstellungen) trägt die Studie dazu bei, zu verstehen, warum Lehrpersonen sich in Bezug auf kulturell minorisierte Schülerinnen und Schüler mehr oder weniger selbstwirksam fühlen (Geerlings et al., 2018). Die Ergebnisse einer Befragung von 186 Lehrpersonen deuten darauf hin, dass sowohl das wahrgenommene Schulklima der Gleichheit und Inklusion als auch das Klima des kulturellen Pluralismus positiv mit der interkulturellen Selbstwirksamkeit von Lehrpersonen zusammenhängen. Daher ist die Umsetzung von Programmen in Schulen, die ein Schulklima fördern, das den Kontakt und die Zusammenarbeit fördert, aber auch die kulturelle Vielfalt anerkennt, von großer Bedeutung. Die Ergebnisse deuten ferner darauf hin, dass Anstrengungen unternommen werden müssen, um die ablehnenden Einstellungen (z. B. durch Erwartungen der Anpassung an die majorisierte Kultur) von Lehrpersonen zu ändern, damit Vielfalt als Ressource für Schülerinnen und Schüler, aber auch für Lehrpersonen geschätzt wird (Vedder et al., 2006). Insbesondere unterschiedliche Ansätze des Erfahrungslernens, wie etwa Kurse, Mentoring oder Hospitationen, bieten das Potenzial, die Einstellungen von Lehrpersonen gegenüber kultureller Vielfalt zu verändern (Civitillo et al., 2018).

---

[1] Der Begriff "minorisiert" bezieht sich auf Personen, die einer rassisch markierten, kulturellen, sprachlichen oder sozioökonomischen Gruppe angehören, deren begrenzte Macht nicht primär auf eine zahlenmäßige Unterrepräsentation zurückzuführen ist, sondern vielmehr auf gesellschaftliche Strukturen und historische Formen der Unterdrückung, die Ungleichheit und Unrecht systematisch hervorbringen.

2. Forschungsziel

Studie 2 baut auf den Ergebnissen der ersten Studie auf, die nahelegen, dass Anstrengungen erforderlich sind, um die ablehnenden kulturellen Einstellungen und Überzeugungen von angehenden Lehrpersonen zu ändern, indem verschiedene Möglichkeiten des Erfahrungslernens (z. B. Kurse, Mentoring, Hospitationen) genutzt werden. Aufbauend auf den Ergebnissen von Studie 1 untersucht Studie 2, wie gezielte Interventionen zur Professionalisierung von angehenden Lehrpersonen im Sinne des CRT beitragen können. Die zweite Studie untersucht das Identitätsprojekt (Umaña-Taylor & Douglass, 2017), eine unterrichtsbasierte Intervention, die kulturellen Pluralismus sowie Gleichheit und Inklusion fördert und darauf abzielt, Lehramtsstudierende auf CRT vorzubereiten. Die Studie fokussiert Kernkomponenten von CRT, nämlich die kritische Reflexion über Privilegien und Benachteiligungen, Überzeugungen über kulturelle Vielfalt und CRT-Selbstwirksamkeit. Innerhalb der Studie findet ein qualitatives, quasi-experimentelles Design Anwendung, bei dem alle Teilnehmenden ein theoretisches Seminar über das Identitätsprojekt besuchten und anschließend das Identitätsprojekt durchführten (Interventionsgruppe, N = 4) oder regulären Unterricht im Rahmen eines Schulpraktikums im Lehramtsstudium unterrichteten (Kontrollgruppe, N = 4).

Auf der Grundlage der Ergebnisse der thematischen Analyse (Clarke & Braun, 2006) bietet die Studie einen einzigartigen Einblick in die individuellen Entwicklungsverläufe von Lehramtsstudierenden in Bezug auf professionelle Kompetenzen, basierend auf ihrer kritischen Reflexionspraxis, ihrer Entwicklung von Überzeugungen in Bezug auf Vielfalt und ihrer wahrgenommenen CRT-Wirksamkeit. Die Ergebnisse deuten darauf hin, dass das Identitätsprojekt die kritische Reflexionsfähigkeit von angehenden Lehrpersonen verbessert, positive kulturelle Überzeugungen stärkt und die Selbstwirksamkeit im Bereich CRT erhöht. Obwohl die Studie einen Überblick über Veränderungen in der kritischen Reflexion, den Überzeugungen zur kulturellen Vielfalt und der Selbstwirksamkeit im Zusammenhang mit CRT

bietet, können keine fundierten Aussagen über die dynamischen Zusammenhänge zwischen den untersuchten Konstrukten getätigt werden.

3. Forschungsziel

Aufbauend auf den Studien 1 und 2 wurde die Schlussfolgerung gezogen, dass die Einstellungen und Überzeugungen der Lehrpersonen entscheidende Konstrukte für die Professionalisierung im Sinne des CRT sind. Während Studie 2 zeigte, dass gezielte Interventionen die kulturellen Überzeugungen angehender Lehrpersonen beeinflussen, ist das Ziel von Studie 3, die individuellen Prozesse zu untersuchen, die die Veränderung von kulturellen Überzeugungen erleichtern. Mithilfe der konstruktivistischen Grounded Theory Methodology (Charmaz, 2017) wurden die impliziten und expliziten kulturellen Überzeugungen von acht angehenden Lehrpersonen analysiert, um eine Theorie zu entwickeln die Veränderungen dieser erklärt. Die Ergebnisse wurden im Rahmen einer Fallanalyse vorgestellt und deuten darauf hin, dass die Entwicklung kultureller Überzeugungen Weißer Lehramtsstudierender im Zusammenhang mit der Entwicklung ihrer Weißen kulturellen Identität steht. Diese Weiße, kulturelle Identitätsentwicklung von Lehramtsstudierenden wird durch ihre Konzeptualisierung von Kultur, ihre kritische Reflexion über Identität sowie ihre Reflexion über Erfahrungen mit Ablehnung, Diskriminierung und Rassismus geprägt. Die Ergebnisse legen nahe, dass die Lehrer*innenbildung sowohl ein tieferes Verständnis von Kultur fördern sollte, das Macht, Privilegien und Identität einbezieht, als auch Reflexionsmöglichkeiten bietet, um die Rolle kultureller Identität und sozialer Positionierung kritisch zu hinterfragen, insbesondere im Hinblick auf Erfahrungen mit Diskriminierung und deren Auswirkungen auf den Umgang mit Vielfalt im Klassenzimmer.

Ergebnisse und Diskussion

Die Ergebnisse deuten darauf hin, dass die Entwicklung von CRT sowohl bei (angehenden) Lehrpersonen durch ein komplexes Zusammenspiel von kontextuellen, erfahrungsbezogenen und individuellen Bedingungen geprägt ist. Erstens zeigte die quantitative Untersuchung, dass das Schulklima und der Anteil an Schülerinnen und Schülern mit Migrationshintergrund in der Schule wichtige kontextuelle Bedingungen sind, die mit der CRT-Selbstwirksamkeit von Lehrpersonen verbunden sind, insbesondere wenn sie durch ein Klima des kulturellen Pluralismus, der Gleichheit und der Inklusion gekennzeichnet sind. Die qualitativen Ergebnisse deuten jedoch darauf hin, dass Lehramtsstudierende, die in Schulen mit einem hohen Anteil an kulturell minorisierten Schülerinnen und Schülern unterrichten, nicht per se ihre CRT-Selbstwirksamkeit erhöhen oder die Erhaltung der Kultur von Schülerinnen und Schülern befürworten, da solche Erfahrungen in einigen Fällen sogar ablehnende kulturelle Überzeugungen, wie Defizitüberzeugungen verstärken können. Zweitens deuten die Ergebnisse der Interventionsstudie darauf hin, dass Lehramtsstudierende am meisten von Lehrer*innenbildungsprogrammen profitieren, wenn diese reflexives, seminargestütztes Lernen mit strukturierten praktischen Erfahrungen in kulturell vielfältigen Umgebungen kombinieren und so kritische Reflexion, CRT-Selbstwirksamkeit und die wertschätzenden Überzeugungen kultureller Vielfalt fördern. Drittens legen die Ergebnisse nahe, dass die Entwicklung der expliziten und impliziten kulturellen Überzeugungen Weißer angehender Lehrpersonen im Zusammenhang mit der Entwicklung der kulturellen Identität steht, die durch die Art und Weise, wie Kultur konzeptualisiert wird und wie kritisch über Machtdynamiken und über persönliche oder stellvertretende Erfahrungen mit Ablehnung, Diskriminierung und Rassismus bestimmt wird. Zusammengenommen unterstreichen diese Ergebnisse, wie wichtig es ist, erfahrungsorientierte, kritisch reflektierende und auf kulturelle Identität ausgerichtete Lernmöglichkeiten strukturell in die Lehrer*innenbildung einzubeziehen und gleichzeitig ein

kulturell pluralistisches Schulklima zu fördern, um Lehrpersonen effektiv auf CRT vorzubereiten.

Fazit

Im Ergebnis leistet diese Dissertation einen wichtigen Beitrag zur Vorbereitung von Lehrpersonen auf kulturelle Vielfalt, insbesondere im Hinblick auf die begrenzte Auseinandersetzung mit internationalen Diskursen über kulturelle Vielfalt, Diskriminierung und Rassismus im deutschen Kontext. Abschließend betont diese Dissertation die vielschichtige Entwicklung von CRT bei (angehenden) Lehrpersonen und hebt das komplexe Zusammenwirken von kontextuellen, erfahrungsbezogenen und intraindividuellen psychologischen Faktoren und Prozessen hervor. Auf der Grundlage der Analyse quantitativer und qualitativer Daten unterstreicht diese Dissertation die Bedeutung von kontextuellen Bedingungen, wie dem Anteil an Schülerinnen und Schülern mit Migrationshintergrund und dem Schulklima, für die kulturellen Überzeugungen und die Entwicklung der CRT-Selbstwirksamkeit von Lehrpersonen.

Darüber hinaus verdeutlicht die Dissertation, dass der Kontakt mit kulturell vielfältigen Schülerinnen und Schülern allein nicht ausreicht, um Lehrpersonen auf CRT vorzubereiten, da in einigen Fällen sogar defizitäre Überzeugungen verstärkt wurden, wenn der Kontakt nicht mit kritischer Reflexion kombiniert wird. Die Ergebnisse zeigen außerdem, dass die Entwicklung von CRT am effektivsten durch Maßnahmen unterstützt wird, die theoretische Auseinandersetzungen mit Theorien und Konzepten (z.B. Theorie der sozialen Identität) mit Erfahrungs- und kritischen Reflexionsmöglichkeiten verbinden. Insbesondere Lehrer*innenbildungsprogramme, die die Erforschung der Identität, die kritische Selbstreflexion und die Anwendung in praktischen Schulsituationen fördern, können die CRT-Selbstwirksamkeit und die Überzeugungen zur kulturellen Vielfalt bei angehenden Lehrpersonen unterstützen. Die Entwicklung der kultureller Überzeugungen Weißer angehender Lehrpersonen ist eng mit der Entwicklung ihrer weißen kulturellen Identität

verbunden, die durch ihr Verständnis von Kultur, Macht und Erfahrungen mit Ausgrenzung oder Privilegien geprägt ist. Diese Ergebnisse weisen auf die wesentliche Rolle der Identitätsarbeit bei der Vorbereitung von Lehrpersonen auf CRT hin, sowie auf die Notwendigkeit, solche Möglichkeiten strukturell in die Lehrer*innenbildung zu verankern.

1. Introduction

For decades, research has highlighted that educational outcomes in Germany are determined by the socioeconomic and migration background (Edele & Stanat, 2022, OECD, 2023). Empirical educational research identified various causes and mechanisms for unequal educational success and unequal educational opportunities. The main explanations for the reproduction of educational inequality are forms of institutional discrimination (Gomolla, 2021) and institutional racism (Phillips, 2011). Teachers, as part of institutional structures, play a crucial role in either reinforcing or challenging educational inequalities through their pedagogical practices and interactions with students. More recently, studies have shown that diversity-related teachers' attitudes and beliefs can also lead to unequal student outcomes (Makarova et al., 2019; Turetsky et al., 2021). Consequently, the professional development of teachers in the context of cultural diversity has become increasingly important.

Professional development aims to equip teachers with abilities and skills, knowledge, as well as beliefs and attitudes to respond to cultural diversity, enhance their professional judgment, and refine their teaching practices to achieve a greater positive impact on their students (Abacioglu et al., 2022; Hachfeld, 2013; Parkhouse et al., 2019). Although professional development of teachers in Germany has been extensively researched, only a few studies (e.g., Hachfeld, 2013) have examined the professional development of in- and pre-service teachers working in culturally diverse classrooms under varying conditions or considered international debates. The limited engagement with international debates on race is particularly problematic in Germany, where there is a persistent tendency to overemphasize culture while neglecting the development of critical consciousness. The discourse on racism remains limited, as explicit discussions on race are frequently avoided and often regarded as taboo, a tendency that may be rooted in the distinct socio-historical context associating racism with the Nazi ideology (Civitillo et al., 2021; Juang et al., 2021). However, avoiding discussions

on race can perpetuate oppressive structures and contribute to systemic inequalities in social and educational contexts due to a lack of critical engagement with these issues (Neville et al., 2013).

Originating in the United States, Culturally Responsive Teaching (CRT) has emerged as a critical framework for reframing public debates about teaching to challenge power discourses and is considered essential for the professional development of teachers in culturally diverse classrooms, as CRT enhances students' academic achievement, motivation, school belonging, and intercultural competence (see Aronson & Laughter, 2016 for a review). CRT is a multidimensional construct that encompasses curricular content, learning contexts, school and classroom climate, and instructional methods with the goal of integrating the experiences and perspectives of diverse cultural, ethnic, and racialized students in order to teach them more effectively (Gay, 2002, 2015). CRT goes beyond the mere use of diverse teaching methods and requires valuing beliefs from teachers who move away from a deficit perspective on culturally diverse students (Gay, 2015). In this context, critical reflection on the structures and systems that perpetuate privilege and disadvantage in education is particularly important. Thus, CRT offers the opportunity focus on concepts such as ideology, hegemony, resistance, power, knowledge construction, race, and class. Within teacher education research, it has already been shown that teachers who implement CRT can act as agents of change by promoting more equitable educational experiences and improving the academic outcomes of culturally diverse students (Gay, 2015; Vavrus, 2008).

In summary, this dissertation aims to address the research gap regarding the limited examination on the conditions of (pre-service) teachers' professionalization in the sense of CRT in Germany, while incorporating international debates on culture, race, and ethnicity, through the overarching research question: How are contextual conditions and psychological interventions associated with components of pre-service and in-service teachers' CRT?

The aim of this dissertation is to identify the conditions that shape the key components of (pre-service) teachers' professional CRT and to analyze how these components change over time. To address this overarching research question, the dissertation focuses on the following three essential, theoretically derived key components of teachers' professionalization in the sense of CRT: 1) critical reflection, defined as the ability to critically analyze current social realities (Diemer & Li, 2011; Gay, 2002), 2) diversity-related beliefs and attitudes as cognitive concepts that shape how individuals perceive, value, and address cultural diversity and interactions within cultural diverse contexts (Gay, 2015), 3) self-efficacy, i.e., belief in own capability to organize and execute courses of action required to effectively complete a specific task within a particular context (Tschannen-Moran & Hoy, 2001).

Chapter 1 introduces the theoretical framework of this dissertation, describes key components of CRT and refers to previous research in order to derive a conceptual model. Chapters 2, 3, and 4 constitute the empirical part of the present dissertation. Each chapter presents one of three empirical studies based on different data sets containing quantitative, qualitative, and intervention data, which were analyzed using three different methods. In the last chapter (Chapter 6), the results of the empirical studies are discussed.

1.1 Clarifying Terms: A Guide to Terminology

This section outlines the rationale behind the selection of key terms used throughout the dissertation. Due to publication guidelines, it is often challenging to provide definitions for certain terms. The choice of terminology is inherently linked to the theoretical framework of the research and has important implications for how the populations under study are represented and approached. In line with the theoretical perspectives adopted in this thesis, this section clarifies the use of the most important terms, namely culture, ethnicity and race, cultural, groups, cultural and ethnic-racial identity, cultural diversity, culturally diverse students, pre-service and in-service teacher which will appear consistently throughout the chapters.

Culture. Nearly two decades ago, Baldwin et al. (2005) identified over 300 distinct definitions of culture, highlighting the complexity and challenges of its conceptualization. Culture is often conceptualized as a group characteristic, encompassing shared beliefs, symbols, ideals, and behavioral patterns of a particular society (Causadias et al., 2018). Linear models in cultural psychology, such as Berry's (1997) acculturation model, referred to in Chapter 3, have been criticized for conceptualizing culture as static and homogenous (Bhatia, 2007). More recently, Causadias (2020, p. 311) introduced the "p-Model" to define culture as "system of people, places, and practices connected by dimensions and processes, for a purpose such as justifying or resisting power". According to the definition of Causadias (2020), "people" refers to population dynamics, social relationships, and cultural aspects within groups; "places" encompass ecological dynamics, institutional influences, and cultural contexts; and "practices" include participatory processes, community engagement, and culture in action. Although there is a variety of ways to conceptualize culture, there are four aspects in this definition that are particularly important for the current dissertation: 1) culture is transmissible to others, 2) culture is dynamic and changes over time, 3) culture contributes to shaping individual and societal behavior and 4) culture is an expression of power. Culture functions as an expression of power by enforcing the values, norms, and epistemologies of dominant social groups, thereby legitimizing certain forms of knowledge, behavior, and identity, while others are systematically marginalized within institutional and societal structures (Swartz, 2009).

Ethnicity and race. Ethnicity is a social and cognitive construct that enables individuals to identify themselves or be identified by others based on real or perceived common ancestry, shared culture or a collective historical background. Similarly, race is a socially and cognitively constructed framework used to categorize individuals based on perceived physical or biological traits (Roth et al., 2023).

Cultural and ethnic-racial identity. In social psychology, social identity is conceptualized as "the part of an individual's self-concept which derives from his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63). The present dissertation uses the term "cultural identity" when discussing studies conducted in Europe, whereas "ethnic-racial identity" is used for those conducted in the United States, reflecting differences in how ethnicity, race, and culture are understood. Cultural identity encompasses key aspects of an individual's self-concept, including national (e.g., German), regional (e.g., Saxon), ethnic (e.g., Sudeten-German), and religious (e.g., Muslim) affiliations.

Cultural groups. Study 1 adopts terminology of acculturation research, referring to the group of the "majoritized culture" (often termed host culture or majority culture). In acculturation literature, the majoritized culture is often conceptualized as the antithesis of "heritage culture" or "minority culture". In the current dissertation, the term "majoritized culture" is favored over "host culture" as the latter suggests that cultural and ethnic minoritized groups are merely temporary visitors with limited residence rights, which may be discriminatory. "Mainstream culture" typically refers to the numerical majority. However, in the context of using different terms, it is important to recognize that it is not solely defined by numbers as it encompasses social power, including cultural, economic and political authority that shapes norms and influences societal structures. Thus, the term "majoritized" group is used to refer to the group that has historically held political, economic, and social power and is racialized as superior.

Culturally diverse students. In this dissertation, the term "cultural diversity" is used to emphasize its value as an asset and opportunity to foster learning and growth, rather than 'heterogeneity', which in the German context is often associated with challenges that need to be managed (Sliwka, 2010). The term culturally diverse students aims to capture, in a

comprehensive way, all students within a classroom or school. When the term "students of immigrant descent" is used, it refers to students born outside of Germany or those with at least one foreign-born parent (Organisation for Economic Co-operation and Development [OECD], 2023). In this dissertation, the term is often used when presenting statistics or translations from interviews with participants. In contrast, "minoritized students" denotes individuals from racial, cultural, linguistic, or socioeconomic groups whose marginalization stems not only from their numerical minority but from systemic societal structures and historical oppression that sustain inequality and injustice.

Pre-service and in-service teachers. In Germany, teacher education is divided into three distinct phases: 1) a university-based course of study and 2) a subsequent two-year period of practical training in schools ("Referendariat"), both phases are part of pre-service teacher education, and 3) ongoing professional development for in-service teachers (further education and training). In this dissertation, the first empirical study refers to in-service teachers, while studies 2 and 3 refer to pre-service teachers.

1.2 CRT as a Concept for Professionalizing Teachers for Cultural Diversity

Professionalization "involves the development of skills, identities, norms, and values associated with becoming part of a professional group" (Levine, 2001, p. 12146). In the context of teacher education, beliefs and attitudes, knowledge, self-regulation, and motivational orientations are conceptualized as central components of teachers' professional development (Kunter et al., 2013). As classrooms became increasingly culturally diverse, scholars have highlighted the importance of professionalizing teachers and explicitly addressing diversity, cultural responsiveness, and social justice in teacher education (Gay, 2002; Ladson-Billings, 1995; Villegas & Lucas, 2002). To transform schools and educational institutions and ensure that students from various cultural, ethnic, racial, and socioeconomic backgrounds have equal educational opportunities, the concept of multicultural education has been developed (Banks &

Banks, 2004). As an outgrowth of multicultural education, CRT serves as a specific approach for teachers' actions, interactions, reflections, and values when teaching in culturally diverse classrooms. While CRT is conceptualized in various ways, there is a broad consensus that CRT uses students' cultural experiences and knowledge, supports students in maintaining their cultural identities, fosters positive intergroup relationships, and dismantles White power and privilege to promote educational equity and raise students' critical consciousness (Gay, 2002, 2015). CRT encompasses teaching materials, curriculum content, instructional engagements, achievement assessment, as well as classroom climate (Gay, 2018).

According to reciprocal determinism by Bandura (1986), bidirectional relationships exist among a individuals' self-system (which include attitudes and beliefs), actions, and the environment, such that each of these is directly shaped by and shapes the others. In the context of CRT, teachers working in a culturally diverse school setting develop attitudes and beliefs about cultural diversity, which influence their instructional practices and interactions with culturally diverse students. At the same time, these beliefs are reinforced or challenged by the school's policies, leadership, and overall school climate. Thus, implementing culturally responsive practices in daily classroom activities and climate requires teachers with salient qualities: First, teachers require a set of beliefs and attitudes that values cultural diversity and rejects deficit beliefs blaming marginalized students for inequalities they face (Gay, 2013a). Second, if teachers can strengthen their abilities of critical reflection, they may better prepared to implement culturally responsive practices and adjust their beliefs toward social justice (Gorski & Dalton, 2019). Third, teachers' self-efficacy implementing CRT is crucial as high levels of self-efficacy have positive effects on multiple student and teacher outcomes (for a review, see Romijn et al., 2020).

A critical review of qualitative and quantitative studies on trainings with pre-service teachers concluded that CRT is a framework "for best preparing teachers for cultural diversity,

including challenging their beliefs about cultural diversity" (Civitillo et al., 2018, p. 74). A multicultural school climate can serve as an important condition for CRT, shaping teachers' ability and willingness to engage in culturally responsive practices by providing support, trust, and resources to foster equity and inclusion (Knox et al., 2025). A synthesis of qualitative and quantitative research highlights the benefits of CRT, showing that CRT practices are associated with positive student outcomes, such as improved test scores, increased motivation and interest in content, and enhanced ability to engage content area discourses (Aronson & Laughter, 2016). To date, most of the studies on CRT are from the United States. However, a systematic review of CRT in Europe concluded that although research on CRT has increased substantially over the past decade, there is a critical need for improved teacher education programs that focus on supporting teachers in culturally responsive practices (Koukoulidis et al., 2024).

The following sections, research on CRT and its relation to school climate as an essential condition of CRT (Chapter 1.3), diversity-related attitudes and beliefs (Chapter 1.4), critical reflection (Chapter 1.5), and CRT self-efficacy (Chapter 1.6) as important components of CRT are introduced. Chapter 1.7 outlines research on teacher training programs aimed at fostering CRT. Finally, in Chapter 1.8 the specific German (school) context is described, which is important for investigating CRT in Germany.

1.3 The Relation between CRT and School Climate

School climate can be defined as "the shared beliefs, values, and attitudes that shape interactions between students and adults and set the parameters of acceptable behavior and norms for the school" (Wang & Degol, 2016, p. 316). A review of school climate research suggests that school climate is associated with practices and teacher-student relationships (Thapa et al., 2013). Cultural diversity school climate is mainly conceptualized through two approaches addressing cultural diversity in school settings, namely, equality and inclusion, and cultural pluralism (Schachner et al., 2016; Schachner et al., 2021). These approaches often co-

occur and are reflected in school practices, policies, and norms (Thapa et al., 2013; Verkuyten & Thijs, 2013). A climate of equality and inclusion focuses on overcoming group boundaries through positive contact. In this context, teachers are expected to treat all students equally and encourage contact and cooperation between students (Schachner et al., 2016). A cultural pluralism climate focuses on the value of diversity, difference, and pluralism, often termed a multicultural approach.

Culturally minoritized students often navigate cultural, socioeconomic, and linguistic boundaries while adapting to a school climate predominantly shaped by the norms and practices of the culturally majoritized group (Horenczyk & Tatar, 2012). Research suggests that a perceived climate of equality and inclusion is associated with students' orientation toward the culturally majoritized culture, lower prejudice and discrimination, and generally more positive intergroup experiences amongst students (Schachner et al., 2016; Schachner et al., 2021; Schwarzenthal et al., 2018). On the other hand, the support for a cultural pluralism climate was found to foster positive identification with and stronger orientation to the minoritized culture (Brown & Chu, 2012; Schachner et al., 2016). While both perceptions of equality and inclusion, as well as cultural pluralism, were linked to positive student outcomes (e.g., students' intercultural competence, school belonging), too much emphasis on equality and downplaying differences may promote a colorblind approach, potentially hindering students of culturally minoritized groups from utilizing their cultural identities as valuable resources for psychological well-being (Schachner, 2019; Schwarzenthal et al., 2019).

Although school climate has traditionally been studied as a factor of student outcomes, school climate is also crucial for understanding how teachers act within an educational environment (Aldridge & Fraser, 2016). Through culturally responsive practices, teachers may contribute to a classroom climate that supports students in their acculturation, supporting them to learn about cultures, appreciate cultural diversity, collaborate, and treat each other equally.

A study in the United States suggests a bidirectional relationship between school climate and teachers' culturally responsive practices, as a supportive and inclusive school climate can enhance teachers' ability and willingness to implement culturally responsive practices, while these practices, in turn, contribute to fostering a positive school climate (Knox et al., 2025). As described previously, promoting equality and inclusion can lead to a colorblind approach, which has been linked to lower levels of awareness of cultural diversity among teachers and lower self-efficacy in culturally sensitive teaching (Wang et al., 2014; Cadenas et al., 2021). To date, only a few studies have investigated the relationships between cultural diversity in school climate and teacher outcomes. Particularly, there is limited evidence on how school climate is associated with key components of CRT, such as self-efficacy and cultural diversity-related beliefs and attitudes (Ialuna et al., 2024; Knox et al., 2025). Therefore, Chapter 2 will focus on the association between school climate, acculturation attitudes, and CRT efficacy through an empirical study.

1.4 The Relation between CRT and Critical Reflection

Drawing on educational inequalities, there is increasing attention to the role of oppressive and discriminatory structures in the education system (e.g., ethnocentric curriculum, school tracking decisions) in shaping students' academic achievement (El-Amin et al., 2017; Kolluri & Tichavakunda, 2023). In this context, teachers' critical reflection is a central characteristic of CRT as teachers may introduce theoretical frameworks for understanding oppression, increase students' awareness of racism and anti-racism, encourage connections between the oppression faced by different groups, and create opportunities for students to educate each other about social inequities (Seider et al., 2018; Schwarzenthal et al., 2022). Critical reflection is defined as the "ability to analyze current social realities critically, and recognize how historical, social, economic, and political conditions limit access to opportunity and perpetuate injustice" (Godfrey & Rapa, 2023, p. 2).

As CRT is rooted in the belief that all students deserve access to high-quality education, culturally responsive teachers hold high expectations for every learner while recognizing that achievement is often shaped by the opportunities and supports available to them. Thus, culturally responsive teachers do not attribute responsibility for academic failure to students and their families, but question structures and systems that perpetuate privileges and disadvantages (Diemer et al., 2016; Gorski & Dalton, 2019; Russell, 2020). Although addressing educational inequity in schools is crucial, many teachers, who often belong to the culturally majoritized group, avoid discussing issues such as social inequity and power dynamics in the classroom (Sincer et al., 2019). To foster students' critical reflection, teachers must first develop this awareness themselves (Schwarzenthal, et al., 2022b). Intersectionality provides a valuable framework for critical reflection and emphasizes that dimensions (such as ethnicity, culture, race, gender, and sexual orientation) that perpetuate injustices do not exist in isolation. Instead, multiple interconnected systems of oppression interact to shape the diverse experiences of marginalized individuals and groups (Godfrey & Burson, 2018). Applying the concept of intersectionality may enable teachers to critically reflect on the complexity of identity and inequality across multiple, intersecting dimensions.

Critical reflection is one of three central components of critical consciousness, a concept that is defined as the process of "learning to perceive social, political, and economic contradictions and to take action against the oppressive components of reality" (Freire, 2018, p. 119). The body of research on critical consciousness indicated that critical consciousness is a multidimensional construct (Diemer et al., 2016) consisting of the three components of critical reflection, political efficacy (i.e., a personal sense of confidence in bringing about social and political change), and critical action (i.e., a commitment to take action against injustices) (Jemal, 2017). The relationship between reflection and action is described as reciprocal, cyclical, or transitive, as more reflection leads to more action and vice versa (Bañales et al.,

2020; Jemal, 2017; Watts et al., 2011). Research indicates that critical reflection on power dynamics and educational inequalities enhances teachers' cultural awareness and can promote beliefs that value cultural diversity (Acquah & Commins, 2015; Calleja, 2014).

Several authors emphasize the need to develop reliable measures for critical reflection, as existing quantitative measures are often abstract and based on ideological perspectives (e.g., egalitarianism) rather than examining how critical reflection occurs in relation to specific topics (Hope & Bañales, 2019). Therefore, qualitative research contributed to the development of different frameworks to assess the quality of critical reflection. In qualitative studies, some authors (e.g., Hope & Bañales, 2019) distinguish between individual and structural attributions in critically reflecting privileges and disadvantages, while others (e.g., Godfrey & Wolf, 2016; Hershberg & Johnson, 2019) add a further category of fatalistic attribution. Individual attribution involves attributing privileges and disadvantages to individual characteristics or circumstances. For instance, individuals may attribute success or advantages to ability, motivation, or talent, while they attribute disadvantage to lack of effort or willingness. In contrast, structural attributions refer to structural causes. For instance, inequalities are explained by analyzing the broader social, economic, and institutional factors contributing to unequal distribution of privilege and disadvantage across groups. Fatalistic attributions refer to factors beyond an individual's control, such as bad luck or fate.

Although many studies use quantitative measures to assess critical reflection as a subscale of critical consciousness (Diemer et al., 2015; Diemer et al., 2016) or focus on students' critical reflection (Diemer et al., 2017), there is little research on teachers, particularly on the depth and quality of their critical reflection and how these abilities develop through teacher education. Therefore, the empirical study in Chapter 3 will focus on the development of pre-service teachers' critical reflection through interventions. In the empirical study in Chapter 4,

critical reflection will be explored as a mechanism for changing teachers' cultural diversity beliefs.

1.5 The Relation between CRT and Teachers' Cultural Diversity-related Attitudes and Beliefs

In social psychology, the construct of beliefs lacks a unified terminology and often uses various terms, including attitudes, ideology, perceptions, conceptions, dispositions, implicit and explicit theories, personal theories, and internal mental processes (Pajares, 1992). This lack of standardized terminology limits the comparability of findings and makes it challenging to integrate them into a broader theoretical framework. In this dissertation, the term "attitude" is adopted in the tradition of acculturation research and defined as the tendency to evaluate a "particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). Such an entity can include a person, group, object, political party, activity, or school subject. In contrast, teacher beliefs are defined as individual cognitive conceptions articulating values and behaviors, which may "influence instructional choices and teaching practices, and potentially determine when, why, and how teachers interact with students" (Hoffman & Seidel, 2014, p. 106). The sum of beliefs about an entity forms the attitude of an individual (Pajares, 1992). For instance, a teacher endorsing critical multiculturalism rejects the reinforcement of stereotypes and advocates for addressing educational inequities in the classroom. The sum of these valuing cultural diversity beliefs may lead to positive attitudes towards culturally diverse students.

Research distinguished implicit (unconscious or tacit) and explicit (consciously perceived and expressed) attitudes and beliefs (Fives & Buehl, 2012; Pit-ten Cate & Glock, 2019). Fives and Buehl (2016) propose that implicit beliefs are a fundamental aspect of teacher behavior, shaping the interpretation of teaching experiences without conscious awareness. According to Bandura's theory of triadic reciprocal determinism (1997), both explicit and implicit beliefs and attitudes interact dynamically and reciprocally with behavior and

environmental factors. This means that teachers' self-efficacy, attitudes, and beliefs shape their instructional practices, which in turn affect the instructional environment and student outcomes, ultimately reinforcing or reshaping their initial beliefs. Therefore, teachers' attitudes and beliefs about cultural diversity are both problematic and promising, as they have a profound impact on learning opportunities (Gay, 2014). As cultural diversity-related attitudes and beliefs significantly influence how teachers approach diversity and inclusion in the classroom, and will be explored in detail in the following sections (Gay, 2014). In this context, this dissertation will investigate the relationship between self-efficacy and professional development through teacher education, as well as the conditions that facilitate meaningful change in these attitudes.

In the following Chapters (1.5.1 and 1.5.2) research on cultural diversity-related attitudes and beliefs will be analyzed to identify research gaps. The chapters form the theoretical basis for the empirical studies presented in Chapters 2-4. While Chapter 2 refers to acculturation attitudes as the central construct of Study 1, Chapter 3 and 4 refer to cultural diversity beliefs, which were investigated in Studies 2 and 3.

1.5.1 Teachers' Acculturation Attitudes

Acculturation is defined as the psychological consequences of regular intercultural contact (Berry, 2003). Acculturation research has developed a variety of conceptual and methodological frameworks for the empirical investigation of acculturation (Sam & Ward, 2021). In the tradition of acculturation research, acculturation attitudes are investigated within an acculturation framework that encompasses acculturation conditions and outcomes (Arends-Toth & van de Vijver, 2006; Berry, 2017b). Existing interactive acculturation models (Bourhis et al., 1997; Navas et al., 2005) are largely based on power dynamics, conceptualizing the acculturation attitudes of members of the culturally majoritized group as expectations toward culturally minoritized group members who are viewed as acculturators adapting to a given context through various acculturation orientations and strategies.

Berry (2003) introduced a conceptual framework of acculturation, consisting of two main dimensions: 1) whether the maintenance of cultural identity is advocated, and 2) whether intergroup relations and participation in a shared society are sought. The combination of these two dimensions leads to four acculturation strategies: integration (high maintenance and high contact), assimilation (low maintenance and high contact), separation (high maintenance and low contact), and marginalization (low maintenance and low contact) (Berry, 2003). According to Bourhis et al. (1997) acculturation attitudes of culturally majoritized members encompass either support for cultural maintenance or expectations of cultural adoption. Over the past forty years, research has made substantial progress in understanding acculturation processes. To date, most of the research conducted so far has predominantly focused on the attitudes of the culturally minoritized group (Egitim & Akaliyski, 2024; Zagefka et al., 2023). However, research on teachers, who often belong to the culturally majoritized group, remains limited, even though they play a key role in students' acculturation by introducing the new culture, mediating intercultural interactions, and shaping the conditions of acculturation in school settings (Egitim & Akaliyski, 2024; Sidler et al., 2022).

Teachers' acculturation attitudes play a crucial role in implementing CRT, as CRT emphasizes maintaining students' ethnic-cultural identities in the classroom rather than expecting them to adopt to the culturally majoritized group (Gay, 2015). According to the contact hypothesis (Allport, 1954), increased opportunities for intercultural interactions can reduce prejudice and foster positive attitudes toward cultural groups that do not belong to the culturally majoritized group, but this occurs under certain conditions: These conditions include intergroup contact, cooperation to reach superordinate goals, equal status, and institutional support (Allport, 1954).

An integrative review of qualitative research on acculturation summarizes that teachers' acculturation attitudes can be considered both as risk and resource factors, as they influence

outcomes for teachers and students (Makarova et al., 2019): Within the framework of CRT, teachers' integrative acculturation attitudes may be seen as a supportive factor, as they contribute to effective classroom management in culturally diverse settings and promote a sense of integration among students of culturally minoritized groups within the school, and are associated with high levels of diagnostic expertise in social areas (Makarova & Herzog, 2011, 2013). However, teachers (who mainly belong to the culturally majoritized group) often hold expectations for cultural adoption to socialize their culturally minoritized students into the culture of the culturally majoritized group and to prepare them for their future (Van Praag et al., 2016). Teachers' expectations for cultural adoption contrast with CRT, which prioritizes the recognition and integration of culturally diverse identities within an educational framework. Research suggests that teachers' expectations for cultural adoption have negative consequences for both students and teachers, as they are associated with lower teacher self-efficacy, an increased tendency to punish culturally minoritized students for misbehavior, and a reduced ability to diagnose social tensions among students (Makarova & Herzog, 2013; Tatar et al., 2011). Given the limited research on teachers' acculturation, applying an acculturation framework to teachers may be particularly valuable for understanding how teachers can be prepared for CRT. Such an acculturation framework offers insights into the conditions and outcomes of teachers' acculturation attitudes, a key component of CRT.

1.5.2 Teachers' Cultural Diversity Beliefs

In educational contexts, three diversity approaches dealing with cultural diversity can be identified, namely valuing cultural diversity, ignoring cultural diversity or rejecting cultural diversity (Celeste et al., 2019; Hagenaars et al., 2023). Teachers may tend to hold beliefs that are in line with one approach, valuing or ignoring cultural diversity, or combine components of both (Civitillo et al., 2019; Hachfeld et al., 2015). Studies indicate that even within the same schools, teachers may vary significantly in how they address culture and cultural diversity

(Agirdag et al., 2016; Vervaet et al., 2018). Thus, teachers should not be viewed as passive participants who simply implement diversity approaches based on external expectations set by the curriculum, school policies, educational cultures, or headteachers (Hagenaars et al., 2023). When teachers make pedagogical decisions about incorporating cultural diversity into daily classroom activities and the overall classroom climate, they are guided by their beliefs, which are often implicitly and explicitly derived from discourses and idealized values of the culturally majoritized group (Baggett, 2020; Wenzel, 2017).

In the context of CRT, teacher beliefs are conceptualized as central constructs and CRT implies a "positive belief paradigm" (Gay, 2002, 2010). While several quantitative instruments, such as the Teacher Cultural Beliefs Scale (Hachfeld et al., 2011) and the Diversity Teaching Beliefs Scale (Thijs et al., 2025), already exist to measure these beliefs, there is a notable lack of qualitative research that allows for deeper, more nuanced exploration of the teacher beliefs. Addressing this gap is crucial because qualitative methods can reveal complex, context-specific understandings that standardized surveys might miss, ultimately leading to a richer, more comprehensive understanding of teachers' development of cultural diversity beliefs (Hachfeld et al., 2011; Rissanen et al., 2023). Some qualitative approaches already exist to investigate teachers' cultural diversity beliefs through case studies and interviews (e.g., Civitillo et al., 2019; Hagenaars et al., 2023). Despite the central position of cultural diversity beliefs in CRT, research on the conditions affecting cultural diversity beliefs in the German context remains limited, particularly concerning when and why teachers develop and change CRT beliefs.

In general, teachers' cultural diversity beliefs are considered as susceptible to change through interactions and experiences with diverse individuals and contexts, as well as professional training and teaching practice (see Civitillo et al., 2018 for a review). Beliefs may vary in stability, with long-standing and deeply ingrained ones, such as moral values learned in childhood, tending to remain stable, while more recently acquired beliefs, such as opinions

formed through a college course, are generally less stable and more open to change (Fives & Buehl, 2012). However, as beliefs are consistently reinforced by repeated environmental confirmation, beliefs become increasingly ingrained over time. Intercultural interactions are recognized as an important factor in teachers' development of valuing cultural diversity. In particular, four key factors appear to promote positive change in teachers' cultural diversity beliefs: 1) contact to culturally diverse individuals (e.g., friendships); 2) education (e.g., school and university); 3) travel (e.g., vacationing, studying abroad); 4) personal experience with discrimination as a child or an adult (Garmon, 2005; Smith et al., 1997). Research on the development and change of teachers' cultural diversity through teacher training programs is addressed in Chapter 1.7. To date, most of the existing studies on teacher beliefs do not explicitly address the distinction between implicit (unconscious or tacit) and explicit (consciously perceived and expressed) beliefs as suggested by Fives and Buehl (2012).

In the following, research on valuing, ignoring, and rejecting cultural diversity beliefs will be presented. Addressing the research gap of limited qualitative research on teachers' cultural diversity beliefs, the current dissertation addresses the described research gap. While Chapter 3 focuses on an intervention study of teacher education programs and the associated development in explicit cultural diversity beliefs, Chapter 4 refers to the conditions facilitating changes in teachers' explicit and implicit cultural diversity beliefs.

1.5.2.1 Valuing Cultural Diversity Beliefs

Valuing cultural diversity is in line with the concept of CRT and is a key characteristic of cultural pluralism (Civitillo et al., 2017; Schachner et al., 2016). Cultural pluralism, also termed multiculturalism (Hachfeld et al., 2012), emphasizes the explicit recognition and appreciation of diversity and differences within the school environment (Rosenthal & Levy, 2010). Teachers holding cultural pluralism beliefs understand diversity as a valuable resource

and promote an educational environment that values students' cultural backgrounds and perspectives, e.g., by supporting students' home language.

A qualitative study in Germany, using video-recorded classroom observations and post-observation interviews, revealed that teachers who practice CRT hold multicultural beliefs (Civitillo et al., 2019). Quantitative research revealed that cultural pluralism is associated with numerous positive student outcomes, such as more positive peer interactions, reduced drop-out rates, and achievement gaps in schools (Celeste et al., 2019; Smith et al., 2020). Moreover, cultural pluralism is associated with reduced teachers agreement with stereotypes, leads to more positive intergroup attitudes, mitigates the negative impact of cultural misunderstandings between teachers and students, and leads to fewer experiences of teacher discrimination (Baysu et al., 2021). However, if too much emphasis is placed on multiculturalism, it can lead to more stereotyping and greater perceived differences between groups (Ryan et al., 2010; Wolsko et al., 2006). Critical multicultural beliefs are another form of valuing cultural diversity, going beyond appreciating differences by recognizing educational inequalities reinforced in schools through power relations and understanding teaching within a broader sociopolitical context (Gorski, 2009). Research in the United States on racially minoritized students has shown that educating students about societal inequality fosters the development of critical consciousness while also enhancing student achievement and engagement (Carter, 2008; El-Amin et al., 2017).

1.5.2.2 Ignoring Cultural Diversity Beliefs

Ignoring cultural diversity, also termed color-evasiveness, is a perspective that argues that culture, ethnicity, and race are irrelevant (Neville et al., 2000). Ignoring cultural diversity beliefs manifests in distinct approaches, each emphasizing different ways of downplaying racial and cultural differences (Civitillo et al., 2021; Guimond et al., 2014). Teachers who support individualism center the individual by focusing on personal efforts and abilities, ignoring the

educational inequalities between various social and cultural groups. Individualism is related to meritocratic beliefs that assume that success and opportunities, such as educational success, are the result of individual talent, effort and hard work. However, the belief in meritocracy neglects how families' socioeconomic status affects students' academic achievement, therefore, teachers' belief in meritocracy is related to a lack of awareness of culture-related privileges (Ho, 2020; Wang et al., 2014).

Another distinct form of ignoring cultural diversity is the belief in treating all students equally. Equal treatment can lead to increased positive intergroup contact, buffer stereotype threat and perceived discrimination, and protect the academic achievement of students of cultural minorities (Baysu et al., 2016; Karataş et al., 2023b). Some teachers equate the explicit recognition of cultural differences with discrimination or racism, which leads them to emphasize similarities between groups and to downplay cultural differences in an effort to reduce the perceived negative consequences of diversity and to prevent discrimination (Park & Judd, 2005). Research in Germany indicated that beliefs of stressing similarities are associated with lower willingness of teachers to adapt their teaching to culturally diverse students (Hachfeld et al., 2015).

1.5.2.3 Rejecting Cultural Diversity Beliefs

Rejecting cultural diversity is contrary to the concept of CRT as negative beliefs about cultural diversity produce detrimental teaching and learning behaviors (Gay, 2013b; Harlin et al., 2009). One teacher belief that reflects a rejection of cultural diversity is the endorsement of deficit beliefs, which assume that students who differ from the culturally majoritized group, such as those from culturally minoritized groups, groups of lower socioeconomic status, or those who speak the national language as a second language, possess inherent deficiencies. These beliefs often lead to lowered expectations for these students. Deficit thinking stems from an ethnocentric perspective that assumes the beliefs and norms of the culturally majoritized

group are inherently correct. In the deficit thinking model, teachers assume that students fail in school due to a lack of ability, linguistic inferiority, or family dysfunction, instead of structural barriers such as school system or school policies (Dray & Wisneski, 2011; Garcia & Guerra, 2004). Consequently, teachers' deficit beliefs tend to interpret sociocultural and linguistic differences as issues originating in the family home, diminishing educators' influence over these aspects (Nelson & Guerra, 2014). Research indicated that deficit beliefs held by teachers have a negative effect on student achievement, as these beliefs affect their willingness to engage and challenge students of culturally minoritized groups (Sleeter, 2008).

Due to deficit beliefs, teachers may also have expectations regarding assimilation into the culturally majoritized group. Assimilation beliefs reflect a positive orientation toward the culturally majoritized group and expects the adaption culturally majoritized norms, values, language or religion. For instance, teacher working in cultural diverse schools can endorse monolingualism or a headscarf ban (Pulinx et al., 2017). Research suggests that assimilation relates to negative effects on culturally minoritized students, as it can increase stereotyping, peer rejection, negative attitudes toward the outgroup, and feelings of alienation (Celeste et al., 2019; Pulinx et al., 2017; Schachner et al., 2016; Verkuyten, 2011). On the side of teachers, assimilation beliefs are associated with a high risk of diversity-related burnout, leading teachers to report lower levels of CRT efficacy (Gutentag et al., 2018b; Tatar et al., 2011).

1.6. The Relation between CRT and Teachers' Diversity-related Self-efficacy

According to Bandura's social cognitive theory (1977), self-efficacy refers to an individual's judgement of capability to perform a particular action. Teachers' sense of self-efficacy has been defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Teaching efficacy encompasses two components: 1) outcome expectancy and 2) self-efficacy. Outcome expectations refer to the teacher's belief that their teaching can positively influence student

learning outcomes despite external influences. In contrast, self-efficacy reflects an internal locus of control and the belief that teachers' perception of their ability to achieve personal teaching goals (Tschannen-Moran & Hoy, 2001).

The relationship between teachers' self-efficacy and practice is described as reciprocal and self-efficacy beliefs can function as self-fulfilling prophecies: When teachers perceive their teaching as successful, their self-efficacy is strengthened, which in turn reinforces their expectations of future success (Tschannen-Moran & Hoy, 2007). Consequently, teachers' self-efficacy is a theoretical construct that is particularly relevant as it is one of the most important beliefs influencing teachers' professional behaviors (Durksen et al., 2017). A review of forty years of research has found that teachers' self-efficacy is positively related to numerous educational outcomes, such as students' academic adjustment, classroom quality and teacher behavior and practices (Zee & Koomen, 2016). For instance, teachers with higher levels of self-efficacy show a greater level of planning and organization, are more constructive in dealing with mistakes of their students, more satisfied in their profession, more persistent in the face of difficulty and less likely to experience burnout (Gutentag et al., 2018; Vieluf et al., 2013). In conclusion, teachers with higher self-efficacy tend to be more successful than those with lower self-efficacy. However, Wheatley (2002) argued that self-efficacy doubts can also be beneficial, given that meaningful learning and improvement often arise from doubts and critical self-reflection.

Teachers' self-efficacy is shaped by teachers' personal characteristics (e.g., teaching experience) but also by classroom characteristics (e.g., performance level) and school and principal characteristics (e.g., school climate, work experience of the principal) (Fackler & Malmberg, 2016). Another central characteristic of Bandura's (1997) concept of teachers' self-efficacy is its contextual and domain specificity, meaning that individuals may have varying levels of self-efficacy beliefs depending on the specific behavioral context and domain.

However, context- and domain-specific aspects of self-efficacy, such as teachers' self-efficacy in teaching culturally diverse classrooms and implementing CRT, are rarely considered in teacher education, particularly in the German context (Schwarzenthal et al., 2022a).

CRT efficacy is defined as a teacher's belief in the own ability to implement culturally responsive practices by supporting all students academically, designing relevant lessons, fostering school-family relationships, and creating an inclusive classroom climate (Siwatu, 2007). CRT efficacy is a crucial aspect of CRT, as teachers with high CRT efficacy can support students in understanding sociopolitical issues and questioning existing social inequality and injustice by bridging home and school culture (Banks & Banks, 2004; Gay, 2002; Ladson-Billings, 1995). However, teachers often feel unprepared for the challenges of a culturally and linguistically diverse setting and lack confidence in adapting their teaching to culturally diverse students (OECD, 2019).

In quantitative studies, a number of instruments have been developed to measure teachers' efficacy in culturally diverse educational settings, such as the Multicultural Efficacy Scale (Guyton & Wesche, 2005), the Measurement of Immigration-Related Self-Efficacy (Tatar et al., 2011), the CRT Self-Efficacy Scale (Siwatu, 2007) and Culturally Responsive Classroom Management Self-Efficacy Scale (Siwatu et al., 2015).

A mixed-method study by Siwatu (2011) using CRT Self-Efficacy Scale and in-depth interviews, suggested an association between teacher efficacy and CRT practices. Similar findings were revealed in a quantitative study conducted by Romijn et al. (2020) in four European countries, which found that diversity-related beliefs are positively associated with intercultural teaching practices. A study by Civitillo and colleagues (2016) adapted the Culturally Responsive Classroom Management Self-Efficacy Scale (Siwatu et al., 2015) for German-speaking countries. Compared to the original questionnaire's single-factor structure by Siwatu et al. (2015), the adapted version demonstrated a better model fit with a two-factor

structure (factor 1: adjustments to teaching and relationships; factor 2: cooperative learning) and suggests that pre-service teachers have less efficacy in the implementation of strategies of dealing with students' cultural backgrounds than in the implementation of cooperative learning techniques (Civitillo et al., 2016). Further studies suggest that a teacher's self-efficacy varies when the teacher assesses the demands of a task and the context in which it takes place while evaluating self-efficacy. Qualitative and quantitative studies in the United States have shown that pre-service teachers, who often belong to the culturally majoritized group, have low self-efficacy in CRT, largely due to doubts about their ability to connect instruction to students' home lives, including their language and culture (Cruz et al., 2020; Siwatu et al., 2016).

Research suggests that individual experiences and contextual factors may explain varying levels of CRT efficacy. For instance, research shows that the duration of teaching experience and certain individual experiences such as teacher mobility are positively associated with teachers' CRT self-efficacy (Cruz et al., 2020; Mahon & Cushner, 2002; Schwarzenthal et al., 2023). Moreover, research suggests that teachers in schools with a high proportion of culturally minoritized students and a strong multicultural climate feel more efficacious in working with culturally minoritized students (Geerlings et al., 2018; OECD, 2019; Schwarzenthal et al., 2023). However, Ialuna et al. (2024) found no relationship between when considering also students' perspectives in a multi-informant study. This gap leads to the first research aim to investigate the relation between school climate and teachers' self-efficacy working with culturally diverse students.

Bandura (1997) proposes a theory that both mastery and vicarious experiences serve as powerful sources for developing self-efficacy. Thus, for (pre-service) teachers, opportunities to engage in CRT through coursework and practice (mastery experiences) and observation (vicarious experiences) ideally occur during field experiences in culturally diverse classrooms. The role of teacher training in relation to CRT efficacy is addressed in Chapter 1.7.

Despite the increasing importance of CRT efficacy in teaching culturally diverse students, research on the conditions affecting CRT efficacy in the German context remains limited, particularly concerning when and why pre-service teachers develop doubts about their CRT efficacy, and it evolves through teacher training. Therefore, quantitative research is needed to investigate the factors of teachers' CRT efficacy, while qualitative research could provide deeper insights into the experiences and perceptions that shape pre-service teachers' doubts about CRT efficacy and explore how teacher training relates to the development of CRT efficacy over time.

1.7 Teacher Training targeting CRT

The significance of teacher preparation is particularly highlighted in the 2018 TALIS report, which found that over 50% of teachers in participating countries felt unprepared for the challenges of multicultural classrooms and lacked confidence in adapting their instruction for culturally diverse students (OECD, 2019). Therefore, it is necessary to better prepare teachers to effectively meet the needs of their culturally and linguistically diverse students (Koukoulidis et al., 2024). In recent decades, a wide range of teacher training programs have been developed that aim to investigate several dimensions of cultural diversity in education. A critical review of 36 teacher training programs using a longitudinal design concluded that CRT offers "a framework for best preparing teachers for cultural diversity" (Civitillo et al., 2018, p. 74).

However, the majority of teacher training programs focused on specific aspects of CRT, such as teacher beliefs, and exhibited methodological limitations, including the absence of comparison groups and longitudinal assessments (Civitillo et al., 2018). Most of the existing studies focused on teacher beliefs about culturally diverse students and their families and culturally sensitive teaching practices or approaches, while only a few studies focused on teacher beliefs about cultural context and environment and cultural self-efficacy beliefs (Civitillo et al., 2018).

Some studies report an increase in CRT self-efficacy through teacher training (Cruz et al., 2020; Fitchett et al., 2012). In general, both mastery and vicarious experiences are considered as central in increasing teachers' self-efficacy (Bandura, 2002). For pre-service teachers, this means that actively practicing and observing CRT in diverse classrooms, especially during field experiences, can effectively increase pre-service teachers' CRT efficacy (Bravo et al., 2014). Moreover, structured support and positive feedback from supervisors and cooperating teachers are considered important for developing pre-service teachers' self-efficacy and preparing them for CRT (Koukoulidis et al., 2024; Moulding et al., 2014).

Studies investigating teacher training programs reported positive effects on teachers' cultural diversity beliefs if pre-service teachers had opportunities for experiential learning in culturally diverse settings and self-reflection (e.g., Kyles & Olafson, 2008; Sanders et al., 2014, Han, 2016). According to the contact hypothesis (Allport, 1954), positive contact experiences between pre-service teachers and culturally diverse students have the potential to foster positive intergroup attitudes, deconstruct pre-service teachers' prejudices and dismantle deficit beliefs. According to transformative learning theory, the practice of reflection serves as a tool that encourages teachers to question their beliefs and behaviors (Christie et al., 2015; Mezirow, 2003). Research on teacher education suggests that reflection on daily teaching practices helps teachers support minoritized students, interrogate their attitudes, beliefs, and values, and reduce deficit perspectives toward students, thereby preparing culturally responsive teachers (Gorski & Dalton, 2019; Ross, 2008; Saito & Khong, 2017). In the context of CRT, critical reflection on positionality, power, inequalities and privileges is necessary to understand how these issues shape perspectives and actions, ultimately enabling CRT to be effectively implemented through classroom behaviors and practices (Gorski & Dalton, 2019). However, critics argue that personal approaches to critical reflection, such as reflective diaries, pose the risk of students becoming overly self-critical, excessively cynical, isolated in their thinking, or too focused on

themselves (Alvesson & Sköldberg, 2000; Boud & Walker, 1998; Finlay, 2002; Aron, 2000; Weick, 1999). In the context of teacher training, this could result in students disengaging or becoming excessively introspective, placing greater emphasis on self-examination rather than actively engaging with broader structural issues (Smith, 2011). Critical reflection involves not only looking back and reflecting on one's actions and identity, but also looking forward and developing a vision of the identity one aims to be, which is essential in becoming a culturally responsive teacher (Juang & Hwang, 2024).

Therefore, there is a call in teacher education to support (white[2]) teachers in developing an anti-racist identity to enhance their pedagogical practice and effectively implement CRT in schools (Priester-Hanks, 2023). White racial development is considered as a process that may take a lifetime, making it crucial to examine even as White pre-service teachers begin their careers (Helms, 1995). Helms (2014), describes the development of an anti-racist identity as a fluid, non-linear process involving different schemata that shape how White individuals perceive race, culture, and their own racialized experiences. The proposed White racial identity model consists of six schemes with two phases. The first phase includes 1) contact, characterized by a lack of awareness of racial identity and the belief that ethnicity is only relevant for minoritized groups; 2) disintegration, where individuals recognize whiteness and racism, leading to guilt, anxiety, and moral conflict about White privilege; and 3) reintegration, characterized by the idealization of whiteness and a defensive position toward racial issues. The second phase begins with 4) pseudo-independence, in which individuals intellectually acknowledge White privilege without engaging in critical self-reflection or personal responsibility. This is followed by (5) immersion/emersion, where individuals actively explore

---

[2]   White refers to a socially constructed racial category that identifies people as part of the dominant group, historically positioned to hold social, cultural, and institutional power within racial hierarchies. White refers to a socially constructed racial category that identifies people as part of the dominant group, historically positioned to hold social, cultural, and institutional power within racial hierarchies. Although race is not based on biology, it has significant social consequences, as it emerged to differentiate groups and justify systems of privilege, power, and exclusion, and remains deeply embedded in societal structures (Halley et al., 2022).

systemic racism and begin unlearning internalized biases. The final stage, (6) autonomy, represents the development of a positive, anti-racist White identity. In summary, teachers' critical reflection on privileges and disadvantages, can be a first step towards promoting White cultural identity development which in turn can lead to a change in beliefs, e.g. toward valuing, critical multicultural beliefs (Acquah & Commins, 2015; Calleja, 2014). The next chapter presents the Identity Project, a teacher training program, which aims to promote pre-service teachers' White cultural identity development.

1.7.1 The Identity Project

Based on theoretical perspectives from CRT and empirical research on effective teacher training, a teacher training program was originally developed in the United States (Umaña-Taylor & Douglass, 2017) and later adapted in Germany (Juang et al., 2020) and other European countries (Juang et al., 2022). The Identity Project was originally designed to encourage students in school to explore and gain a deeper understanding of both their own and their classmates' cultural identities within broader societal contexts (Umaña-Taylor & Douglass, 2017). In teacher training, the Identity Project seminar was implemented as a one-semester course in the regular seminar format, consisting of eight sessions including activities centered on cultural identity, along with discussions on related themes such as intergroup relations, acculturation, stereotypes, racism and intersectionality aimed to prepare pe-service teachers for CRT. To enhance understanding of the Identity Project activities, theoretical insights from education, psychology, and sociology were provided (see Table 1 and for detailed descriptions, see Juang et al., 2020). A quasi-experimental mixed-methods study conducted in Germany with 606 pre-service teachers found that those who participated in the Identity Project Seminar (intervention group) became more confident for interacting with culturally diverse students and engaging in culture-related conversations than those in the control group (Pevec-Zimmer et al., 2024). However, participants in the intervention group did not show significant differences in

changes over time regarding confidence in treating all students equally, beliefs about the importance of including diversity in the curriculum, deficit thinking about minoritized students, bias awareness, and concern for appearing racist. To date, studies have not investigated the implementation of the Identity Project in classrooms as part of a teacher training program.

Table 1

Themes of the Sessions in the Identity Project Seminar

	Themes of the Identity Project Seminar
1	Introduction to the seminar
2	Thematic introduction to the seminar: Relevance of themes for teachers
3	Project session 1 – Introduction to the Identity Project – Cultural Identity
4	Project session 2 – Social Identity Theory – Intergroup Relations
5	Project session 3 – One's own cultural identity
6	Project session 4 – Migration and Acculturation
7	Project session 5 – Family cultural socialization
8	Project session 6 – Stereotypes, prejudices, and discrimination
9	Project session 7 – Information about the Digital Stories (final assignment)
10	Project session 8 – Diversity, Culture, and Justice for Everyone
11	Racism and Intersectionality
12	Social Justice Perspective and Equity
13	Submission of Digital Stories
14	Evaluation – presentations and discussion of the digital stories (final assignment)

1.8 The German (School) Context

Germany's political, social, cultural, and educational systems have been shaped by a unique and complex history, including a period when the country was divided into two separate states with very different approaches to society, politics, and migration. This distinct history still influences how race, diversity, and education are approached in Germany today, which is important to understand when investigating CRT in the German context as these influences are embedded within the macrosystem (Bronfenbrenner & Morris, 2007).

After World War II, Germany was divided into two countries: West Germany (officially the Federal Republic of Germany), which followed a capitalist and democratic model, and East Germany (the German Democratic Republic), which was a socialist state aligned with the Soviet Union. Each state developed its own policies handling with migration and diversity. In West Germany, economic growth in the 1950s and 1960s led to a labor shortage. Thus, the government invited workers from other states, especially Turkey, Italy, and the former Yugoslavia, under agreements known as guest worker programs (Penninx, 2018). These "guest workers", were initially seen as temporary help, not future citizens and were expected to eventually return to their countries of origin. As they settled permanently and started families, debates emerged around how to integrate their children and grandchildren into German society, especially through the education system. Starting in the mid-1960s, education in West Germany took an assimilationist approach called "foreigner pedagogy", which was shaped by the idea of otherness (Faas, 2008, p. 110). This approach was rooted in a deficit perspective that saw culturally minoritized children as non-German and focused on what they were lacking, especially German language skills.

In contrast, the Eastern German migration policy was tightly controlled and ideologically framed. The socialist state accepted foreign workers, such as those from Vietnam and Mozambique, but kept them isolated from East German society. Eastern German scholars

conceptualized intercultural education as a problem specific to capitalist systems, consequently,

regarded it as irrelevant (Reich, 1993). Germany did not officially acknowledge itself as an

immigration country until the 1990s, despite a long history of immigration (Juang et al., 2021).

After reunification in 1990, significant disparities between East and West Germany remained,

with the East facing higher unemployment and lower wages. These differences also influenced

social, political, and cultural aspects, leading to distinct values, lifestyles, and voting patterns,

with the eastern regions tending to support far-left and far-right parties (Juang et al., 2021). The

cultural identity of people in East Germany often relates to regional dimensions such as local

identity. However, those who identify as East German are frequently confronted with

stereotypes and prejudices (Juang et al., 2022). Younger people in East German frequently

highlight how their identity is shaped by the socialization of participants' parents, the systematic

degradation of East German life stories after reunification, and the ongoing "othering" of East

Germans within broader German society (Kubiak, 2019). As a result, East German identity is

not only regionally rooted but also deeply entangled with historical and social processes of

marginalization.

Today, Germany is the most popular destination country for immigration in Europe,

with approximately 42% of students of immigrant descent and 13% of teachers of immigrant

descent (Statistisches Bundesamt, 2023). Within the German context, the discourse surrounding

race and racism is limited, as explicit discussions on race frequently avoided and often regarded

as taboo. This tendency may be rooted in the socio-historical context that associates racism with

Nazi ideology, an exclusionary policy linked to the atrocities of the Holocaust and leads to a

collective societal desire to avoid re-engagement with such harmful ideas (Juang et al., 2021).

In Germany, narratives have emerged in which culture is frequently viewed through an

essentialist lens, as an unchanging, inherently homogeneous, monolithic, and stable entity

(Albrecht, 2016). Moreover, in public discourse in Germany, integration is used synonymously

with assimilation, and expectations of the culturally majoritized group for assimilation are particularly strong (Kunst & Sam, 2014). In this context, schools can be seen as a microsystem that reflects the norms and values within the macrosystem of society, such as the orientation toward the culturally majoritized group and the silencing of issues related to ethnicity and racism, thereby influencing individual development (Bronfenbrenner & Morris, 2007). In this context, teachers in culturally diverse schools may also undergo professional development and playing a key role for the academic development of their students. Teachers, as part of the microsystem and central actors in the school environment, play a key role in transmitting, reinforcing, or challenging norms and values through their teaching practices, materials, and interactions. However, teachers in Germany are largely oriented towards German-speaking, culturally Christian socialized middle school students and expect culturally minoritized students to adapt to the culturally majoritized group (Gomolla, 2021). Analyses have shown that schoolbooks in various subjects in Germany often contain racist and stereotypical components and engage in forms of othering through dichotomous cultural representations that construct an "us" and "others" (Zabel, 2022; Ziai & Marmer, 2023). Children who have recently immigrated or arrived as refugees in Germany are often separated into "preparation classes" for one or two years before transitioning into regular classes (Gibson & Brown, 2009). While some academic high schools offer such preparation classes, the majority of preparation classes are found in other school types (Crul et al., 2016). The described German (school) context, highlight the need to address existing research gaps in the professional development of teachers for cultural diversity. In this context, this dissertation focuses on the following research questions and aims.

1.9 The Present Dissertation

1.9.1 Research Gaps and Research Aims

1.9.1.1 Research Gap and Research Aim 1

Contemporary lines of research conceptualize diversity-related attitudes and CRT-efficacy as key components of CRT. To date, little is known about in-service teachers' self-efficacy in relation to students from different cultural, ethnic or racial groups (Geerlings et al., 2018). An acculturation framework may provide a broader framework for teachers' attitudes and self-efficacy in a culturally diverse context. While acculturation research has predominantly focused on culturally minoritized students, the acculturation processes of teachers, who often represent the culturally majoritized group, have largely been neglected (Haugen & Kunst, 2017). However, teachers' acculturation attitudes are central components of their professionalization in culturally diverse contexts. These attitudes may also relate to their individual judgement of capability to implement culturally responsive practices (self-efficacy). In addition, the role of school characteristics as context factors in shaping acculturation attitudes and CRT efficacy remains largely ambiguous. This is the first investigation to apply an acculturation framework to in-service teachers, extending prior work by investigating how school climate and school composition are associated with teachers' acculturation attitudes and CRT efficacy.

Research Aim 1: Investigate the contextual conditions of in-service teachers' acculturation attitudes and CRT efficacy as components of CRT.

1.9.1.2 Research Gap and Research Aim 2

Concluding from the results of Study 1, the importance of supporting the professional development of pre-service teachers in culturally diverse contexts is emphasized. The

importance of teachers' professional development is also highlighted in the 2018 TALIS report, which revealed that over 50% of teachers in participating countries felt unprepared for the challenges of a multicultural learning environment and lacked confidence in adapting their teaching to culturally diverse students (OECD, 2019). A critical review of trainings with pre-service teachers has identified CRT as a promising framework for preparing pre-service teachers for cultural diversity (Civitillo et al., 2018), but the studies reviewed revealed some methodological limitations, including methodological limitations, particularly the lack of longitudinal designs with a control group. Moreover, empirical studies assessing the effectiveness of teacher training programs that explicitly use CRT as a framework and incorporate various CRT components, such as CRT self-efficacy, cultural diversity beliefs, and critical reflection, remain limited (Civitillo et al., 2018). In summary, this dissertation aims to extend prior work by addressing methodological limitations in CRT research through a quasi-experimental design, and by empirically investigating a teacher training program based on CRT principles. The dissertation aims to advance the field by incorporating multiple CRT components—such as self-efficacy, cultural diversity beliefs, and critical reflection—into one cohesive intervention. Moreover, this investigation aims to broaden the German discourse on teacher education by engaging with international debates on race and systemic inequity, which are often overlooked in national contexts. This gap leads to the second research aim:

Research Aim 2: Investigate how pre-service teachers can be prepared for CRT through a teacher training program.

1.9.1.3 Research Gap and Research Aim 3

Teachers' beliefs are considered one of the most important concepts in educational research and central components of CRT as they determine the way teachers construct meaning and make decisions (Dignath et al., 2022). In the context of cultural diversity, research indicated that teachers' cultural diversity beliefs can be influenced through teacher training, especially

through experiential learning (Civitillo et al., 2018). However, less is understood about how cultural diversity beliefs develop and change (Bayram Özdemir et al., 2024; Chiner et al., 2015; Liu et al., 2021). Moreover, further research is needed to explore teachers' implicit beliefs about diversity, as explicit beliefs may be influenced by social desirability and may not accurately reflect underlying implicit attitude (De Houwer, 2006), the aim was to reconstruct the development of implicit beliefs. The present study builds on the results of the second study suggesting that pre-service teachers implementing the Identity Project (Umaña-Taylor & Douglass, 2017) strengthened valuing cultural diversity beliefs, while pre-service teachers who participated in the regular practicum developed predominantly ignoring and rejecting cultural diversity beliefs. This dissertation aims to aims to investigate intraindividual psychological processes, such as white identity development and critical reflection, that shape teachers' cultural diversity beliefs. By applying a grounded theory approach (Charmaz, 2017), this dissertation aims to contribute to the broader field of CRT by introducing new insights into the complex relationship between identity development, critical reflection and cultural diversity beliefs. Based on the described research gap study 3 addresses the following research aim:

Research Aim 3: Investigate how White pre-service teachers in Germany develop their implicit and explicit cultural diversity beliefs and explore the conditions that facilitate changes in these beliefs.

1.9.2 Study Overview and Connections to Research Aims

As introduced at the beginning of this dissertation, the professionalization of (pre-service) teachers in Germany has been widely studied. However, only a few studies (e.g., Hachfeld, 2013) have examined the professional development of in-service and pre-service teachers working in culturally diverse classrooms under varying conditions (e.g., school characteristics, university characteristics). The conceptual model of this dissertation (see figure 1) provides a structured framework for the investigation of CRT. The school and teacher

education context within the model includes school characteristics such as school climate and school composition and university characteristics such as the Identity Project intervention in teacher education. These contextual factors form the institutional framework within which teachers develop their professional competencies. Teacher education, which includes various practical phases such as the Identity Project or the school internship, can be understood as the microsystem according to Bronfenbrenner's ecological systems theory, as this comprises the immediate environments and direct interactions that shape a person's intraindividual psychological processes (Bronfenbrenner & Morris, 2007).

At the center of the model are the intraindividual psychological components that are relevant for CRT and are undergoing a process of development: CRT efficacy, cultural diversity-related attitudes and beliefs as well as critical reflection and identity exploration. The three research aims refer to different target groups: The first aim focuses on in-service teachers and investigates the contextual conditions of their acculturation attitudes and CRT efficacy. The second aim focuses on pre-service teachers and investigates the development of the intraindividual psychological components of CRT efficacy, cultural diversity beliefs and critical reflection through teacher education programs. The third objective focuses specifically on White pre-service teachers living in East Germany and examines the development of their cultural diversity beliefs and the conditions that facilitate development. The results of this dissertation should help to develop effective strategies for teacher education and training to better prepare (pre-service) teachers for culturally diverse classrooms and ultimately promote a more equitable and inclusive education for all students.

Figure 1

Conceptual Model and Study Overview
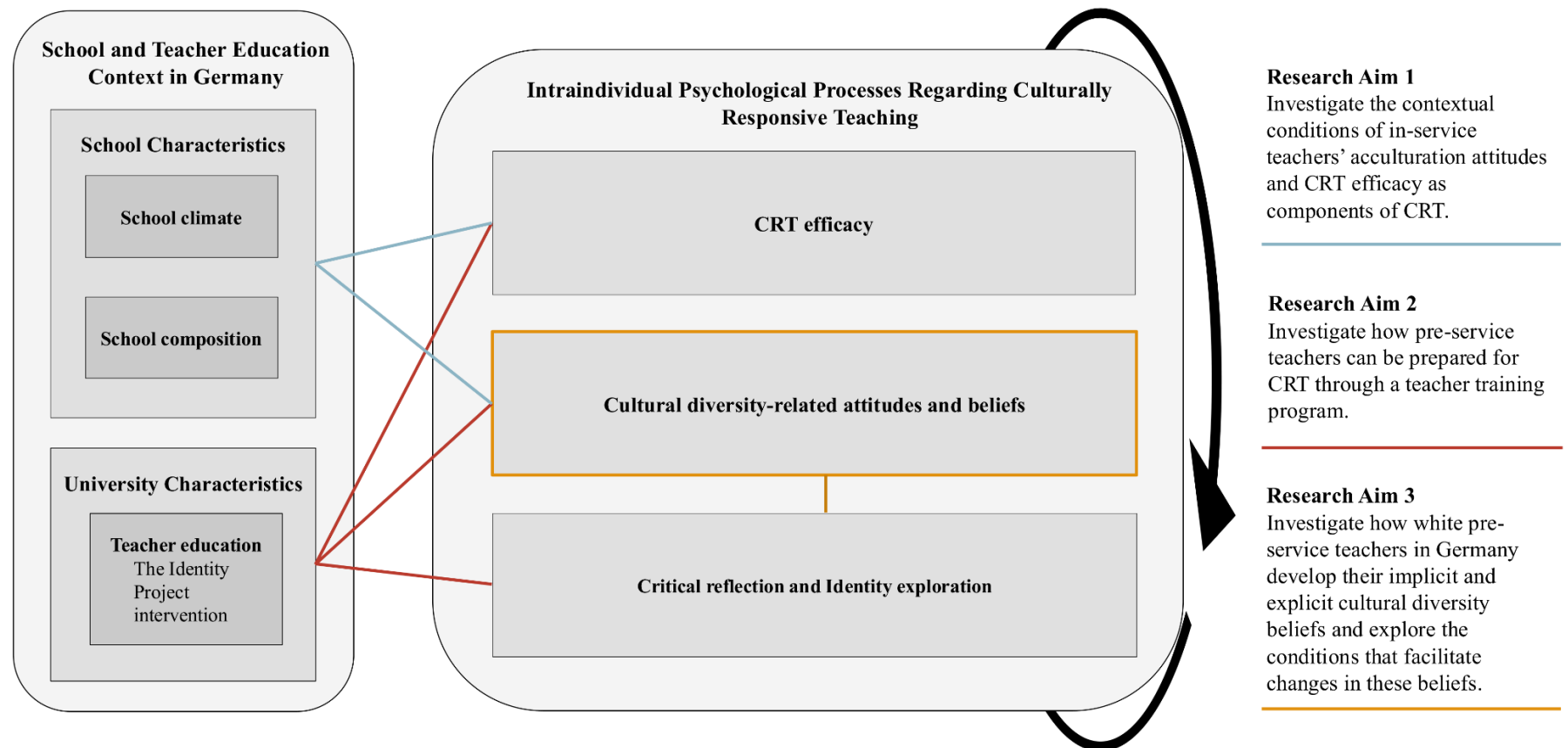
Note. The lines represent the associations under investigation. Arrows represent the processes of change under investigation.

2. Study 1: Teachers' Acculturation in Culturally Diverse Schools: How Is the Perceived Diversity Climate Linked to CRT Self-Efficacy?

Jolina Ulbricht*[1], Maja K. Schachner[1], Sauro Civitillo [2], and Peter Noack[3]

[1] Martin-Luther-University Halle-Wittenberg, Germany

[2] Utrecht University, Netherlands

[3] University of Jena, Germany

Abstract

While in the school context, acculturation is often studied in relation to students of culturally minoritized groups, the current study applies an acculturation framework to teachers mostly representing the majoritized culture. Specifically, we investigated whether teachers' acculturation attitudes toward their students mediate effects of the perceived cultural diversity climate at school on teachers' CRT efficacy in culturally diverse classrooms. Analyses were based on reports of 186 teachers (14% of immigrant descent; M_{age} = 40.8; SD_{age} = 11.8, 73% female) in 22 culturally diverse secondary schools in Southwest Germany. Path analyses indicated that perceived norms of *cultural pluralism*, and perceived norms of *equality and inclusion* are directly and positively associated with facets of CRT efficacy. Moreover, teachers' support for cultural maintenance amongst their students was associated with intercultural self- efficacy, but no mediation was found between climate and CRT efficacy via acculturation attitudes. Implications for teacher training, educational practice and future research on the acculturation and adjustment of teachers in culturally diverse classrooms are discussed.

Keywords: Acculturation attitudes, teacher self-efficacy, school climate

2.1 Introduction

Most societies are characterized by a high cultural diversity, which often results from migration movements. The proportion of international migrants globally increased to an estimated 272 million in 2019 (United Nations, 2019). With global issues such as climate change, war, and increasing social and economic disparities this rising trend will continue. The steady rise in migration is also increasing cultural and ethnic diversity[3] in classrooms. According to the Mikrozensus (2020) more than one-third (38%) of students at general and vocational schools in Germany are of immigrant descent, meaning that they are immigrants themselves or the children of immigrants. In stark contrast, only 7,2% of the elementary and secondary school teaching staff in Germany are of immigrant descent (Mikrozensus, 2015).

Concerning increasingly diverse schools, teachers are considered agents of change, as they can contribute to a school climate that recognizes and addresses the needs of students of culturally minoritized groups (Brown et al., 2021). Moreover, diversity-related aspects of the school climate are an important condition for acculturation at school (Schachner et al., 2016). Acculturation is defined as the psychological consequences of regular intercultural contact (Berry, 2003). Although acculturation has been researched extensively in recent decades, the focus has mainly been on individuals of culturally minoritized groups, whereas little attention has been paid to psychological changes taking place amongst members of the majoritized group, especially concerning their acculturation attitudes and effects of those on their own functioning in a multicultural society (Haugen & Kunst, 2017; Schachner, 2019). This is particularly dramatic as the lack of research on acculturation of members of the majoritized culture has led to the common misconception that only people of culturally minoritized groups undergo cultural change (Dinh & Bond, 2008; Kunst et al., 2021).

---

[3] In Germany the public debate is often about culture, but culture is used in a racialized way and often implies ethnicity.

In this study, we apply an acculturation framework to teachers mostly representing the majoritized culture. The framework distinguishes between different components of the acculturation process: The school context can be conceptualized as an acculturation condition that shapes the acculturation experience (Arends-Tóth & van de Vijver, 2006; Schachner et al., 2014, 2018a). We focus on two facets of cultural diversity climate, namely *equality and inclusion*, and *cultural pluralism*, which have been shown to be relevant for the acculturation of culturally minoritized students and teacher outcomes (Civitillo et al., 2017; Schachner et al., 2016). Acculturation attitudes, comprising own acculturation orientations and expectations toward others, constitute the center of the acculturation framework and mediate between acculturation conditions and outcomes (Arends-Tóth & van de Vijver, 2006).

To adequately meet the needs of culturally diverse classrooms, teachers need to be prepared (Barrett, 2018; Civitillo & Juang, 2019; Gay, 2010; OECD, 2010). In this context, intercultural competence is a key qualification which is defined as the "ability to develop targeted knowledge, skills and attitudes that lead to visible behavior and communication that are both effective and appropriate in intercultural interactions" (Deardorff, 2006; p. 247). A main component related to teachers' intercultural competence is their sense of self-efficacy, as high levels of self-efficacy have positive effects on multiple student and teacher outcomes (for a recent review, see Romijn et al., 2020). To date, little attention has been paid to teacher self-efficacy as an outcome of the acculturation process and how (contextual) acculturation conditions and attitudes relate to this efficacy (Geerlings et al., 2018).

Prior research on students has already indicated that the positive effects of a cultural diversity climate (*equality and inclusion*; *cultural pluralism*) on achievement and school adjustment are mediated by students' own acculturation orientations (Schachner et al., 2016). Based on these findings, our study is the first to apply an acculturation framework to teachers and hypothesize that teachers' acculturation attitudes (in the sense of their expectations toward the acculturation of their students) mediate the association between the perceived cultural

diversity climate in their school and their CRT efficacy (Figure 2). In the following sections, we first introduce the role of the diversity climate as an acculturation condition in the school context. Then, we lay out the significance of teachers' acculturation attitudes in the school context. Finally, we review the conditions for the development of teachers' CRT efficacy.

Figure 2

Conceptual Model of Teachers' Acculturation
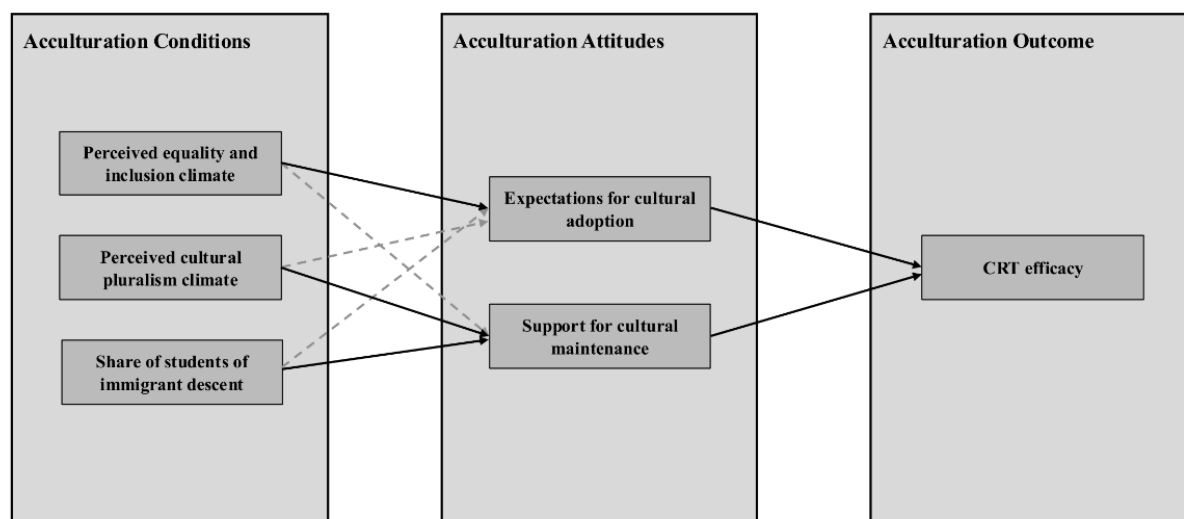
2.1.1 Cultural Diversity Climate: Equality and Inclusion and Cultural Pluralism

Drawing on research on the psychology of intergroup relations (Allport et al., 1954; Tajfel & Turner, 1986) as well as research on a multicultural ideology (Berry, 1977, 2017), two main approaches of dealing with cultural diversity have been distinguished by social psychologists as describing the norms in a particular social context (Guimond et al., 2014; Park & Judd, 2005; Rattan & Ambady, 2013; Rosenthal & Levy, 2010): the first one focuses on overcoming group boundaries (through positive contact) and promoting equal treatment, often termed an equality or color-blind approach, while the second explicitly values diversity, difference and pluralism, often termed a multicultural approach. These approaches often co-occur and have also been found suitable to describe how schools deal with cultural diversity.

They are visible at different levels in the school context, such as in school policies (Celeste et al., 2019), student and teacher perceptions of the cultural diversity climate (Civitillo et al., 2018; Schachner et al., 2016; Schachner et al., 2021), as well as teacher's diversity beliefs (Civitillo et al., 2021; Hachfeld et al., 2015).

In conceptualizations of the classroom cultural diversity climate, an equality or color-blind approach implying the promotion of positive contact, equal treatment and cooperation is subsumed under broad concepts such as *interpersonal interactions* (Byrd, 2015; Byrd, 2017) or *equality and inclusion* (Schachner, 2019; Schachner et al., 2016). A climate fostering *equality and inclusion* in schools aims to promote positive contact between culturally diverse students to overcome differences and prevent stereotyping. Teachers have a crucial role in promoting *equality and inclusion* by acting as role models for equal treatment of all students and actively promoting positive intergroup attitudes (Schwarzenthal et al., 2018). Teachers can foster *equality and inclusion* by encouraging collaboration on common goals through cooperative learning techniques (Banks, 2015; Civitillo et al., 2017; Schachner et al., 2016; Schachner et al., 2021). The approach is associated with lower prejudice and discrimination, and generally more positive intergroup experiences amongst students (Schachner et al., 2021; Schwarzenthal et al., 2018).

When perceiving a stronger endorsement of norms of *equality and inclusion*, students of culturally minoritized groups also expressed a stronger orientation toward the majoritized culture (Schachner et al., 2016). However, a strong emphasis on *equality and inclusion* may sometimes imply ignoring or downplaying differences between cultural groups as in colorblindness, which has been associated with a lower awareness of cultural diversity amongst teachers, and lower culturally responsive teaching self-efficacy (Cadenas et al., 2021; Wang et al., 2014).

On the other hand, *cultural pluralism* as a second facet in conceptualizations of the classroom cultural diversity climate values cultural diversity as enriching all students' learning

experiences and is reflected in policies that acknowledge differences in order to value them as positive resources and create a climate that welcomes and appreciates cultural diversity (Celeste et al., 2019; Schachner et al., 2016). Teachers promote norms of *cultural pluralism* in their classrooms by offering many opportunities to engage with diverse cultural norms, traditions, values, and specifically showing an interest in and valuing the cultural backgrounds of the families of their students. When students perceived a stronger support of cultural pluralism, students of culturally minoritized groups held more positive ethnic identities (Brown & Chu, 2012) and were oriented more toward the maintenance of their heritage culture (Schachner et al., 2016). A stronger support of *cultural pluralism* is associated with better teacher-student relationships, with more positive peer interactions, and with an enhanced sense of school belonging (Smith et al., 2020). In summary, both approaches of dealing with diversity in school are mostly associated with positive student and teacher outcomes. Therefore, we hypothesize that a stronger endorsement of *equality and inclusion* as well as *cultural pluralism* is associated with higher CRT efficacy.

2.1.2 Acculturation in the School Context

As schools provide important opportunities for intergroup contact and acculturation amongst children and adolescents (Horenczyk & Tatar, 2012; Motti-Stefanidi et al., 2012; Schachner et al., 2018a), they can be viewed as a micro-system, reflecting norms and values within the macro-system of the society at large and influencing individual development (Bronfenbrenner & Morris, 2007). In this process, teachers in culturally diverse schools may also undergo development and experience acculturation (Makarova et al., 2019; Makarova & Herzog, 2013), as well as playing a key role for the development and acculturation of their students in predominantly representing the majoritized cultural group.

Acculturation is defined by a two-dimensional structure: first, maintenance of heritage culture and identity, and second, relationships sought among groups and participation in a common society (Berry, 1997; Berry, 2003). However, other researchers have later revised the

second dimension by replacing relationships and contact with the majoritized group with the cultural adoption, i.e., adopting key aspects of the majoritized culture (Bourhis et al., 1997). By combining the two dimensions, Berry distinguished four acculturation strategies (Berry, 1997; Berry, 2003): integration (high maintenance and high contact), assimilation (low maintenance and high contact), separation (high maintenance and low contact), marginalization (low maintenance and low contact). These strategies and attitudes can be held by both, culturally majoritized group members and people of culturally minoritized groups. Focusing on the culturally majoritized perspective, members of the culturally majoritized group have different expectations about the acculturation of people of culturally minoritized groups, which are defined as *acculturation expectations* (Berry, 2017). Although the four combined patterns are useful conceptually, the statistical classification of acculturation attitudes into four strategies has been criticized for being difficult to replicate and not strictly comparable across studies (van de Vijver, 2017). Empirically we will therefore work with the two dimensions of acculturation expectations as conceptualized by Bourhis and colleagues (1997), i.e., support for cultural maintenance and expectations for cultural adoption, independently.

Integration was long regarded as the most preferred acculturation strategy for both, people of culturally minoritized groups and members of the culturally majoritized group, as it was associated with the best adjustment outcomes (i.e. higher life-satisfaction, less acculturative stress) (Kunst, 2021; Lefringhausen & Marshall, 2016; Nguyen & Benet-Martínez, 2013). However, Germany is a country where the expectations of members of the culturally majoritized group for assimilation are particularly strong and where immigrants' maintaining elements of their heritage culture is often associated with separation in the public discourse (Kunst & Sam, 2014; Zick et al., 2001).

Teachers may differ in their acculturation attitudes, including acculturation-related expectations they hold toward students (Makarova & Herzog, 2013; Van Praag et al., 2016). Teachers' acculturation expectations are crucial, as they may serve as particular risk or resource

factors for acculturation and school adjustment of students of culturally minoritized groups (Makarova et al., 2019). In addition, teachers' acculturation expectations are relevant for the well-being of both teachers and students: Teacher with assimilation attitudes run a high risk of stress and stress-related health problems, as well as diversity-related burnout, leaving teachers feeling less able to cope with the challenges of a multicultural classroom (Dubbeld et al., 2019). Moreover, teachers who endorse more assimilative attitudes report lower levels of CRT efficacy, while multicultural attitudes were associated with higher levels of CRT efficacy (Gutentag et al., 2018; Hachfeld et al., 2015; Tatar et al., 2011). A study by Makarova and Herzog (2013) further showed that teachers' acculturation attitudes are associated with diagnostic competencies in assessing students' characteristics, social dynamics in the classroom and classroom management. Teachers with integrative attitudes seemed to be best able to prevent social conflict among their students, while teachers with assimilative attitudes showed low diagnostic expertise in the area of social tensions and seemed to be less likely to be successful in preventing social conflicts among their students.

Yet, we know little about how the acculturation expectations of members of the majoritized culture are formed (Acker & Vanbeselaere, 2011), specifically in the context of the cultural diversity climate in schools, and how they may in turn be linked to teachers' own adjustment in the context of multicultural schools, including their CRT efficacy.

2.1.3 Teachers' CRT Self-Efficacy in Diverse Classrooms

According to Bandura's social cognitive theory (1977), self-efficacy refers to an individual's judgement of capability to perform a particular action. Teachers' sense of self-efficacy has been defined as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran et al., 1998, p. 22, p. 22) .

The relationship between teachers' self-efficacy and practice is described as reciprocal, and self-efficacy beliefs can work as self-fulfilling prophecies (Tschannen-Moran & Hoy,

2007). Teachers' perceiving their teaching performance as being successful raises their self-efficacy beliefs and contributes to their expectations of future success. Teachers' self-efficacy is considered one of the most important beliefs influencing teachers' professional behaviors (Durksen et al., 2017) and supporting positive and effective classroom behaviors (Zee & Komen, 2016). In addition, teachers' self-efficacy has been associated with valuable educational outcomes for both students and teachers. For instance, more self-efficacious teachers are less likely to experience burnout and diversity-related stress and are more satisfied in their profession. Moreover, students of self-efficacious teachers demonstrate greater motivation, academic adjustment, and achievement (Fernet et al., 2012; Lazarides & Warner, 2020; Wang et al., 2015).

Teachers' CRT self-efficacy specifically has been conceptualized based on different the theoretical concept of culturally responsive teaching (CRT) (Gay, 2002). According to these concepts, teachers with high CRT efficacy beliefs are confident to use students' diverse cultural backgrounds as a learning resource to build positive relationships with students, adapt instruction to diverse students, and create an inclusive learning environment. However, teachers do not always feel prepared in culturally diverse classrooms (Glock et al., 2019; Slot et al., 2019), as managing the academic, behavioral, communication, and social needs of students can be challenging for teachers (Farmer et al., 2019).

Previous research showed associations between facets of the school climate and teacher self-efficacy (Aldridge & Fraser, 2016; Pas et al., 2012; Schwarzenthal et al., 2022). A cultural diversity climate reflecting equality and inclusion and cultural pluralism was found to be an important condition for positive intercultural relations amongst students (Schachner et al., 2015; Schwarzenthal et al., 2017). Moreover, a positive cultural diversity climate in schools has been associated with intercultural competence amongst students (Schwarzenthal et al., 2019). Therefore, we expect similar effects also for the CRT efficacy of teachers. Specifically, we

expect that the more teachers perceive their school climate as supporting both cultural pluralism and equality and inclusion, the higher their CRT efficacy.

To date, little is known about teacher self-efficacy in relation to students from different cultural backgrounds (Geerlings et al., 2018). Teaching an increasingly culturally diverse student population, may imply new demands such as developing an understanding of the contributions of different cultural groups and adapting the curriculum correspondingly.

According to the contact hypothesis (Allport, 1954), having more frequent opportunities for intercultural contact can reduce prejudice. Moreover, more intercultural contact is associated with more mutual acceptance and a higher preference for integration (Berry et al., 2022). Therefore, in this study, we control for the proportion of students of immigrant descent as an indicator of opportunity for intergroup contact. Indeed, the proportion of students of immigrant descent is an important characteristic of culturally diverse schools and classrooms and was related to similar outcomes (e.g., teacher attitudes, classroom interactions, acculturation orientations) in previous research (Schachner et al., 2016, Ortega et al., 2020, Brault et al., 2014). Geerlings et al. (2018) also found that Dutch teachers in classes with a higher proportion of students of immigrant descent felt more efficacious in teaching these students compared to teachers in classrooms with a smaller share of students of immigrant descent.

The present study extends the literature on acculturation focusing on teachers. We will test the conceptual model shown in Figure 2, including the proportion of students of immigrant descent as a covariate. We expect the following relations between our substantive variables:

Hypothesis 1: Teachers perceiving a school climate more strongly reflecting norms of *equality and inclusion* report a higher CRT efficacy.

Hypothesis 2: Teachers perceiving a school climate more strongly reflecting norms of *cultural pluralism* report a higher CRT efficacy.

Hypothesis 3: The positive effect of a perceived school climate of *equality and inclusion* on CRT efficacy is mediated through a higher expectation for cultural adoption.

Hypothesis 4: The positive effect of a perceived school climate of *cultural pluralism* on CRT efficacy is mediated through a higher support of cultural maintenance.

2.2 Methods

2.2.1 Participants and Procedure

The study used a cross-sectional design and was part of a larger study conducted in 2011 on the cultural diversity climate and acculturation in schools. The study was authorized by the Ministry of Education in the Federal State of Baden-Württemberg, Germany. A total of 207 teachers were recruited in 22 multiethnic secondary schools representing the three main secondary school tracks (streams) in the local school system: Seven low vocational track schools (*Hauptschule*), ten medium vocational track schools (*Realschule*), and five high academic track schools (*Gymnasium*). Teachers had an average age of 41 years ($M_{age} = 40.8$; $SD_{age} = 11.8$) and were in service for an average of 13 years ($SD = 0.67$; range 1-32 years). About two thirds of the participants (73%) were female and 27 teachers (14%) reported to be of immigrant descent, thirteen of whom were first-generation immigrants, mainly from Eastern Europe. In contrast to the teachers, the majority (69%) of the students at the sampled schools was of immigrant descent.

Within the schools, the project targeted students in 5th and 6th grade classrooms as well as the corresponding homeroom teachers and two teachers of the main subjects per classroom. Teachers were asked to complete the survey parallel to the students' survey in their class where possible or received the survey with a written invitation and a small gift (chocolate) in their mailbox in the school office. Participation was voluntary and anonymous. Four in five questionnaires were returned and between three and twelve teachers per school participated in the survey ($M = 8.45$). Completed surveys were partly directly collected by the research team and partly in an envelope in the school office that was mailed back to the project leader later.

2.2.2 Measures

Where possible, we chose established measures that were considered suitable for the use in Germany and with teachers. Where no suitable or adaptable measure was found, we adapted or developed our own measures based on the literature and exploratory interviews with four teachers (three female, two of immigrant descent) and one school principal (male, non-immigrant descent). Measures not originally available in German were translated using a translation/back-translation method. All measures applied 5-point Likert scales ranging from 1 (do not agree at all) to 5 (fully agree).

2.2.2.1 Diversity Climate – Equality and Inclusion

The perceived *equality and inclusion* climate was assessed by adapted items from the School Interracial Climate Scale (Green et al., 1988; Molina & Wittig, 2006), mirroring parallel items for students (Civitillo et al., 2017; Schachner et al., 2016). The scale comprised three subscales: (a) perceived equal treatment and non-discrimination (seven items; e.g., 'The teachers at this school are equally friendly to students with and without immigrant background.'), (b) support for contact & cooperation (four items; e.g., 'In the composition of work groups, the teachers at this school make sure that they are mixed in terms of the cultural background of the students.'), (c) strengthening class community (four items; e.g., 'The teachers at this school often organize joint activities to strengthen the classroom community.').

2.2.2.2 Diversity Climate –Cultural Pluralism

Perceived cultural pluralism climate was assessed using a combination of three subscales, which were newly devised for the purpose of the current study (also corresponding to student measures by Schachner et al., 2016): (a) dealing with cultural diversity constructively (twelve items e.g., 'The teachers at this school try hard to boost the self-esteem of students of immigrant background.'), (b) appreciating cultural diversity (five items e.g. 'Most teachers at this school perceive it as enrichment for class when different traditions and ideas from students'

countries of origin are brought up and discussed.'), and (c) multicultural curriculum (five items e.g. 'The cultural background of immigrant students is regularly incorporated in class.').

2.2.2.3 Acculturation Expectations

Items measuring acculturation expectations were adapted from Arends-Tóth & van de Vijver, (2007), with subscales measuring support for maintenance of the heritage culture and expectation for adoption of the majoritized culture, each containing three items. Exemplary items are 'At school children of immigrant descent should be allowed to adhere to the values and norms of their country of origin', for support for maintenance of the heritage culture and 'At school children of immigrant background should comply with German values and norms' for adoption of the majoritized culture.

2.2.2.4 CRT Efficacy

CRT efficacy was measured with nine items, which had been developed for the purpose of this study (e.g., 'I can adequately respond to students with different abilities and cultural preconditions.').

2.2.2.5 Share of Students of Immigrant Descent

We included the classroom proportion of students of immigrant descent as important school-level covariate of acculturation. The share of students of immigrant descent (M = .63; SD= .19; range = .24–.94) was computed on the basis of the demographic information provided by 5th and 6th grade students at the respective schools who had participated in the corresponding student survey. Scores closer to 0 indicated a low share, whereas scores closer to 1 indicated a higher share of students of immigrant descent in the school.

2.2.3 Analytic Approach

We conducted several steps of analysis. First, we performed preliminary analyses on our measures, by conducting an Exploratory Factor Analysis (EFA), followed by Confirmatory

Factor Analysis (CFA) to verify the factor structure of the scales. To judge model fit in the CFA, multiple indices were used, with comparative fit index (CFI) $\geq$ .90, Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean square Residual (SRMR) $\leq$ .08 indicating acceptable fit (Marsh et al., 2004), and CFI $\geq$. 95 and RMSEA and SRMR $\leq$ .06 indicating good fit (Hu & Bentler, 1999). In case of misfit, we examined the modification indices to see if the fit could be improved by omitting items that were expected to change the parameter by 0.2 (Brown, 2015). The Maximum Likelihood Robust (MLR) estimator was selected accounting for complete and incomplete data.

Hypotheses were tested using path analysis with a factor score regression approach. Factor scores were computed for all the latent constructs and saved for the main analysis. In case of the two climate dimensions, equality and inclusion, and cultural pluralism, we worked with a second-order factor summarizing the three subscales for each dimension instead of sum scores. This multistage approach is recommended when performing path analysis with small sample sizes (Rosseel, 2020). The hypothesized path model examined the direct and indirect associations among perceived equality and inclusion climate, perceived cultural pluralism climate, acculturation attitudes (i.e., support for the maintenance of the heritage culture, and expectation for adoption of the majoritized culture), and teacher CRT efficacy, with proportion of students of immigrant descent in school as control. Model fit was evaluated considering similar fit indices as in CFAs. To estimate direct and indirect effects among pathways, we used bootstrapping procedure with 1000 resamples. EFA, CFA and path analysis were conducted using JASP software (Version 0.14.1, JASP Team, 2020) and the lavaan package in R (4.0.2) (Rosseel, 2012).

2.3 Results

2.3.1 Preliminary Analyses

Prior to analysis, patterns of missing values were examined. Twenty-one cases were excluded due to missing values on more than 20% of responses, leaving 186 cases for the final

analyses. Missing values for the remaining participants were accounted for using the expectation–maximization-procedure in SPSS.

For *equality and inclusion*, we had theoretically assumed three subscales. These also emerged in the EFA, but we excluded six items because of low factor loadings (< .40) or cross-loadings on other subscales. The CFA indicated an acceptable model fit on the remaining items, $\chi^2(87) = 147.66$, CFI = .920, TLI = .911, SRMR = .067, RMSEA = [.58, .47]. The final subscale of perceived equal treatment and non-discrimination consisted of seven items ($\alpha = .77$), the final subscale of support for contact & cooperation ($\alpha = .78$) and the final subscale of strengthening class community ($\alpha = .67$) consisted of four items each. For *cultural pluralism*, the expected three-factor structure emerged in EFA and was confirmed in CFA. The CFA indicated an acceptable model fit, $\chi^2(227) = 366.77$, CFI = .920, TLI = .911, SRMR = .067, RMSEA = [.058, .47]. The subscales yielded good reliabilities for dealing with cultural diversity constructively ($\alpha = .89$), appreciating cultural diversity ($\alpha = .76$) and multicultural curriculum ($\alpha = .78$).

Regarding the acculturation expectations, the three items measuring support for maintenance of the heritage culture were unifactorial in EFA and the subscale achieved a good reliability ($\alpha = .71$). For the subscale measuring the expectation for cultural adoption, we excluded one item ("Children of immigrant background should generally only speak German on school grounds, even outside the classroom") because it did not load on to the same factor and reduced the reliability of the scale. Many schools in Germany have formal rules that the use of heritage languages other than German is not allowed at school, which may be the reason why this item is less suitable to capture variations in teachers' acculturation attitudes. The subscale expectation for adoption of the majoritized culture therefore contained two items. The most appropriate reliability statistic for a two-item scale is the Spearman-Brown coefficient (Eisinga et al. 2013), which in our case ($r = .518$, p < .001) indicated that there was a strong positive relationship between the two items (Dancey & Reidy, 2004). Due to the small number of items measuring acculturation attitudes, CFA were not conducted on these scales.

Regarding teachers' CRT efficacy, nine items were theoretically assumed unifactorial, but after conducting EFA, two factors emerged. This result is consistent with previous research by Civitillo, Juang, Schachner and Börnert-Ringleb (2016) using a two factor scale to measure teachers self-efficacy in cultural diverse classrooms. We excluded one item from the scale measuring self-efficacy in culturally diverse classrooms because of cross-loadings with other items. CFA indicated a good model fit, $\chi^2(19) = 52.13$, CFI = .949, TLI = .925, SRMR = .057, RMSEA = [.066, .129]. The subscale *teaching-related CRT efficacy* (α = .86) consisted of three items, the subscale *efficacy in promoting positive intercultural relations* consisted of five items (α = .83). The final selection of items for the *CRT efficacy* scale, as well as the standardized factor loadings can be found in Table 2. Mean scores and standard deviations for our main study variables as well as correlations between the measures are presented in Table 3.

Table 2

CRT Efficacy Items, Standardized Factor Loadings and Reliabilities

Dimension		
Subscale	Item	Loading
CRT efficacy		
Teaching-related CRT efficacy		.80
	In general, I believe that I can cope with the challenges of a multicultural classroom.	
α = .86	I can adapt my teaching to the cultural diversity of students.	.89
	I can adequately respond to students with different abilities and cultural preconditions.	.78

Efficacy in promoting positive intercultural relations	I can contribute to advance the relationship between students with and without migration background.	.74
α = .83	I can take care that students with and without migrant background work together.	.64
	I can raise awareness for cultural differences amongst the students.	.73
	I can contribute to greater mutual understanding between students from different cultural groups.	.79
	I can contribute to reducing mutual prejudices between the students.	.61

Table 3

Correlations Between Main Study Variables (N = 186)

	M	SD	1	2	3	4	5	6	7	8	9	10
Equality & Inclusion												
1. Equal treatment and non-discrimination	5.52	0.55	--									
2. Contact and cooperation	3.23	0.87	.174*	--								
3. Strengthening class community	4.18	0.61	.316***	.305***	--							
Cultural Pluralism												
4. Dealing with cultural diversity constructively	3.38	0.60	.251***	.464***	.499***	--						
5. Appreciating cultural diversity	2.32	0.72	-.432***	-.281***	-.328***	-.468***	---					
6. Multicultural curriculum	3.42	0.67	.07	.375***	.356***	.619***	-.364***	--				
Acculturation Attitudes												
7. Acceptance of cultural maintenance	3.16	0.93	-.037	.051	.078	.071	-.161*	.055	--			
8. Expectation for cultural adoption	3.99	0.79	.068	.078	-.035	.083	.043	.075	.014	--		
CRT efficacy												
9. Teaching-related CRT efficacy	3.68	0.76	.244***	.179*	.287***	.291***	-.381***	.142	.025	.147**	--	
10. Efficacy in promoting positive intercultural relations	3.92	0.61	.158*	.296***	.263***	.344***	-.381***	.287***	.143*	.023	.499***	--

Note. ***$p < .001$, **$p < .01$, *$p < .05$, †$p < .10$.

2.3.2 Path Analysis

The overall goodness of fit of the hypothesized model was good, $\chi^2(18) = 163.06$, CFI = 1.000, TLI = 1.105, SRMR = 0.008, RMSEA = [0.000, .037]. Overall, we could explain 15.7% of the variance in teaching-related CRT efficacy and 20.5% of the variance in efficacy in promoting positive intercultural relations. The path model indicates that a perceived climate of equality and inclusion directly and positively predicts teaching-related CRT efficacy (Hypothesis 1), whereas a perceived climate of cultural pluralism directly and positively predicts the efficacy in promoting positive intercultural relations (Hypothesis 2). There were no significant associations between either facet of the perceived diversity climate and acculturation expectations. Yet, a higher proportion of students of immigrant descent predicted a stronger support for cultural maintenance. Looking at the effects of acculturation attitudes on CRT efficacy, only teachers' support of cultural maintenance is associated with teaching-related CRT efficacy. No significant mediation effects of acculturation attitudes were found in the associations between climate and facets of CRT efficacy (Hypotheses 3 & 4). The results of our model are presented in figure 3, standardized regression coefficients are reported[4].

Figure 3

Final Model of Teachers' Acculturation With Standardized Coefficients

---
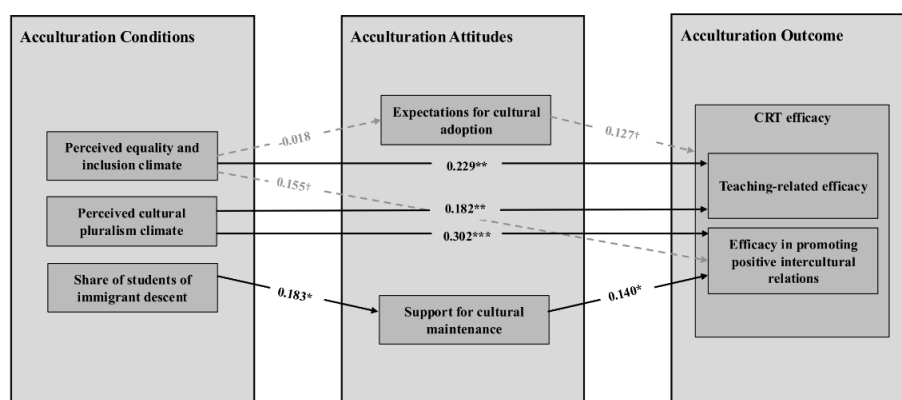
[4] As teacher data are nested within schools, we also ran the same path model again with robust standard errors to accommodate for the nested structure of the data. The results were very similar to the model reported, with all significant paths remaining significant.

2.4 Discussion

Teacher self-efficacy has been researched extensively in recent decades, but little attention has been paid to teacher self-efficacy in culturally diverse classrooms. Because many teachers feel unprepared and overwhelmed when dealing with cultural diversity, there is a need to understand how conditions at school can be more favorable for teachers' CRT efficacy. Our study is the first to apply an acculturation framework to teachers, who mainly represent the majoritized culture, while extending past work that focused on students of culturally minoritized groups (Schachner et al., 2016). Thereby, we examined how teachers' acculturation attitudes could potentially mediate the effects of the perceived cultural diversity climate on CRT efficacy in culturally diverse classrooms. In doing so, we address the call to examine school (e.g., multicultural education; norms about diversity) and teacher characteristics (e.g., teachers attitudes) that could help us to understand when and why teachers feel more or less self-efficacious in relation to students of culturally minoritized groups (Geerlings et al., 2018).

2.4.1 School Diversity Climate and CRT Efficacy

Our findings are consistent with previous research showing associations between a positive school climate and higher (intercultural) self-efficacy amongst (Gutentag et al., 2018; Schwarzenthal et al., 2022). Higher perceptions of an equality and inclusion climate were associated with higher teaching-related CRT efficacy, meaning that teachers were more confident in coping with the challenges of a multicultural classroom and adapting their teaching to the cultural diversity of their students, as well as adequately responding to students with different abilities and cultural preconditions (Hypothesis 1). However, the lack of a positive association between perceived norms of equality and inclusion and the efficacy of promoting positive intercultural relations suggests that this approach does not fully address dealing adequately with culturally diverse classrooms. If teachers strongly emphasize equality, and follow a principle of neutrality to reduce the fear of discrimination, it may lead into a colorblind approach (Civitillo et al., 2017; Hachfeld et al., 2015; Schachner et al., 2016), which does not

acknowledge the presence of discrimination and inequality and therefore may not be a suitable condition to address these issues with students and promote more positive intercultural relations. Indeed, colorblindness has been associated with lower awareness of cultural diversity, and lower teaching-related CRT efficacy (Cadenas et al., 2021; Wang et al., 2014). Thus, our findings suggest that perceived norms of equality and inclusion are not sufficient to meet the needs of a multicultural classroom and should be accompanied by norms of cultural pluralism (Civitillo et al., 2017).

Teachers emphasizing cultural pluralism appear to have not only higher teaching-related CRT efficacy, but also higher efficacy regarding the promotion of positive intercultural relations, i.e., they are more confident in advancing relationships between students of different cultural backgrounds, contributing to greater mutual understanding among students from different cultural groups, and helping to reduce mutual prejudices between students (Hypothesis 2). Teachers can contribute to students' interethnic relationships not only through their cultural attitudes (Vezzali et al., 2012) but also through their own interpersonal relationships they build with their students (Thijs & Verkuyten, 2014). Thus, teachers can promote a positive cultural diversity climate by acting as role models and exemplifying norms of cultural pluralism: Positive relationships between teachers and students who belong to a different cultural group than the teachers can also improve students' cultural attitudes in the classroom. However, research suggest that teachers have fewer positive relationships with students from other cultural groups than with students from their own cultural group (Baysu et al., 2021; Thijs et al., 2012), which in turn may negatively impact students' evaluation of cultural differences in the classroom (Thijs & Verkuyten, 2014).

2.4.2 Teachers' Acculturation Expectations and CRT Efficacy

The findings we provide in this study give insights into teachers' acculturation expectations and associations with teachers' CRT efficacy. Overall, we find only partial support for associations between teachers' acculturation expectations and CRT efficacy. Specifically,

teachers with higher support for cultural maintenance feel more efficacious regarding culturally diverse students and promoting positive relationships amongst these. The benefits of appreciating diverse cultural backgrounds amongst students extends previous research suggesting similar positive effects, such as the appreciation of students' heritage culture being associated with an increased motivation of the learners (Vedder & van Geel, 2012). Moreover, a higher support for cultural maintenance has been linked with higher diagnostic skills in assessing student characteristics, classroom social dynamics, and teachers' classroom management (Makarova & Herzog, 2013).

Contrary to our established hypotheses (Hypothesis 3 & 4), and previous research on students' acculturation (Schachner et al., 2016), we did not find that teachers' acculturations expectations mediate the associations between school cultural diversity climate and CRT efficacy. In contrast to the acculturation framework of students, which refers to one's own acculturation orientations, the acculturation framework we applied in our current study to teachers (mainly representing majoritized group), refers to teachers' expectations regarding the acculturation of students of culturally minoritized groups. Our findings suggest that perceptions of school climate may be more salient than acculturations expectations, at least regarding CRT efficacy. These findings may also stem from the psychometric properties of the teacher acculturations expectations. For example, the scale assessing expectations for adoption of the majoritized culture only contains two items. Hence, future research is needed to further examine teachers' acculturation expectations by using scales that are psychometrically more robust.

Our findings support previous research that teachers are more likely to accept cultural adoption compared to cultural maintenance (Makarova & Herzog, 2013). A simple explanation could be that teachers hope to socialize students of culturally minoritized groups into the majoritized culture and prepare them for their (professional) future. Indeed, monocultural and monolingual norms are often dominant in schools (Moffitt et al., 2019). However, in everyday school life, if the expectation for cultural adoption is not complemented by the support for

cultural maintenance, students of culturally minoritized groups may feel that their cultural background is not sufficiently valued or even denigrated (Haenni Hoti et al., 2019; Van Acker et al., 2014). Teachers should be aware of the impact acculturation attitudes may have on students' acculturation, academic achievement, and the teacher-student-relationship (Foster, 2008; Vedder & van Geel, 2012). But this is easier said than done because teachers might have unconscious biases which may have negative consequences for their expectations and behaviors toward students of culturally minoritized groups (van den Bergh et al., 2010). Thus, our findings support the need for more attention to teacher education providing students in teacher education degrees opportunities to critically reflect on, examine, and discuss their own acculturation attitudes, but also their biases, stereotypes, and prejudices.

Finally, research indicated that effects of school composition (e.g. ethnic composition) has been associated with a wide range of teacher expectations (for a review see Brault et al.,2014). Our findings suggest that teachers in schools with a higher percentage of students of culturally minoritized groups are more supportive of cultural maintenance, suggesting that greater diversity and intergroup contact is associated with more inclusive attitudes in schools. This is in line with previous findings and the contact hypothesis (Allport, 1954), which states that more frequent opportunities and higher quality intercultural contact can reduce prejudice. For instance, Berry et al. (2022) indicated that more intercultural contact is associated with more mutual acceptance and predicts a higher preference for integration.

2.4.3 Limitation and Future Research

The present study should be considered in the light of some limitations. First, the data (perceived school climate, teacher attitudes, CRT efficacy) are based on self-reports, i.e., they are sensitive to response tendencies and socially desirable responses (Kreitchmann et al., 2019; Paulhus, 2017). To obtain more reliable and robust data on school climate, future research could collect measures from multiple informants, such as student and teacher perceptions (Grazia & Molinari, 2021).

Second, we did not conduct multilevel analyses because of the small number of teachers in some schools (range from 2 to 14) and the small number of schools. Teachers share the same environment and may have similar perceptions of the school climate. Thus, multilevel analysis is crucial when observations are interdependent because it distinguishes contextual influences from individual influences (Mitchell et al., 2010).

Third, we measured public acculturation attitudes by phrasing our items specifically referring to the school context, which is considered part of the public domain, but some authors argue that norms and values are internalized and therefore private, even if measured in the school context (Arends-Tóth & van de Vijver, 2004; Haugen & Kunst, 2017; Kunst et al., 2012). Additionally, our datasets were cross-sectional, which makes it impossible to draw conclusions about causality. Kunst (2021) argues that acculturation is a causal and temporal phenomenon, which requires a longitudinal design to confirm the stability of the reported findings and draw conclusions about causality.

Forth, CRT efficacy is based on self-reports, and does not necessarily reflect teachers' classroom behaviors or students' perceptions (Tschannen-Moran & Hoy, 2007). To obtain more reliable information about teachers' CRT efficacy and ultimately their interculturally competent behavior in the classroom, future research should couple self-reported CRT efficacy with alternative measurement methods, e.g., situational judgment tests applied to teachers, interviews, or thinking-aloud procedures (Khukhlaev et al., 2021; Schwarzenthal et al., 2019).

2.5 Conclusion and Implications

Despite the above-mentioned limitations, our study provides an insight into the importance of the acculturation context in schools (perceived cultural diversity climate and proportion of students of immigrant descent) and acculturation expectations on teachers' CRT efficacy. This seems particularly relevant for culturally diverse classrooms, as higher levels of CRT efficacy among teachers buffer diversity-related stress (Ahsan et al., 2013; Gao & Mager, 2011) and increase the readiness to work in culturally diverse schools (Hachfeld et al., 2015).

Our findings also contribute to the discussion on the education and preparation of teachers for cultural diversity and have several practical implications.

As both a perceived climate of equality and inclusion and a perceived climate of cultural pluralism were associated with teachers' CRT efficacy, implementing programs in schools fostering a school climate that encourages contact and collaboration but also celebrates cultural diversity is of high importance. However, schools should go beyond merely promoting equality and inclusion while developing a climate that welcomes cultural pluralism. Therefore, the appreciation of linguistic diversity and diverse backgrounds of students and their families can help fostering relationships with children and their families. Moreover, school leadership practices have a crucial role in constantly preparing culturally responsive teachers, providing culturally responsive school environments, and increasing teachers' CRT efficacy (Duyar et al., 2013; Khalifa et al., 2016).

Overall, the findings of this study provided useful insights into teachers' perceptions of the school cultural diversity climate, as well as their acculturation expectations in relation to CRT efficacy. Results suggest that efforts are needed to change deficit-oriented perspectives of teachers, so that diversity is valued as a resource for development and learning, not only for students but also for teachers (Vedder et al., 2006). Specifically entailing different opportunities for experiential learning (e.g., courses, mentoring, observation visits) are highly relevant for changing teachers' cultural diversity beliefs (Civitillo et al., 2018).

2.6 References

Acker, K. V., & Vanbeselaere, N. (2011). Bringing together acculturation theory and intergroup contact theory: Predictors of Flemings' expectations of Turks' acculturation behavior. *International Journal of Intercultural Relations*, *35*(3), 334-345. https://doi.org/10.1016/j.ijintrel.2010.06.004

Ahsan, M. T., Deppeler, J. M., & Sharma, U. (2013). Predicting pre-service teachers' preparedness for inclusive education: Bangladeshi pre-service teachers' attitudes and perceived teaching-efficacy for inclusive education. *Cambridge Journal of Education*, *43*(4), 517-535. https://doi.org/10.1080/0305764X.2013.834036

Aldridge, J. M., & Fraser, B. J. (2016). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, *19*(2), 291-307. https://doi.org/10.1007/s10984-015-9198-x

Allport, G. W., Clark, K., & Pettigrew, T. (1954). *The nature of prejudice*. Addison-Wesley.

Arends-Tóth, J., & van de Vijver, F. J. R. (2004). Domains and dimensions in acculturation: Implicit theories of Turkish–Dutch. *International Journal of Intercultural Relations*, *28*(1), 19-35. https://doi.org/10.1016/j.ijintrel.2003.09.001

Arends-Tóth, J., & van de Vijver, F. J. R. (2006). Assessment of psychological acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology*, (pp. 142-160). Cambridge University Press. https://doi.org/10.1017/CBO9780511489891.013

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191-215. https://doi.org/10.1037/0033-295X.84.2.191

Banks, J. A. (2015). Multicultural education, school reform, and educational equality. *Opening the doors to opportunity for all: Setting a research agenda for the future*, 54-63.

Banks, J. A., & Banks, C. A. M. (Eds.). (2004). Handbook of research on multicultural education. Jossey-Bass.

Barrett, M. (2018). How Schools Can Promote the Intercultural Competence of Young People. *European Psychologist*, *23*(1), 93-104. https://doi.org/10.1027/1016-9040/a000308

Baysu, G., Hillekens, J., Phalet, K., & Deaux, K. (2021). How Diversity Approaches Affect Ethnic Minority and Majority Adolescents: Teacher–Student Relationship Trajectories and School Outcomes. *Child Development*, *92*(1), 367-387. https://doi.org/10.1111/cdev.13417

Berry, J. W. (1977). *Multiculturalism and Ethnic Attitudes in Canada*. Supply and Services Canada.

Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, *46*(1), 5-34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Berry, J. W. (2003). *Conceptual approaches to acculturation*. In K. M. Chun, P. Balls Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17–37). American Psychological Association. https://doi.org/10.1037/10472-004

Berry, J. W. (2017). *Mutual intercultural relations*. Cambridge University Press. https://doi.org/10.1017/9781316875032

Berry, J. W., Lepshokova, Z., Collaboration, M., & Grigoryev, D. (2022). How shall we all live together?: Meta-analytical review of the mutual intercultural relations in plural societies project. *Applied Psychology*, *71*(3), 1014-1041. https://doi.org/10.1111/apps.12332

Bourhis, R. Y., Moïse, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International journal of psychology*, *32*(6), 369-386. https://doi.org/10.1080/002075997400629

Brault, M.-C., Janosz, M., & Archambault, I. (2014). Towards an interactive effect of school composition and school climate on teacher expectations of students: A multilevel analysis. *Teaching and Teacher Education, 44*, 148–159. https://doi.org/10.1016/j.tate.2014.08.008

Bronfenbrenner, U., & Morris, P. (2007). The Bioecological Model of Human Development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (6th ed., pp. 793–828). John Wiley & Sons.

Brown, C., White, R., & Kelly, A. (2021). Teachers as educational change agents: what do we currently know? findings from a systematic review. *Emerald Open Research*, *3*(26). https://doi.org/10.35241/emeraldopenres.14385.1

Brown, C. S., & Chu, H. (2012). Discrimination, Ethnic Identity, and Academic Outcomes of Mexican Immigrant Children: The Importance of School Context. *Child Development*, *83*(5), 1477-1485. https://doi.org/10.1111/j.1467-8624.2012.01786.x

Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. Guilford publications.

Byrd, C. M. (2015). The Associations of Intergroup Interactions and School Racial Socialization with Academic Motivation. *The Journal of Educational Research*, *108*(1), 10-21. https://doi.org/10.1080/00220671.2013.831803

Byrd, C. M. (2017). The complexity of school racial climate: Reliability and validity of a new measure for secondary students. *British Journal of Educational Psychology*, *87*(4), 700-721. https://doi.org/10.1111/bjep.12179

Cadenas, G. A., Cisneros, J., Spanierman, L. B., Yi, J., & Todd, N. R. (2021). Detrimental Effects of Color-Blind Racial Attitudes in Preparing a Culturally Responsive Teaching Workforce for Immigrants. *Journal of Career Development*, *48*(6), 926-941. https://doi.org/10.1177/0894845320903380

Celeste, L., Baysu, G., Phalet, K., Meeussen, L., & Kende, J. (2019). Can School Diversity Policies Reduce Belonging and Achievement Gaps Between Minority and Majority Youth? Multiculturalism, Colorblindness, and Assimilationism Assessed. *Personality and Social Psychology Bulletin*, *45*(11), 1603-1618. https://doi.org/10.1177/0146167219838577

Civitillo, S., & Juang, L. P. (2019). How to best prepare teachers for multicultural schools: Challenges and perspectives. In P.F. Titzmann & P. Jugert (Eds.), *Youth in Superdiverse Societies: Growing up with globalization, diversity, and acculturation* (1st ed., pp. 285-301). Routledge.

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. *Educational Research Review*, *24*, 67-83. https://doi.org/10.1016/j.edurev.2018.01.003

Civitillo, S., Juang, L. P., & Schachner, M. K. (2021). Stressing similarities or ignoring differences? Shedding light into different forms of color-evasive ideology with pre- and in-service teachers. *Zeitschrift für Erziehungswissenschaft*, *24*(1), 135-153. https://doi.org/10.1007/s11618-021-00995-9

Civitillo, S., Schachner, M., Juang, L., van de Vijver, F. J. R., Handrick, A., & Noack, P. (2017). Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study. *Learning, Culture and Social Interaction*, *12*, 1-14. https://doi.org/10.1016/j.lcsi.2016.09.002

Dancey, C., & Reidy, J. (2004). *Statistics Without Maths for Psychology*. Pearson.

Deardorff, D. K. (2006). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization. *Journal of Studies in International Education*, *10*(3), 241-266. https://doi.org/10.1177/1028315306287002

Dinh, K. T., & Bond, M. A. (2008). The other side of acculturation: Changes among host individuals and communities in their adaptation to immigrant populations. *American Journal of Community Psychology, 42*(3-4), 283–285. https://doi.org/10.1007/s10464-008-9200-1

Dubbeld, A., de Hoog, N., den Brok, P., & de Laat, M. (2019). Teachers' multicultural attitudes and perceptions of school policy and school climate in relation to burnout. *Intercultural Education*, *30*(6), 599-617. https://doi.org/10.1080/14675986.2018.1538042

Durksen, T. L., Klassen, R. M., & Daniels, L. M. (2017). Motivation and collaboration: The keys to a developmental framework for teachers' professional learning. *Teaching and Teacher Education*, *67*, 53-66. https://doi.org/10.1016/j.tate.2017.05.011

Duyar, I., Gümüş, S., & Bellibaş, M. (2013). Multilevel analysis of teacher work attitudes: The influence of principal leadership and teacher collaboration. *International Journal of Educational Management*, *27*(7), 700-719. https://doi.org/10.1108/IJEM-09-2012-0107

Farmer, T. W., Hamm, J. V., Dawes, M., Barko-Alva, K., & Cross, J. R. (2019). Promoting Inclusive Communities in Diverse Classrooms: Teacher Attunement and Social Dynamics Management. *Educational Psychologist*, *54*(4), 286-305. https://doi.org/10.1080/00461520.2019.1635020

Fernet, C., Guay, F., Senécal, C., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education*, *28*(4), 514-525. https://doi.org/10.1016/j.tate.2011.11.013

Foster, G. (2008). Names will never hurt me: Racially distinct names and identity in the undergraduate classroom. *Social Science Research*, *37*(3), 934-952. https://doi.org/10.1016/j.ssresearch.2008.02.004

Gao, W., & Mager, G. (2011). Enhancing preservice teachers' sense of efficacy and attitudes toward school diversity through preparation: A case of one US inclusive teacher education program. *International journal of special education*, *26*(2), 92-107.

Gay, G. (2002). Preparing for Culturally Responsive Teaching. *Journal of Teacher Education*, *53*(2), 106-116. https://doi.org/10.1177/0022487102053002003

Gay, G. (2010). Acting on Beliefs in Teacher Education for Cultural Diversity. *Journal of Teacher Education*, *61*(1-2), 143-152. https://doi.org/10.1177/0022487109347320

Geerlings, J., Thijs, J., & Verkuyten, M. (2018). Teaching in ethnically diverse classrooms: Examining individual differences in teacher self-efficacy. *Journal of School Psychology*, *67*, 134-147. https://doi.org/10.1016/j.jsp.2017.12.001

Glock, S., Kleen, H., & Morgenroth, S. (2019). Stress among teachers: Exploring the role of cultural diversity in schools. *The Journal of Experimental Education*, *87*(4), 696-713. https://doi.org/10.1080/00220973.2019.1574700

Grazia, V., & Molinari, L. (2021). School climate multidimensionality and measurement: a systematic literature review. *Research Papers in Education*, *36*(5), 561-587. https://doi.org/10.1080/02671522.2019.1697735

Green, C. W., Adams, A. M., & Turner, C. W. (1988). Development and validation of the school interracial climate scale. *American Journal of Community Psychology*, *16*(2), 241-259. https://doi.org/10.1007/BF00912525

Guimond, S., de la Sablonnière, R., & Nugier, A. (2014). Living in a multicultural world: Intergroup ideologies and the societal context of intergroup relations. *European Review of Social Psychology*, *25*(1), 142-188. https://doi.org/10.1080/10463283.2014.957578

Gutentag, T., Horenczyk, G., & Tatar, M. (2018). Teachers Approaches Toward Cultural Diversity Predict Diversity-Related Burnout and Self-Efficacy. *Journal of Teacher Education*, *69*, 408 - 419. https://doi.org/10.1177/0022487117714244

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education*, *48*, 44-55. https://doi.org/10.1016/j.tate.2015.02.001

Haenni Hoti, A., Wolfgramm, C., Müller, M., Heinzmann, S., & Buholzer, A. (2019). Immigrant students and their teachers – exploring various constellations of acculturation orientations and their impact on school adjustment. *Intercultural Education*, *30*(5), 478-494. https://doi.org/10.1080/14675986.2019.1586214

Haugen, I., & Kunst, J. R. (2017). A two-way process? A qualitative and quantitative investigation of majority members' acculturation. *International Journal of Intercultural Relations*, *60*, 67-82. https://doi.org/10.1016/j.ijintrel.2017.07.004

Horenczyk, G., & Tatar, M. (2012). Conceptualizing the school acculturative context: School, classroom, and the immigrant student. In A. S. Masten, K. Liebkind, & D. J. Hernandez. *Realizing the potential of immigrant youth.* (pp. 359-375). Cambridge University Press. https://doi.org/10.1017/CBO9781139094696.018

Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016). Culturally Responsive School Leadership: A Synthesis of the Literature. *Review of Educational Research*, *86*(4), 1272-1311. https://doi.org/10.3102/0034654316630383

Khukhlaev, O. E., Pavlova, O. S., Khakimov, E. R., Khukhlaeva, O. V., Krivtsova, A., Leybman, I. Y., & Usybyan, S. (2021). Measuring Intercultural Competence in Teachers: Development and Evaluation of Situational Judgment Test. *Psychological Science and Education*, *26*(6), 46-57. https://doi.org/doi:10.17759/pse.2021260603

Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Nieto, M. D., & Morillo, D. (2019). Controlling for Response Biases in Self-Report Scales: Forced-Choice vs. Psychometric Modeling of Likert Items. *Frontiers in Psychology*, *10*, 2309. https://doi.org/10.3389/fpsyg.2019.02309

Kunst, J. R. (2021). Are we facing a "causality crisis" in acculturation research? The need for a methodological (r)evolution. *International Journal of Intercultural Relations*, *85*, A4-A8. https://doi.org/10.1016/j.ijintrel.2021.08.003

Kunst, J. R., Lefringhausen, K., Sam, D., Berry, J., & Dovidio, J. (2021). The missing side of acculturation: How majority-group members relate to immigrant and minority-group cultures. *Current directions in psychological science, 30*(6), 485-494. https://doi.org/10.31234/osf.io/aph8g

Kunst, J. R., & Sam, D. L. (2014). "It's on Time That They Assimilate" – Differential acculturation expectations towards first and second generation immigrants. *International Journal of Intercultural Relations*, *39*, 188-195. https://doi.org/10.1016/j.ijintrel.2013.10.007

Kunst, J. R., Tajamal, H., Sam, D. L., & Ulleberg, P. (2012). Coping with Islamophobia : the effects of religious stigma on muslim minorities' identity formation. *International Journal of Intercultural Relations*, *36*(4), 518-532. https://doi.org/10.1016/j.ijintrel.2011.12.014

Lazarides, R., & Warner, L. M. (2020). Teacher Self-Efficacy. In *Oxford Research Encyclopedia of Education*. https://doi.org/10.1093/acrefore/9780190264093.013.890

Lefringhausen, K., & Marshall, T. C. (2016). Locals' Bidimensional Acculturation Model. *Cross-Cultural Research*, *50*(4), 356-392. https://doi.org/10.1177/1069397116659048

Makarova, E., 't Gilde, J., & Birman, D. (2019). Teachers as risk and resource factors in minority students' school adjustment: an integrative review of qualitative research on acculturation. *Intercultural Education*, *30*(5), 448-477. https://doi.org/10.1080/14675986.2019.1586212

Makarova, E., & Herzog, W. (2013). Teachers' Acculturation Attitudes and Their Classroom Management: An Empirical Study among Fifth-Grade Primary School Teachers in

Switzerland. *European Educational Research Journal*, *12*(2), 256-269. https://doi.org/10.2304/eerj.2013.12.2.256

Marsh, H. W., Hau, K.-T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling: A Multidisciplinary Journal*, *11*(3), 320-341. https://doi.org/10.1207/s15328007sem1103_2

Mikrozensus, S. B. (2015). *Hauptberuflisches Bildungspersonal innerhalb und außerhalb früher Bildung, Schulen, und Hochschulen des Mikrozensus 2015*.

Mikrozensus, S. B. (2020). Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus 2019 [Population with immigrant background - results of the microcensus 2015]. https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Publikationen/Downloads-Migration/migrationshintergrund-2010220207004.html

Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and Teacher Perceptions of School Climate: A Multilevel Exploration of Patterns of Discrepancy. *Journal of School Health*, *80*(6), 271-279. https://doi.org/10.1111/j.1746-1561.2010.00501.x

Moffitt, U., Juang, L. P., & Syed, M. (2019). "We don't do that in Germany!" A critical race theory examination of Turkish heritage young adults' school experiences. *Ethnicities*, *19*(5), 830-857. https://doi.org/10.1177/1468796818788596

Molina, L. E., & Wittig, M. A. (2006). Relative importance of contact conditions in explaining prejudice reduction in a classroom context: Separate and equal? *Journal of Social Issues*, *62*(3), 489-509. https://doi.org/10.1111/j.1540-4560.2006.00470.x

Motti-Stefanidi, F., Berry, J., Chryssochoou, X., Sam, D. L., & Phinney, J. (2012). Positive immigrant youth adaptation in context: Developmental, acculturation, and social-psychological perspectives. In A. S. Masten, K. Liebkind, & D. J. Hernandez (Eds.), *Realizing the Potential of Immigrant Youth*. (pp. 117-158). https://doi.org/10.1017/CBO9781139094696.008

Nguyen, A.-M. D., & Benet-Martínez, V. (2013). Biculturalism and Adjustment: A Meta-Analysis. *Journal of Cross-Cultural Psychology*, *44*(1), 122-159. https://doi.org/10.1177/0022022111435097

OECD. (2010). *Educating teachers for diversity: Meeting the challenge*. OECD Paris.

Ortega, L., Boda, Z., Treviño, E., Arriagada, V., Gelber, D., & Escribano, M. d. R. (2020). The centrality of immigrant students within teacher-student interaction networks: A relational approach to educational inclusion. *Teaching and Teacher Education*, *95*, 103126. https://doi.org/10.1016/j.tate.2020.103126

Park, B., & Judd, C. M. (2005). Rethinking the Link Between Categorization and Prejudice Within the Social Cognition Perspective. *Personality and Social Psychology Review*, *9*(2), 108-130. https://doi.org/10.1207/s15327957pspr0902_2

Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacher- and school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology*, *50*(1), 129-145. https://doi.org/10.1016/j.jsp.2011.07.003

Paulhus, D. L. (2017). Socially Desirable Responding on Self-Reports. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1-5). Springer. https://doi.org/10.1007/978-3-319-28099-8_1349-1

Rattan, A., & Ambady, N. (2013). Diversity ideologies and intergroup relations: An examination of colorblindness and multiculturalism. *European Journal of Social Psychology*, *43*(1), 12-21. https://doi.org/https://doi.org/10.1002/ejsp.1892

Romijn, B., Slot, P., Leseman, P., & Pagani, V. (2020). Teachers self-efficacy and intercultural classroom practices in diverse classroom contexts: A cross-national comparison. *International Journal of Intercultural Relations*, *79*, 58-70. https://doi.org/10.1016/j.ijintrel.2020.08.001

Rosenthal, L., & Levy, S. R. (2010). The Colorblind, Multicultural, and Polycultural Ideological Approaches to Improving Intergroup Attitudes and Relations. *Social Issues and Policy Review*, *4*(1), 215-246. https://doi.org/10.1111/j.1751-2409.2010.01022.x

Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of Statistical Software*, *48*(2), 1-36. https://doi.org/10.18637/jss.v048.i02

Rosseel, Y. (2020). Small sample solutions for structural equation modeling. In van de Schoot, R. & Miočević, M. (Eds.), *Small sample size solutions.* (1st ed., pp. 226-238). Routledge. https://doi.org/10.4324/9780429273872-19

Schachner, M. K. (2019). From equality and inclusion to cultural pluralism – Evolution and effects of cultural diversity perspectives in schools. *European Journal of Developmental Psychology*, *16*(1), 1-17. https://doi.org/10.1080/17405629.2017.1326378

Schachner, M. K., Brenick, A., Noack, P., van de Vijver, F. J. R., & Heizmann, B. (2015). Structural and normative conditions for interethnic friendships in multiethnic

classrooms. *International Journal of Intercultural Relations*, *47*, 1-12. https://doi.org/10.1016/j.ijintrel.2015.02.003

Schachner, M. K., Juang, L., Moffitt, U., & van de Vijver, F. J. R. (2018). Schools as Acculturative and Developmental Contexts for Youth of Immigrant and Refugee Background. *European Psychologist*, *23*(1), 44-56. https://doi.org/10.1027/1016-9040/a000312

Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural Diversity Climate and Psychological Adjustment at School-Equality and Inclusion Versus Cultural Pluralism. *Child Development*, *87*(4), 1175-1191. https://doi.org/10.1111/cdev.12536

Schachner, M. K., Schwarzenthal, M., Moffitt, U., Civitillo, S., & Juang, L. (2021). Capturing a nuanced picture of classroom cultural diversity climate: Multigroup and multilevel analyses among secondary school students in Germany. *Contemporary Educational Psychology*, *65*, 101971. https://doi.org/10.1016/j.cedpsych.2021.101971

Schachner, M. K., Van de Vijver, F. J. R., & Noack, P. (2014). Family-Related Antecedents of Early Adolescent Immigrants' Psychological and Sociocultural School Adjustment in Germany. *Journal of Cross-Cultural Psychology*, *45*(10), 1606-1625. https://doi.org/10.1177/0022022114543831

Schachner, M. K., Van de Vijver, F. J. R., & Noack, P. (2018). Acculturation and School Adjustment of Early-Adolescent Immigrant Boys and Girls in Germany: Conditions in School, Family, and Ethnic Group. *The Journal of Early Adolescence*, *38*(3), 352-384. https://doi.org/10.1177/0272431616670991

Schwarzenthal, M., Daumiller, M., & Civitillo, S. (2022). Investigating the Sources of Teacher Intercultural Self-Efficacy: A Three-Level Study Using TALIS 2018. https://doi.org/10.31234/osf.io/un5zv

Schwarzenthal, M., Juang, L. P., Schachner, M. K., & van de Vijver, F. J. R. (2019). A multimodal measure of cultural intelligence for adolescents growing up in culturally diverse societies. *International Journal of Intercultural Relations*, *72*, 109-121. https://doi.org/10.1016/j.ijintrel.2019.07.007

Schwarzenthal, M., Juang, L. P., Schachner, M. K., van de Vijver, F. J. R., & Handrick, A. (2017). From tolerance to understanding: Exploring the development of intercultural competence in multiethnic contexts from early to late adolescence. *Journal of Community & Applied Social Psychology*, *27*(5), 388-399. https://doi.org/10.1002/casp.2317

Schwarzenthal, M., Schachner, M. K., Juang, L. P., & van de Vijver, F. J. R. (2019). Reaping the benefits of cultural diversity: Classroom cultural diversity climate and students' intercultural competence. *European Journal of Social Psychology*, *50*(2), 323-346. https://doi.org/10.1002/ejsp.2617

Schwarzenthal, M., Schachner, M. K., van de Vijver, F. J. R., & Juang, L. P. (2018). Equal but different: Effects of equality/inclusion and cultural pluralism on intergroup outcomes in multiethnic classrooms. *Cultural Diversity and Ethnic Minority Psychology*, *24*(2), 260-271. https://doi.org/10.1037/cdp0000173

Slot, P., Romijn, B., & Nata, G. (2019). *A Virtual Learning Environment model of professional development aimed at enhancing diversity and inclusiveness*. EU ISOTIS Project. https://dspace.library.uu.nl/handle/1874/415345

Smith, L. V., Wang, M.-T., & Hill, D. J. (2020). Black Youths' perceptions of school cultural pluralism, school climate and the mediating role of racial identity. *Journal of School Psychology*, *83*, 50-65. https://doi.org/10.1016/j.jsp.2020.09.002

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Hall Publishers.

Tatar, M., Ben-Uri, I., & Horenczyk, G. (2011). Assimilation attitudes predict lower immigration-related self-efficacy among Israeli immigrant teachers. *European Journal of Psychology of Education*, *26*(2), 247-255. https://doi.org/10.1007/s10212-010-0044-3

Thijs, J., & Verkuyten, M. (2014). School ethnic diversity and students' interethnic relations. *British Journal of Educational Psychology*, *84*(1), 1-21. https://doi.org/10.1111/bjep.12032

Thijs, J., Westhof, S., & Koomen, H. (2012). Ethnic incongruence and the student–teacher relationship: The perspective of ethnic majority teachers. *Journal of School Psychology*, *50*(2), 257-273. https://doi.org/10.1016/j.jsp.2011.09.004

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944-956. https://doi.org/10.1016/j.tate.2006.05.003

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher Efficacy: Its Meaning and Measure. *Review of Educational Research*, *68*(2), 202-248. https://doi.org/10.3102/00346543068002202

United Nations. (2019). *International Migration 2019: Highlights*. https://www.un-ilibrary.org/content/books/9789210048194

Van Acker, K., Phalet, K., Deleersnyder, J., & Mesquita, B. (2014). Do "they" threaten "us" or do "we" disrespect "them": Majority perceptions of intergroup relations and everyday contacts with immigrant minorities. *Group Processes & Intergroup Relations*, *17*(5), 617-628. https://doi.org/10.1177/1368430214536062

van de Vijver, F. J. R. (2017). Challenges in the study of adolescent and acculturative changes. *Journal of Adolescence*, *62*(1), 226-229. https://doi.org/10.1016/j.adolescence.2017.08.004

van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The Implicit Prejudiced Attitudes of Teachers: Relations to Teacher Expectations and the Ethnic Achievement Gap. *American educational research journal*, *47*(2), 497-527. https://doi.org/10.3102/0002831209353594

Van Praag, L., Stevens, P. A. J., & Van Houtte, M. (2016). 'No more Turkish music!' The acculturation strategies of teachers and ethnic minority students in Flemish schools. *Journal of Ethnic and Migration Studies*, *42*(8), 1353-1370. https://doi.org/10.1080/1369183X.2015.1103171

Vedder, P., Horenczyk, G., Liebkind, K., & Nickmans, G. (2006). Ethno-culturally diverse education settings; problems, challenges and solutions. *Educational Research Review*, *1*(2), 157-168. https://doi.org/10.1016/j.edurev.2006.08.007

Vedder, P., & van Geel, M. (2012). Immigrant youth and discrimination. In C. Coll & A. Marks (Eds.), *The impact of immigration on children's development* (Vol. 24, pp. 99-121). Karger Publishers.

Vezzali, L., Giovannini, D., & Capozza, D. (2012). Social antecedents of children's implicit prejudice: Direct contact, extended contact, explicit and implicit teachers' prejudice. *European Journal of Developmental Psychology*, *9*(5), 569-581. https://doi.org/10.1080/17405629.2011.631298

Vieluf, S., Kunter, M., & van de Vijver, F. J. R. (2013). Teacher self-efficacy in cross-national perspective. *Teaching and Teacher Education*, *35*, 92-103. https://doi.org/10.1016/j.tate.2013.05.006

Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, *47*, 120-130. https://doi.org/10.1016/j.tate.2014.12.005

Wang, K. T., Castro, A. J., & Cunningham, Y. L. (2014). Are perfectionism, individualism, and racial color-blindness associated with less cultural sensitivity? Exploring diversity awareness in White prospective teachers. *Journal of Diversity in Higher Education*, *7*(3), 211-225. https://doi.org/10.1037/a0037337

Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research*, *86*(4), 981-1015. https://doi.org/10.3102/0034654315626801

Zick, A., Wagner, U., Van Dick, R., & Petzel, T. (2001). Acculturation and prejudice in Germany: Majority and minority perspectives. *Journal of Social Issues*, *57*(3), 541-557. https://doi.org/10.1111/0022-4537.00228

3. Study 2: Fostering Culturally Responsive Teaching Through the Identity Project Intervention: A Qualitative Quasi-Experiment with Pre-Service Teachers

Jolina Ulbricht[1,2], Maja K. Schachner[1], Sauro Civitillo[3], Linda Juang[4]

[1]Department of Educational Psychology, Martin-Luther-University Halle-Wittenberg, Halle, Germany

[2]Department of Geography Education, Martin-Luther-University Halle-Wittenberg, Halle, Germany

[3]Department of Interdisciplinary Social Science, Utrecht University, Utrecht, The Netherlands

[4]Education Department, University of Potsdam, Potsdam, Germany

Abstract

The framework of culturally responsive teaching (CRT) provides a promising pathway for preparing teachers for culturally diverse schools. Important components of CRT are critical reflection, valuing cultural diversity, and efficacy in teaching in a diverse classroom. The present study explores whether the Identity Project (Umaña-Taylor & Douglass, 2017), an eight-week classroom-based intervention, changes pre-service teachers' 1) critical reflection, 2) diversity beliefs, and CRT efficacy. Using a qualitative, quasi-experimental design, we conducted semi-structured interviews (M_t=75min.) with eight pre-service teachers (three identified as female, five identified as male), in Eastern Germany at two time points: before and after an eight-week teaching experience at school. During the teaching experience, four participants in the intervention group (M_{age}=22.3) facilitated the Identity Project, while the remaining four participants (control group, M_{age}=25.5) taught regular lessons as part of the compulsory internship in their teacher-training degree at university. One out of eight participants are of immigrant descent. Using thematic analysis (Braun & Clarke, 2006), findings suggest that implementing the Identity Project intervention promotes pre-service teachers' quality of critical reflection, contributes to valuing cultural diversity beliefs, and promotes CRT efficacy. The findings help to identify approaches for reflexive critical education in a migration-diverse society.

3.1 Introduction

As societies become more diverse, addressing a broader diversity of students becomes increasingly important in education. Yet, teachers often feel ill prepared or overwhelmed in dealing with cultural diversity and addressing educational inequalities (Cushner & Mahon, 2009). In Germany, teachers are largely oriented toward German-speaking, culturally-Christian socialized middle-class students (Gomolla, 2021). Moreover, (pre-service) teachers[5] often engage in deficit thinking when working with students of cultural[6] minorities, students from lower socioeconomic backgrounds, and students who speak the national language as a second language (Civitillo & Jugert, 2022; Guo, 2015). In general, deficit thinking blames individuals, such as students from marginalized and oppressed groups, for the challenges and inequalities they face. These teacher beliefs can be harmful as they ignore the structural barriers these students experience and contribute to an increasing gap in educational attainment (Gay, 2010). Previous research (Civitillo et al., 2019; Hachfeld et al., 2015) suggests that dealing constructively with cultural diversity in the sense of culturally responsive teaching (CRT) is related to appreciative beliefs (e.g., multicultural beliefs).

CRT implies a "positive belief paradigm" (Gay, 2015), which can be useful for addressing sociocultural inequalities. Critical reflection, defined as the ability to analyze current social realities critically, and recognize how social, economic, and political conditions limit access to opportunity and perpetuate injustices of privileges and disadvantages, is a crucial component of CRT (Diemer & Li, 2011; Gay, 2002). Critical reflection can be applied to reduce deficit beliefs about students and confront inequitable policies or practices within schools

---

[5] Pre-service teachers are individuals who are being prepared for the teaching profession (e.g., at a college or university) but have not yet completed formal teacher training or received their teaching qualification.

[6] In the public debate in Germany, culture is often perceived as static and hereditary, often used in a racialized way and often implies ethnicity. In accordance with Causadias and collogues (2018), we define culture as "a coherent system of practices, symbols, beliefs, and ideals that are created and shared by a community, subject to change as it is passed from one generation to the next, and working simultaneously at the individual and societal level" (p. 2). We conceptualize culture as dynamic, inherently heterogeneous and influenced by various factors such as historical events and social dynamics, which counters an essentialist view of culture as unchanging and inherently homogenous, monolithic and stable.

(Gorski & Dalton, 2019). Research on CRT has focused on pre-service and in-service teachers' perceptions of their competence (i.e., self-efficacy), which is crucial given established correlations between teaching efficacy and students' learning outcomes in the past three decades (Tschannen-Moran & Hoy, 2001). While there is a large body of literature on the conceptual framework of CRT, mainly originating from the United States, only a few studies investigated how teacher trainings and structured practical experiences using this conceptual framework may shape pre-service teachers' critical reflection, diversity beliefs and teaching efficacy (e.g., Milner, 2005; Fitchett et al., 2012; Paetsch et al., 2023). The present study focuses on structured practical experiences around conducting the Identity Project, an eight-week classroom-based intervention that addresses and values students' cultural identities, in secondary schools in Eastern Germany[7]. We follow the call for a qualitative, longitudinal, quasi-experimental design for the investigation of teacher trainings (Civitillo et al., 2018), and examine how implementing the Identity Project in the classroom can facilitate the development of critical reflection and cultural diversity beliefs as well as culturally responsive teaching (CRT) efficacy.

3.1.1 Culturally Responsive Teaching as a Promising Framework for Teacher Trainings

A critical review of trainings with pre-service teachers described CRT as a promising framework "for best preparing teachers for cultural diversity, including challenging their beliefs about cultural diversity" (Civitillo, 2018, p. 74). Gay (2002, 2018) defined CRT as using students' cultural experiences, supporting their cultural identity development, and empowering their sociopolitical consciousness as a way of teaching students more efficaciously. Although CRT encompasses several dimensions, previous research on teacher trainings is often limited

---

[7] Schools in East Germany often have a lower level of cultural diversity than schools in West Germany. The Identity Project took place in Halle, a bigger town with a more recent increase in cultural diversity due to incoming refugees starting in 2015. Historically, Halle has been deeply influenced by the West/East division during the Cold War era until 1990, which shapes Germany's sociopolitical landscape. The cultural identity of people in East Germany often relates to regional dimensions such as local identity. People who identify as East German may be confronted with stereotypes and prejudices and share experiences with other minoritized groups (Juang et al., 2022).

to just one component, e.g., beliefs (Civitillo et al., 2018). The different components of CRT, such as critical reflection, diversity beliefs and CRT efficacy, are introduced in separate sections below.

3.1.2 Critical Reflection as a Core Component of Culturally Responsive Teaching

Critical reflection is an essential component of CRT (Gay & Kirkland, 2003; Villegas & Lucas, 2002) which does not solely attribute responsibility for academic failure to students and their families, but questions structures and systems that perpetuate privileges and disadvantages (Diemer et al., 2016; Gorski & Dalton, 2019). In the light of the various discriminatory structures in the German education system, teachers' critical reflection on privilege and disadvantage is a central characteristic of their professional identity (Morgan, 2017). Critical reflection requires the application of the concept of intersectionality, which reveals that sociocultural inequalities do not exist in isolation along different dimensions (e.g., race, gender, sexual orientation), but rather the convergence of different, interconnected systems of oppression leads to different experiences for marginalized individuals and groups (Godfrey & Burson, 2018). Applying the concept of intersectionality enables teachers to critically reflect on the complexity of identity and inequality along multiple, intersecting dimensions, but also to recognize inequalities and exclusion in school and in the classroom in order to advocate for social justice and social reconstruction (Gorski & Dalton, 2019; Simola, 2021). A study of critical reflection in the United States (Gorski & Dalton, 2019) analyzed courses in multicultural and social justice teacher education and identified approaches promoting critical reflection. These approaches include reflecting on one's own understanding of "other" cultures as well as understanding one's own identities and life experiences. Critical approaches also include reflecting on one's own preparedness and willingness to be an agent of social justice change in the school context. Research suggests that critical reflection on issues of power and educational inequalities promote teachers' cultural awareness and can change

beliefs, e.g., toward appreciative, critically multiculturalist beliefs (Baldwin et al., 2005; Calleja, 2014).

3.1.3 Cultural Diversity Beliefs as a Core Component of Culturally Responsive Teaching

Teacher beliefs are defined as individual cognitive conceptions articulating values and behaviors, which may" influence instructional choices and teaching practices, and potentially determine when, why, and how teachers interact with students" (Hoffman & Seidel, 2014, p. 106). In the context of culturally diverse classrooms, teachers' diversity beliefs are conceptualized as central components of teachers' professional development (Hachfeld, 2013). As classrooms become more diverse, teachers' cultural diversity beliefs, reflecting teachers' views about incorporating cultural diversity content into daily teaching and learning activities, have become an increasingly important focus in teacher education research (Civitillo et al., 2018). Teachers' cultural diversity beliefs are susceptible to change through interactions and experiences with diverse individuals and contexts, as well as professional training and teaching practice (Milner, 2005). Previous research suggests that whether cultural diversity is valued, ignored or rejected is not only reflected in school policies (Celeste et al., 2019) and classroom climate (Schachner et al., 2021) but is also an expression of teachers' individual beliefs (Hagenaars et al., 2023; Vázquez-Montilla et al., 2014).

Valuing cultural diversity. Valuing cultural diversity is a defining aspect of cultural pluralism (Civitillo et al., 2017; Schachner et al., 2016) or multiculturalism (Hachfeld et al., 2012), and explicitly values diversity and difference in the school context. Cultural pluralism is associated with positive outcomes, such as better teacher-student relationships, more positive peer interactions, and higher CRT efficacy of teachers (Smith et al., 2020; Ulbricht et al., 2022). Critical multiculturalism (Gorski, 2009), goes beyond celebrating differences and recognizes educational inequalities that are reinforced and maintained in schools by uncovering power relations and understanding teaching within a larger sociopolitical context. Studies in the United States with minoritized Black students found that teaching students about societal inequality

promotes students' development of critical consciousness and student achievement and engagement (Carter, 2008; El-Amin et al., 2017).

Ignoring diversity beliefs. Ignoring cultural diversity, often termed color-evasiveness, is an approach insisting that culture, ethnicity, and race do not matter (Neville et al. 2000).Color-evasion has been criticized for ignoring and reducing awareness of existing societal inequalities, perceived discrimination, and racism (Bonilla-Silva, 2015). Research emphasizes that color-evasive beliefs may have different meanings and take different forms (Civitillo et al., 2021; Guimond et al., 2014), such as individualism, equal treatment, or stressing similarities. Individualism beliefs ignore the educational inequalities faced by different social and cultural groups by emphasizing the individual. Teachers with individualism beliefs value the uniqueness of students, regardless of their cultural background, and highlight their individual talents and academic performance. Another distinct form of ignoring cultural diversity is the belief of treating all students equally, regardless of their cultural backgrounds, to prevent discrimination. Some teachers equate explicit recognition of cultural differences with a form of racism and therefore endorse stressing between-group similarities and downplaying differences (Park & Judd, 2005). Although some facets of color-evasive beliefs, notably equal treatment, can lead to positive intergroup contact and buffer perceived discrimination (Baysu et al., 2016; Karataş et al., 2023a), they were associated with lower willingness of teachers to adapt their teaching to culturally diverse students (Hachfeld et al., 2015).

Rejecting cultural diversity beliefs. Rejecting cultural diversity, often manifested in assimilationism and deficit beliefs about students from minoritized groups, contradicts the concept of CRT, as negative beliefs about cultural diversity produce detrimental teaching and learning behaviors (Hagenaars et al., 2023). Teachers with assimilation beliefs advocate that students from minoritized groups adapt to the majoritized group with its norms, values, language, and religion. Deficit thinking originates from an ethnocentric perspective, assuming that the beliefs and standards of the majoritized cultural group are inherently correct. This

mindset leads to the perception of students diverging from the dominant norms as deficient. Consequently, teachers' deficit beliefs tend to interpret sociocultural and linguistic differences as issues originating in the family home, diminishing educators' influence over these aspects (Nelson & Guerra, 2014). Research in Belgium and Germany suggests that school approaches of rejecting cultural diversity have negative effects on culturally minoritized students, as they can increase stereotyping, peer rejection, negative attitudes toward the outgroup, and feelings of alienation (Celeste et al., 2019; Pulinx et al., 2017; Schachner et al., 2016). To move away from rejecting cultural diversity, the practice of reflection is an important tool that encourages teachers to question their beliefs and behaviors (Christie et al., 2015; Mezirow, 2003). Critical reflection on teaching practices with marginalized youth provide important space to interrogate their attitudes, beliefs, and values and reduce deficit perspectives toward students (Gorski & Dalton, 2019).

3.1.4 Self-Efficacy as a Core Component of Culturally Responsive Teaching

Self-efficacy is a main component of teachers' professional competence working in a culturally diverse context and is related to effective teacher actions in the classroom and the ability to promote learners' educational outcomes, e.g., academic achievement and motivation (Hachfeld et al., 2012). According to Bandura's social cognitive theory (1977), self-efficacy refers to an individual's judgement of capability to perform a particular action and is described as context-, task-, and domain-specific. Domain-specific aspects of self-efficacy, such as teachers' self-efficacy regarding teaching culturally diverse classrooms, are rarely considered in teacher education within the German context. However, one existing quantitative study on CRT efficacy in Germany revealed an overall two-factor structure 1) instructional and relational adaptations, 2) cooperative learning arrangements, and indicated that pre-service teachers have less efficacy in the implementation of strategies of dealing with individual cultural backgrounds than in the implementation of cooperative learning techniques Civitillo et al, 2016). Research in the United Stated found that pre-service teachers (who are often from the culturally

majoritized group) have low CRT self-efficacy, rooted in doubts about their ability to teach in ways that relate to the student's home life (e.g., language, culture). These doubts may stem from a general lack of knowledge about students' cultural backgrounds and CRT, as well as experiences observing and working in culturally diverse classrooms (Cruz et al., 2020; Siwatu et al., 2016). Teachers' language characteristics, instructional setting, and perceived quality of professional preparation were significant predictors of CRT efficacy (Chu & Garcia, 2014). Additionally, a study by Fitchett et al. (2012) indicated that pre-service teachers who engaged deeply with the concept of CRT, were more confident in their abilities to employ CRT practices.

3.1.5 Promoting Culturally Responsive Teaching Through the Identity Project

In the sense of CRT, teachers need to be equipped with effective tools and enabled to encourage students to explore their cultural identities (Branch, 2020). Implementing the Identity Project in the classroom was shown to promote the exploration of students' cultural identity and can initiate a transformative process that is associated with a variety of positive outcomes for students, such as greater resolution of ethnic-racial and global identity, improved academic engagement, higher self-esteem, improved outgroup attitudes, and positive socioemotional adjustment (Juang et al., 2020; Umana-Taylor et al., 2018). Previous research on the implementation of the Identity Project has so far only examined student outcomes, without any focus on teacher outcomes. We argue that through implementing the Identity Project, pre-service teachers can develop and practice core components of CRT. Through different activities in the Identity Project, pre-service teachers can practice CRT, for instance by encouraging students to reflect on their different social identities and stereotypes depending on different, intersecting social categories. Critical reflection on different, intersecting social categories may also help pre-service teachers to recognize their own cultural assumptions and biases and question how these affect their teaching practices in order to develop an understanding of cultural diversity and appreciative diversity beliefs, such as cultural pluralism and critical multiculturalism beliefs (Gulya & Fehérvári, 2024). In addition, teachers can practice CRT in

the classroom by facilitating group work and thereby fostering intergroup relationships between culturally diverse students (Byrd, 2016). Indeed, the Identity Project contains multiple activities that require students to work in diverse groups and changing group constellations. Working in diverse groups not only leads to better learning outcomes, but is also crucial for reducing prejudice and improving intergroup relations (Pettigrew, 1998). According to the contact hypothesis (Allport et al., 1954), positive contact experiences between pre-service teachers and culturally diverse students may also deconstruct pre-service teachers' prejudices and dismantle deficit beliefs. In addition, we argue that pre-service teachers gain mastery experiences through practicing CRT. In this context, the perception of pre-service teachers' own teaching performance as successful can increase self-efficacy beliefs (Bandura, 1993).

3.1.6 The Present Study

Drawing on the principles of CRT, we developed a one-semester training, which was implemented in a regular seminar format at the university to prepare pre-service teachers for the implementation of the Identity Project (Pevec-Zimmer et al., 2024). The seminar included discussing contents, going through project activities and materials, and learning about the research behind the Identity Project. After completing a theoretical seminar on the Identity Project at the university, four participants in the intervention group facilitated the Identity Project in a 7th grade classroom, while the remaining four participants (control group) taught regular lessons as part of the compulsory internship in their teacher-training degree at university.

Drawing on pre- and post-intervention interviews, the present study addresses three research questions: How do pre-service teachers change through implementing the Identity Project in 1) critical reflection on privileges and disadvantages, 2) cultural diversity beliefs, and 3) CRT self-efficacy, compared to teachers who are going through their regular internship. Specifically, we are interested in how implementing the Identity Project would enable pre-service teachers to engage with students' sociocultural identities in the classroom and initiate a

process of critical reflection. We further investigate how implementing the Identity Project, which explicitly values the sociocultural backgrounds of the students and addresses issues such as discrimination and racism in its sessions, can contribute to the development of cultural pluralism and critical multiculturalism beliefs of pre-service teachers. In addition, we are interested in how the implementation of the Identity Project can promote pre-service teachers' self-efficacy to implement CRT practices in classroom.

3.2 Method

3.2.1 Participants

Eight participants (three identified as female, five identified as male), aged between 21 and 27 years ($M = 23.9$), took part in the study in Eastern Germany. All participants were born in Germany. Hanna grew up in Western Germany, while the remaining participants grew up in Eastern Germany[8]. David is of immigrant descent, which means he has one immigrant parent. However, David identifies as White, as he describes having no experience of racism, discrimination, or othering. All participants were given the opportunity to choose a pseudonym. However, three participants either did not respond or requested to have a name chosen for them. All participants attended an Identity Project seminar at the university. Participants were recruited at the end of the seminar if they either were willing to moderate the Identity Project in a classroom (intervention group) or they were going to transition into an eight-week compulsory internship at a school soon after the teaching period ended. While the Identity Project involved structured sessions accompanied by observers who provided feedback, the compulsory internship included lesson observation as well as planning lessons with the help of mentors and conducting lessons (control group). When selecting four participants for each

---

[8] Schools in East Germany often have a lower level of cultural diversity than schools in West Germany. The Identity Project took place in Halle, a town with a more recent increase in cultural diversity due to incoming refugees starting in 2015. Historically, Halle has been deeply influenced by the West/East division during the Cold War era until 1990, which shapes Germany's sociopolitical landscape. The cultural identity of people in East Germany often relates to regional dimensions such as local identity. People who identify as East German may be confronted with stereotypes and prejudices and share experiences with other minoritized groups (Juang et al., Citation2023).

condition (intervention group, M_{age}=22.3; control group, M_{age}=25.5), we ensured a balance of gender across conditions. Table 4 provides an overview of the participants in the intervention and control groups and the subjects they studied.

Some participants had extensive experiences with diversity. Within the intervention group, Emil lived in the United Kingdom for a year and Benjamin attended additional trainings in gender related topics and was actively engaged in volunteer educational initiatives related to these topics within schools. Within the control group, Gregor lived for five months each in Australia and Thailand and Feline lived one year in Australia as part of a work and travel program. Emilia lived one year in Chile and tutored students of culturally minoritized group in Germany. Konrad attended an additional training in democracy-related topics. The participants shared a similar level of practical experience from their academic studies, i.e. they had conducted one supervised lesson in schools but had not undertaken more extended practical periods teaching in a classroom. All participants gave informed consent for their data to be used. The study was authorized by the Federal School Office in Halle, Germany.

3.2.2 Research Design and Procedure

Using a quasi-experimental design, we conducted semi-structured interviews at two time points (T1 and T2). The first interview was conducted after participants had completed the Identity Project seminar and before the beginning of the practical phase at school (T1), while the second interview was conducted after the practical phase (T2). Figure 4 shows an overview of the procedure. The interview sessions focused on participants' reflections on their own identity, privileges, disadvantages, their experiences and perceptions of cultural diversity in the school context and lasted between 61 and 96 minutes ($\varnothing$ $t_{T1, \text{Intervention}}$= 65min.; $\varnothing$ $t_{T2, \text{Intervention}}$= 85min.; $\varnothing t_{T1, \text{Control}}$= 74min.; $\varnothing t_{T2, \text{Control}}$ = 79min.). As recommended, the interviewer avoided asking closed or leading questions but rather facilitated the reconstruction of their teaching experience with cultural diversity through deliberately asking open-ended questions and

thereby reducing confirmation bias (Powell et al., 2012). The first author conducted the interviews and was not involved in teaching the Identity Project seminar.

Figure 4

Overview of the Procedure
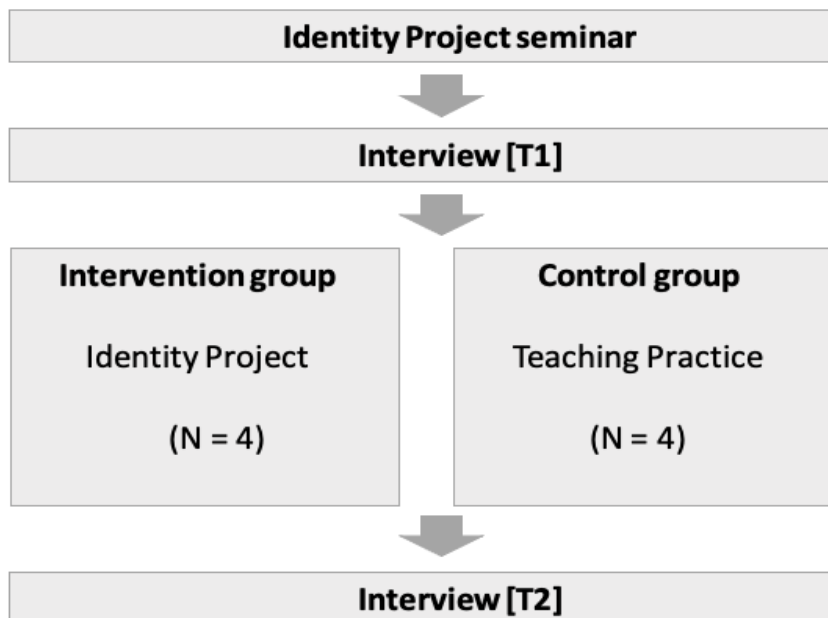
3.2.3 Analytical Approach and Data Analysis

As recommended, we are using a quasi-experimental design to combine qualitative research with a quantitative evaluation of the effectiveness and efficacy of an intervention (Fàbregues et al., 2022). To increase the validity of the results, the qualitative data were converted into a numerical format to compare and contrast the quality of the statements with the quantity of recurring statements. The audio-recorded interviews were transcribed by a research assistant. While the research questions were guided by existing theory and research on CRT, critical reflection, teachers' diversity beliefs, and teaching efficacy, we combined inductive and deductive thematic analysis as a flexible method for qualitative research in psychology (Braun & Clarke, 2006). First, we became familiar with the data by reading each interview transcript and generating initial codes capturing the research questions. We discussed our initial codes, developed themes and subthemes to determine coherent patterns within the data, and developed a coding guide.

Regarding the first research question about the overarching theme of critical reflection, we developed subthemes capturing participants' explanations about why people were privileged or disadvantaged. We revised subthemes, merging some into larger subthemes, resulting in a list of five subthemes that were salient, recurring, and related to the aims of the investigation (Buetow, 2010). These were namely "culture, race and ethnicity" (n_{T1}= 8; n_{T2}=8), "gender and sexuality" (n_{T1}= 5; n_{T2}=4), "language" (n_{T1}= 4; n_{T2}=7), "school and teachers" (n_{T1}= 7; n_{T2}=7), and "socioeconomic status" (n_{T1}= 8; n_{T2}=8). Following the literature, we then coded each of the mentioned subthemes as "structural attribution" or "individual attribution" to assess causal attributions regarding privileges and disadvantages (Godfrey & Wolf, 2016; Watts et al., 2011). Individual attributions involve attributing privileges and disadvantages to individual characteristics or circumstances. For instance, participants would attribute success or advantage to ability, motivation, or talent, while attributing disadvantage to lack of willingness or effort. Structural attributions involve attributing privileges and disadvantages to structural causes. For instance, inequalities are explained by analyzing the broader societal, economic, and institutional factors contributing to the unequal distribution of privileges and disadvantages among groups.

Concerning the second research question, based on previous research in Germany and theoretical considerations (e.g., Celeste et al., 2019; Hachfeld et al., 2013), we formed the following themes for diversity beliefs: "valuing cultural diversity", "ignoring cultural diversity" and "rejecting (cultural) diversity". Under these overarching themes, we developed several subthemes. While Table 4 presents the frequency of codes within cases, Table 5 presents the description and exemplary codes and quotes of the themes and subthemes.

The third research question about the theme "CRT efficacy" refers to pre-service teachers' perceived ability and competence in implementing teaching practices that are sensitive to and inclusive of diverse cultural backgrounds. It involves the causes of doubts as well as the sources of CRT efficacy. We deductively developed the following two subthemes, "efficacy in adapting

instruction and teaching diverse students" and "efficacy in promoting positive intercultural relations," based on previous research and theoretical considerations, and inductively developed the subtheme "efficacy to combat discrimination and racism".

The first coder (first author) identifies as a White woman, born and raised in Eastern Germany, who studied to become a teacher and contributed her knowledge and experience of the school system. The second coder, a woman who immigrated to Germany from Georgia to study psychology and political science enriched the data analysis through experiences with othering and micro-aggression and previous commitment to women's equality. The coding unit was defined as one sentence, and all material was coded in MAXQDA (VERBI Software, 2020) by two coders (the first author and research assistant) independently of each other on a case-by-case basis. If both coders assigned the same section of the transcript to the same (sub)theme, we considered this a match (O'Connor & Joffe, 2020). The average kappa coefficient (K=.56) indicates moderate interrater reliability (O'Connor & Joffe, 2020) as 58% matches (5190 matches, 3826 non-matches) were found between the first and second coder. As recommended by Guest and McLellan (2003), inconsistencies between coders were discussed, and in case of disagreement, we came to a consensus on the best fitting theme (49% of the time, the decision sided with the first author's coding).

The overall coding strategy and scheme were also discussed with the co-authors on several occasions. The third author identifies as a female White German, born and raised in Western Germany, with a background in Developmental and Educational Psychology, the fourth author identifies as a male White Italian with a background in Education and Psychology, and the third author identifies as a female Taiwanese-American with a background in Developmental and Cultural Psychology. All authors are living or have lived in Eastern Germany for a longer period, are familiar with the German education system and have been involved in teacher training at university. They have varying experiences with othering and micro-aggression as immigrant or being a Person of Color.

Table 4

Descriptive Statistics and Absolute Frequencies of Codes for Cultural Diversity Beliefs

Pseudonym	Proportion*	Type of Subject	Timepoint	Critical multiculturalism	Cultural pluralism	Individualism	Equal Treatment	Assimilation	Deficit beliefs
Intervention Group									
Hanna	70%	Natural and social science subject	T2	5	13	0	0	0	0
			T1	3	6	0	0	0	0
Emil	> 50%	Natural sciences subjects	T2	5	10	0	4	1	5
			T1	2	9	0	0	0	0
David	100%	Social science and language subject	T2	15	16	1	1	1	2
			T1	9	7	1	1	1	3
Benjamin	> 90%	Natural and social science subject	T2	4	12	2	0	0	2
			T1	6	5	2	0	0	3
Control Group									
Gregor	65%	Natural and social science subject	T2	5	7	1	2	3	13
			T1	3	5	1	1	0	3
Feline	< 10%	Natural, social science and language subject	T2	0	4	8	2	0	2
			T1	5	2	3	3	0	5
Konrad	< 10%	Musical, technical and language subject	T2	3	4	5	7	1	2
			T1	2	4	6	1	0	1
Emilia	< 10%	Language subjects	T2	9	12	2	1	8	8
			T1	5	10	1	1	1	4

Note. *perceived proportion of students of immigrant descent in classes, a darker color indicates a higher frequency of codes.

Table 5

Themes and Subthemes of Cultural Diversity Beliefs With Examples of Codes and Statements

Themes	Subthemes	Description of subthemes	Code	Example
Valuing Cultural Diversity	**Critical multiculturalism**	Critical multiculturalism beliefs reject the perpetuation of stereotypes and advocate for addressing educational inequities in the classroom.	Question-ing stereotypes and prejudices	"That one perhaps also tries, that if one has any stereotypes or prejudices, to collectively question them and maybe also look behind them, where do they come from and how much does that maybe also have to do with reality" (Hanna, T1)
	Cultural Pluralism	Cultural pluralism sees diversity as a valuable resource, promoting an educational environment that values students' cultural backgrounds and perspectives.	Diversity as something positive	"Maybe also, that one highlights diversity in the classroom, so that one talks about it and becomes aware of it, and does not see it as something negative, but rather as something positive" (Hanna, T1)
Ignoring Cultural Diversity	**Individualism**	Individualism beliefs recognize the unique talents and abilities and emphasize academic performance of students.	Differen-tiation of tasks accor-ding to perfor-mance	"I think that the level of performance should be taken into account in some way, so students should be supported differently" (Feline, T2)
	Equal Treatment	Equal treatment refers to the equal treatment of people regardless of their cultural background and the provision of the same teaching and learning materials for all students in the classroom.	Addres-sing the whole class equally	"I believe that in culturally diverse classes, as I said, either it is treated reflectively, or one tries to address the class as a class without singling out individual persons" (Konrad, T1)
Rejecting Diversity	**Assimilation**	Assimilation beliefs refer to the expectation that people who do not belong to the sociocultural majority should give up their identity in favor of the majoritized group and adapt.	Students should adapt	"I think it's also purely in their own interest, i.e. for the students who are affected, that they adapt, because otherwise, whether you like it or not, it will be difficult to gain a foothold anywhere in the future" (Gregor, T2)
	Deficit beliefs	Deficit beliefs involve negative perceptions or biases toward individuals from specific cultural or social groups. In the sense of ethnocentrism, these beliefs may stem from a judgment of other cultures as deficient compared to one's own cultural values and norms.	People from other cultural back-grounds have a limited under-standing	"Then I've actually noticed that Middle Eastern cultures in particular are, I think, very relaxed, much more relaxed in their mentality, whereas German families, at least I often have the feeling that there is a certain awareness that school, at least the way it works now, is a certain selection principle for later educational paths, later educational success, job opportunities and so on. I don't think people from other cultural backgrounds have understood that" (Benjamin, T2)

Table 6

Subthemes of Culturally Responsive Teaching Efficacy With Examples of Codes and Statements

Themes	Subthemes	Description of subthemes	Code	Example
Culturally Responsive Teaching Efficacy	**CRT efficacy in adapting instruction and teaching diverse students**	This subtheme reflects how teachers feel competent in adjusting their instruction to meet the diverse needs of students, using culturally responsive strategies to engage students from various backgrounds and foster an inclusive learning environment	Language-related difficulties in explaining tasks	"For example, the first thing that comes to mind is when I spoke to some students and there were comprehension difficulties. If I don't speak Romanian and the student doesn't know the word in German, then it was sometimes difficult. Or explaining the tasks on my own"
	CRT efficacy in promoting positive intercultural relations	This subtheme relates to how competent individuals feel to foster intercultural relationships between themselves and students and parents	CRT efficacy in dealing with parents	"With parents, I can't say that I somehow see it as particularly challenging to deal with parents if they have a different cultural background, because I think I generally find it difficult to deal with parents, regardless of their cultural background"
	CRT efficacy to combat discrimination and racism	This subtheme reflects how teachers feel competent in addressing discrimination and racism in the classroom and in dealing with situations related to these issues	CRT efficacy in dealing with racist incidents	"Yes, I've also done that in some cases with racist incidents. I think it's important to act directly in the moment and not wait a long time and say: "What does what you just said here mean?" and that's what we did in the project"

3.3 Results

At T1, major differences emerged within intervention and control groups in critical reflection on privileges or disadvantages, cultural diversity beliefs, and CRT efficacy. In the following, we present and compare the quantitative and qualitative changes of themes from T1 to T2 within the intervention and control group. As recommended, we refer to quantitative changes in the frequency of identified themes, while for qualitative changes, we identify similarities and differences within the intervention and control groups, which we present using exemplary statements (Gibson & Brown, 2009).

3.3.1 Critical Reflection on Privileges and Disadvantages

3.3.1.1 Critical Reflection on Culture, Race, and Ethnicity

Intervention Group. In the intervention group, when reflecting on privileges and disadvantages, the subtheme "culture, race, and ethnicity" was identified within all participants at both timepoints. Emil and David showed a quantitative increase in structural attribution. In terms of the quality of the statements, awareness of discrimination and racism in the classroom increased in all cases of the intervention group. For instance, David reflected at T1 ambivalently, on an individual and structural level, on privileges and disadvantages, and named racism as a form of disadvantage but assumed that racism refers to cultures that are "completely different from German culture". At T2, David mostly reflected on a structural level, drew on experiences related to the Identity Project, and acknowledged that his students are "victims" of racism and discrimination. While at T1, Hanna stated on a structural level, "I didn't have the problem in school that any of the teachers discriminated against me or disadvantaged me because of my cultural background", at T2, she additionally expressed a differentiated awareness of discrimination and racism, referring to her experiences and observations in the classroom. Hanna reported from her experiences in the Identity Project that "jokes" were made between students about their ethnic background. She notes that it has become clear that students

have prejudices and that a "joke" that "was not necessarily meant seriously" also has "an effect" on members of that ethnic group.

Control Group. In the control group, there was a quantitative decrease in structural attributions within the subtheme "culture, race and ethnicity". In terms of the quality of the statements, a decreased awareness of discrimination and racism in the classroom was found. For instance, Gregor attributed culture-, race- and ethnicity-related privileges and disadvantages mostly on a structural level at T1. Gregor referred to his knowledge acquired at the university and explained that educational paths are determined "solely by our skin color, by our cultural background". At T2, Gregor again referred to theoretical considerations at the university on a structural level but when referring to his experiences at school, Gregor reflected on an individual level, attributing disadvantage and discrimination (or the perceived absence of it) to the social relationships between individuals in the classroom: "It actually seemed very peaceful to me, between the students, between me and them, and there were no problems […], even if the students were of immigrant descent, there were never any problems, that anyone was disadvantaged or discriminated". Only Konrad increased his reflection within the theme "culture, race and ethnicity" on a structural level and became aware at T2 that in culturally diverse classrooms there is a risk that students may be "not accepted", "defamed" and "discriminated".

3.3.1.2 Critical Reflection on the Socioeconomic Status

Intervention Group. When reflecting on privileges and disadvantages, the subtheme "socioeconomic status" was identified within all participants of the intervention group at both timepoints, and there was a quantitative increase in structural attributions for Hanna, David, and Benjamin, which were coupled with changes in the quality of the statements for Hanna and David. For instance, Hanna reflected exclusively on an individual level at T1 and described that students can be privileged if they "have their own room at home", if they "get support from

their parents or anyone else", or if they "can do any hobbies". At T2, she attributed privileges and disadvantages related to socioeconomic status only to structural causes such as the "social class from which the students come", leading to students having "completely different conditions, completely different capital" that they can utilize. Although there was a quantitative increase in structural attributions for Benjamin, no differences were found in the quality of the statements. Only for Emil, we found a decrease in structural attributions.

Control Group. For the control group, the subtheme "socioeconomic status" was identified within all participants at both timepoints when reflecting on privileges and disadvantages, and there was a quantitative decrease in structural attributions with Konrad, Feline and Emilia. In terms of the quality of the statements, Konrad attributed students' socioeconomic privileges and disadvantages on a structural level, at T1, referring to their educational background, "class affiliation", and "access" to education. At T2, he attributed students' socioeconomic privileges and disadvantages only on an individual level, as he only mentioned that students may be "financially" disadvantaged even if support, such as for school trips, is offered. Although there was a quantitative increase in structural attributions for Gregor, no differences were found in the quality of the statements.

3.3.1.3 Critical Reflection on School and Teachers

Intervention Group. For the intervention group, the subtheme "school and teachers" was identified for Hanna, David and Emil in the intervention group at both timepoints. There were both qualitative and quantitative changes in structural attribution with David and Emil. While no structural attributions were identified in the case of David at T1, multiple structural attributions were found at T2. In this context, David referred to the cultural composition of classes and schools and teachers' attitudes and approaches to teaching at T2. For instance, David explained that school segregation results in limited interactions between "students with a migration background" and "students without a migration background", which in turn lead to

the development of stereotypes. At T1, Emil reflected on a structural level about the role of teachers' decision about students' further education at the end of elementary school. At T2, Emil again reflected on a structural level, referring to statistics that indicated that teachers are less supportive of students of culturally minoritized groups, and, despite equal academic performance, they assign lower grades compared to their peers from the culturally majoritized group. In summary, Hanna, David and Emil all emphasized the role of teachers as a structure in the distribution of privileges and disadvantages in the school context.

Control Group. For the control group, the theme "school and teachers" was identified within all four cases when reflecting on privileges and disadvantages. There was a quantitative decrease in structural attributions for Konrad and Emilia and an increase for Gregor, with him being the only one recognizing teachers as a structure in the distribution of privileges and disadvantages in the school context.

3.3.1.4 Critical Reflection on Language

Intervention Group. For the intervention group, the subtheme "language" was identified for David, Emil and Benjamin at both timepoints. With David and Benjamin, there was a quantitative decrease in structural attributions. Regarding the quality of the statements, reflecting on the language-related privileges and disadvantages of students also seems to have encouraged pre-service teachers' self-reflection. While Emil and Benjamin exclusively reflected on language-related disadvantages at T1, an awareness of their own language-related privileges was found at T2.

Control Group. For the control group, the subtheme "language" was only identified for Feline at T1. At T2, all participants of the control group reflected on language-related privileges and disadvantages. Feline and Konrad made only individual attributions, while Gregor and Emilia made both individual and structural attributions. Gregor attributed "language barriers" on an individual level to the language abilities of students. On a structural level, Gregor was

aware that linguistic abilities "make a difference" in school and that actions need to be taken to better integrate students. Emilia mainly attributed language on a structural level and reflected on language proficiency requirements in the labor market.

3.3.1.5 Critical Reflection on Gender and Sexuality

Intervention Group. For the intervention group, the subtheme "gender and sexuality" was identified for Hanna and Benjamin at T1. For Hanna, David and Benjamin, we found a quantitative increase in structural attribution. At T1, Hanna and Benjamin attributed own gender and sexuality-related privileges and disadvantages on an individual level. Regarding disadvantages of others, Hanna concluded on a structural level that some people are "confronted" with gender-related prejudices, and some people cannot fit into the "two-gender system", which leads to the problem of not being "accepted". At T2, Benjamin still referred to own attributed gender and sexuality-related disadvantages on an individual level, but also reflected on a structural level about discrimination, while Hanna only reflected on a structural level on gender-related prejudices and discrimination.

Control Group. For the control group, the subtheme "gender and sexuality" was only identified for Konrad and Emilia at T1. Konrad and Emilia both reflected on a structural level, with Emilia only mentioning on a group level that women are "not acknowledged", while Konrad spoke of discrimination against people who "do not belong to this heteronormative group". At T1, Gregor only reflected on a structural privilege due to his male gender in terms of career and payment. At T2, Gregor reflected on a structural level and noted that he had not "experienced any discrimination or disadvantage" due to his "heterosexual existence". However, he mostly attributed disadvantage and discrimination (or the perceived absence of it) to the social relationships between individuals in the classroom.

3.3.2 Cultural Diversity Beliefs

At T1, with the most cases, valuing, ignoring and rejecting beliefs regarding cultural diversity could be identified. Only for Hanna and Emil of the intervention group, no ignoring and rejecting diversity beliefs were identified. In the following, the changes during practical experiences are presented. In the following, we present the changes in cultural diversity beliefs case by case within the intervention and control group.

Intervention Group. All participants of the intervention group increased their valuing of diversity beliefs, not only regarding the quantity but also the quality. In addition, valuing diversity beliefs were the predominant beliefs within all cases of the intervention group at T2. For David, predominantly valuing and rejecting diversity beliefs were both identified at T1, and predominantly valuing diversity beliefs were identified at T2. In particular, he expressed more differentiated pluralistic beliefs at T2, explaining that lessons should be planned sensitively and take the individual and group-specific characteristics of students into account, referring not only to the cultural background of the students (as at T1), but also to the social, linguistic and religious background. At T1, David expressed critical multiculturalism beliefs, referring to observations in schools that teachers were culturally insensitive and failed to address the social and cultural backgrounds of students. David noted that a class was "treated as [it was] a homogeneous group, purely German, brought up like in a middle-class single-family housing estate and yes, I found that a bit strange". He excused the lack of consideration for cultural diversity to teachers' limited time resources.

At T2, David expressed critical multiculturalism beliefs again by criticizing the school system, and the way of teaching in an "ethnocentric" way. In contrast to T1, David did not excuse the lack of consideration for cultural diversity by teachers' lack of time resources, but criticized teachers for seeing changes as work and therefore remaining rigid in their teaching concepts. He concludes from his own experience in the Identity Project that teaching "requires different actions and perhaps different teaching concepts, but it is then a completely normal part

of the teaching profession. It is also something you can do very well". David also reflected on his own stereotypes at T2. When asked what David could do in his role as a teacher to address educational inequalities between different groups, his response at T1 reflected individualism beliefs as he derived actions related to students' academic achievement while ignoring sociocultural group affiliations. At T2, his response to this question reflected pluralistic beliefs. While David had prejudices against Islam at T1, no deficit beliefs or prejudices about Islam were identified at T2. Instead, David referred to a positively perceived experience in the classroom, where a student explained: "In Islam, it's not the case that you necessarily wear a headscarf".

Hanna, Emil, and Benjamin also expressed more nuanced, culturally pluralistic, and more differentiated critical multicultural beliefs at T2. For Hanna, we identified only valuing diversity beliefs at both time points, which strengthened over time. Regarding the quality of the statements, Hanna noted at T1 that the consideration of cultural diversity had not played a role in her previous planning of lessons, while critical multiculturalism beliefs were identified at T2, when Hanna stated that she realized that considering cultural diversity plays a major role in planning lessons. For Benjamin, predominantly valuing and rejecting diversity beliefs were identified at T1, while predominantly valuing cultural diversity beliefs were identified at T2. We identified critical multiculturalism beliefs at both time points: At T2, Benjamin criticized the lack of representation of diversity in teaching materials and emphasized the inclusion of different languages in the classroom (as at T1), but he also emphasized the consideration of religion, such as Ramadan, which took place at the time of the Identity Project. Although quantitatively fewer deficit beliefs were identified for Benjamin, there were no changes regarding the quality of statements, as Benjamin expressed culture and language-related deficit beliefs at both timepoints. Emil expressed increased critical multiculturalism beliefs. While language-related critical multiculturalism beliefs were identified at T1, at T2, Emil referred to concrete actions to deal with cultural diversity and racism at school.

Control Group. Within the control group, the results varied in terms of the quantity of identified themes. While for Gregor and Emilia, there was an increase in valuing and rejecting diversity beliefs, an increase in ignoring cultural diversity beliefs was found for Konrad and Feline. At T1, Gregor emphasized the importance of creating a "pedagogical and social framework" that views diversity as an "enrichment for all", and at T2, he derived concrete actions that also relate to his subject. For instance, Gregor expressed cultural pluralism beliefs referring to the relevance of using students' cultural backgrounds as a resource by allowing students to talk about their own experiences and knowledge of different countries at T2. However, Gregor also expressed religion- and culture-related deficit beliefs at T1, while he expressed deficit beliefs related to gender, socioeconomic background, religion, language, and culture at T2. For instance, Gregor stated at T2: "Then at school, now during the internship, you've also noticed that in some cultural circles, equality, well, between men and women, doesn't really correspond to the status that it should actually be". Emilia mainly reflected on general racist socialization in Germany and on her own stereotypes at T1, while she also included reflections in the classroom at T2. In line with the theme "Critical multiculturalism", Emilia emphasized the need as a teacher to change perspectives on culture and reflects: "How does the child feel when other students make discriminatory comments? Shouldn't I perhaps take the time to contextualize this and make the children understand that hurts, [...] you can't deal with each other like this". However, there was also an increase in deficit beliefs for Emilia, with deficit beliefs related to socioeconomic background and age at T1, and religion-, culture-, and language-related deficit beliefs at T2. Emilia also increased in assimilation beliefs regarding language and stated at T2: "[...] so unfortunately the language of instruction is mostly German. The teachers are also not trained so that they can speak various other languages".

In contrast, for Konrad and Feline, there was an increase in ignoring diversity beliefs. At T1, Feline expressed equally valuing, ignoring, and rejecting diversity beliefs, while she expressed predominantly ignoring diversity beliefs at T2. Feline increased her awareness of

cultural diversity in the classroom, but she did not know how to do this. At T1, Feline expressed various critical multiculturalist beliefs by criticizing teachers and mentors and the school system, engaging against discrimination, and questioning their own racist prejudices. At T2, however, no critical multiculturalist beliefs were identified. For Feline, individual beliefs referring to providing differentiated tasks for students' different academic performance were identified at T1 and increased over time. This was coupled with culture-, religion-, and language-related deficit beliefs at T1, and culture- and language-related deficit beliefs at T2. At T1, Konrad expressed equally valuing, ignoring, and rejecting diversity beliefs, while he expressed predominantly ignoring diversity beliefs at T2. For instance, Konrad mainly expressed individualistic beliefs (e.g., adapting tasks to students' academic performance) at T1, while he mainly endorsed "equal treatment" at T2. Konrad advocated equal treatment over individualism on the basis of planning lessons "without prejudice", without "exposing the individual", which required less time, and as the lessons "worked" the way he wanted them to. Further, Konrad quantitatively increased critical multicultural beliefs. Regarding his qualitative statements, he became aware of his own prejudices and stereotypes. However, perceptions reflecting deficit beliefs toward language and culture appeared for the first time at T2.

3.3.3 Culturally Responsive Teaching Efficacy

3.3.3.1 CRT Efficacy Adapting Instruction and Teaching Diverse Classes

Intervention Group. The intervention group varied in their responses at T1 regarding whether they felt confident in adapting instruction and teaching diverse classes. However, all participants of the intervention group increased their efficacy adapting instruction and teaching diverse classrooms, referring to their experiences in the Identity Project. At T1, David compared addressing educational inequalities with "battling the windmills" (German saying for "fighting in vain against conditions that cannot be changed"), and noted that "somehow, changing the social conditions, well, that's difficult for me to achieve". At T2, David's efficacy changed

slightly as he described becoming more aware of educational inequalities and tried to address them. He emphasized the importance of adapting teaching to linguistically diverse students and felt confident under certain conditions:

> If German is the language of instruction, then that is, of course, an obstacle to communication [...]. But if I design the lesson in such a way that I specifically adapt it to the fact that there are barriers, then I can still do it well. Then it's not a problem.

Although Emil and Hanna also emphasized the need to adapt lessons linguistically at T2, they perceived this as a greater challenge. Benjamin and Hanna also referred to their experiences with the Identity Project. Benjamin stated: "the fact that [the exercises of the Identity Project] worked so well definitely gives me confidence", while Hanna commented that she felt well prepared through theoretical considerations of the Identity Project, and she was able to draw on the knowledge even in "stressful situations" during the Identity Project.

In summary, the participants of the intervention group mainly named the theoretical preparation and the practical implementation of the Identity Project as the main sources of their efficacy adapting instruction and teaching in diverse classrooms, but they also expressed doubts: Benjamin, David and Hanna mostly referred to limited time resources and planning lessons with the curriculum. Hanna described it as "a depressing realization" to have limited time to meet the needs of diverse students and provide individual support, while Benjamin also pointed out the limited time resources available to adequately prepare all students for their final exams. David retrospectively described initial doubts that he overcame at T2. David described the image of the school, where the Identity Project was conducted, as a "horror picture" and a "no-go area", based on his perception in the school; he refuted this assumption.

Control Group. The control group varied in their responses at T1 regarding their efficacy in adapting instruction and teaching diverse classrooms. At T1, all participants in the control group referred to a lack of practical experience and knowledge about cultures and rules

at school in terms of their efficacy. For instance, Gregor referred to the difficulty of applying theoretical knowledge in practice:

> I know [...] you should pay attention to cultural identities, to cultural differences, and act carefully, but I know that daily practice is often different and that it is difficult to act adequately. But I also don't know how to do it [...]. I don't have the experience either.

Gregor and Emilia stated that teachers could get overwhelmed, and there is a risk of burnout. Feline and Konrad felt more confident than Gregor and Emilia. While Feline assumed that she only needed experience, Konrad saw adapting tasks in terms of students' academic performance as an effective way to address educational inequalities and felt confident in doing so, referring to his knowledge. At T2, Gregor increased efficacy in adapting instruction and teaching in diverse classrooms. He attributed his confidence to his practical experience, which is, however, not in line with the principles of CRT: "at least from what I've noticed, it doesn't require a great deal of competences". Emilia's and Konrad's efficacy in addressing educational inequalities remained stable. Konrad felt confident in providing tasks of varying difficulty levels, but he also noted: "It has to be said that I wouldn't have the time to do it as a teacher". At T2, Feline still did not feel confident adapting instruction and teaching diverse classrooms. Yet, unlike at T1, she did not attribute this to a lack of experience, but rather to a lack of preparation at university. At T2, Feline had expressed an awareness of the importance of adapting tasks and instructions in the classroom. However, she explained that she was mainly guided by her mentor:

> I was simply supposed to give everyone the same task. I should do that. And I did, because if it's prescribed to me, I have to do it. I just didn't think it was good, because there were students who took far too long to do tasks and there were students who were just quick.

3.3.3.2 CRT Efficacy in Promoting Positive Intercultural Relations

Intervention Group. Regarding the subtheme "efficacy in promoting positive intercultural relations", all participants in the intervention group, except Benjamin, did not feel confident interacting with culturally diverse students at T1. However, the participants assumed that this would change with experience. For instance, when David was asked about his confidence interacting with culturally diverse students, he said: "It's a challenge, of course. [...] it's incredibly difficult. I think I have to have a lot of experience to be able to do it well". Benjamin felt already confident and stated that the students should be "treated equally" and that he only needed to "adjust a bit to the situation". At T1, Emil mentioned the challenge of dealing with segregation within the class, while Hanna noted that she only has theoretical knowledge so far. All participants of the intervention group increased their CRT efficacy in promoting positive intercultural relations. At T2, Hanna and Emil emphasized the need to establish positive relations through contact opportunities (e.g., group work), but both participants perceive this as a challenge. Referring to his assumption (at T1) that segregation is a challenge, Emil said:

> Yes, I still see it as a big challenge, and I still find it difficult to counteract it. I experienced it myself when I tried to create interethnic groups because the students didn't want to or didn't do it on their own. I still find that difficult and yes. Perhaps I still lack the techniques to counteract this.

Control Group. The control group varied in their responses at T1 and T2 regarding their efficacy in promoting positive intercultural relations. At T1, except for Emilia, they had low confidence interacting with culturally diverse students. For instance, Gregor felt uncertain, whereas Feline felt "absolutely overwhelmed". Emilia felt partly confident, which she attributed to her experience abroad. Although Gregor felt confident interacting with culturally diverse students at T2, his response does not reflect the principles of CRT as he noted "I believe that it's a challenge, but one that can be overcome. One must remain steadfast and true to one's

principles, and perhaps, if necessary, find compromises in some way". Gregor derived his confidence from the fact that he is a man who can "assert himself" in culturally diverse classrooms, as students "test their limits". Emilia increased her efficacy, which she attributed to her experiences tutoring students of immigrant culturally minoritized groups. At T2, Konrad and Feline still felt insecure about promoting positive intercultural relations. While Feline reflected critically on her own classroom behavior, Konrad stated that he would need "more instruction" or "specialists who are familiar with it".

3.3.3.3 CRT Efficacy to Combat Discrimination and Racism

Intervention Group. The participants of the intervention group varied at T1 concerning their efficacy in combating discrimination and racism. At T1, Hanna felt less confident than Benjamin, but both concluded that they would seek support, due to their lack of experience. Emil had more doubts and asked: "How can I, as a privileged, White, rich man, tell other people about racism?". David's responses were ambivalent: While he expressed confidence ("I believe I could manage that"), he also expressed doubts about his ability to manage conflict situations: "I believe many teachers also fail at it. I don't know either whether I would be able to succeed". All participants of the intervention group attributed their increased CRT efficacy to their experiences in the Identity Project. For instance, Emil referred to "racist incidents" and explained that it is important not only to say that racist comments are wrong, but also to find out why the student said this and why they think this way.

Control Group. The participants in the control group varied at T1 concerning their efficacy in combating discrimination and racism. At T1, Gregor was not confident to talk about racism and discrimination, attributing this to his lack of experience. At T1, Feline was generally confident in addressing racism or discrimination in class, but she also emphasized that she had little experience so far and expressed fear of appearing racist. At T1, Konrad was confident to talk about racism and discrimination in culturally diverse classrooms, which he attributed to

having attended additional training on democracy related topics. Emilia described it as challenging and considered it "personally quite uncomfortable" to talk about discrimination and racism at T1. Although Gregor increased his efficacy, his response does not reflect the principles of CRT as, he attributed this to students' deficits in the school internship, stating that "the intellectual background isn't that high or doesn't seem to be so high that you would be particularly challenged there". Feline did not increase in efficacy. Konrad still felt confident due to the training on democracy-related topics. Emilia increased her CRT efficacy to combat discrimination and racism, but she still describes it as challenging to talk about discrimination and racism as it can "open up emotional wounds" for students who have experienced racism and discrimination.

3.4 Discussion

Although teacher beliefs and self-efficacy have been researched extensively in recent decades, little attention has been paid to teacher beliefs and self-efficacy in culturally diverse classrooms. Since many (pre-service) teachers feel unprepared and overwhelmed in dealing with cultural diversity (Cushner & Mahon, 2009), there is a need to understand how teacher training programs, including structured practical experiences as part of teacher education at university, can contribute to the development of professional competence (Civitillo et al., 2018). Concerning professional competence in a culturally diverse context, particular attention is given to teachers' beliefs and teaching self-efficacy, highlighting the role of critical reflection for the endorsement of multicultural beliefs (Hachfeld et al., 2012). Our study compares the experiences of school practice, which is part of the regular teacher education program at the university, with the experience of facilitating the Identity Project, which focuses on students' social and cultural identities with diverse students in a classroom. Our study provides important insights into the changes in critical reflection, cultural diversity beliefs, and CRT efficacy among pre-service teachers.

Regarding our first research question, we conclude that pre-service teachers seem to be aware of privileges and disadvantages on different dimensions. As teachers often describe these dimensions (e.g., socioeconomic status, language, gender) in isolation, rather as interconnected systems, we suggest the application of the concept of intersectionality in teacher education as an important tool for teachers' critical reflection. We also conclude that critical reflection on societal structures and conditions that limit access to opportunity and perpetuate injustice of privileges and disadvantages, seems to challenge pre-service teachers as they often reflect on an individual level. When participants reflected on a structural level, the source of their knowledge often referred to theoretical content from teacher education at university (e.g., the Identity Project seminar).

However, there seems to be a gap between theory and practice, as pre-service teachers had difficulties connecting individual observations in practice with theoretical considerations of structural privileges and disadvantages. Therefore, teacher education at university should not only provide theoretical knowledge, but also encourage critical reflection of their practical experiences (Civitillo et al., 2018). Moreover, our findings suggest the combination of theory (Identity Project seminar at university) and practice (implementation of the Identity Project in school) provide unique learning experiences. While the seminar provided opportunities to explore one's own privileges and disadvantages and give important information about structural inequalities in schools, pre-service teachers had the opportunity to explore the students' social and cultural identities through implementing the Identity Project in the classroom. These experiences have provided opportunities to become aware of own and others' privileges and disadvantages, especially in relation to discrimination and racism. The findings are consistent with previous qualitative research on critical reflection, which emphasized the role of exploring one's own and others' identities (Merritt, 2021).

Regarding the second research question, we conclude that teachers' cultural diversity beliefs are susceptible to change through practical experiences. In accordance with research on

teacher beliefs (White & Chant, 2014), there was a predominant strengthening of cultural diversity beliefs in different directions through practical experiences, i.e. for example, negative beliefs became more negative and positive beliefs more positive, in both the intervention and in the control group. Drawing on the model of professional competence working in culturally diverse contexts (Hachfeld et al., 2012), our findings suggest that implementing the Identity Project in culturally diverse classrooms contributes to the professionalization of teachers, as pre-service teachers participating in the Identity Project developed and strengthened valuing diversity beliefs. We conclude that the Identity Project enabled pre-service teachers to use diversity as a resource in the classroom and to address and value students' cultural identities in order to develop appreciating cultural diversity beliefs.

However, our results also show that practical experience per se does not contribute to the professionalization of teachers, as pre-service teachers who completed the regular school internship rarely developed valuing cultural diversity beliefs, but rather beliefs that ignore or reject cultural diversity. With regard to the model of professional competence working in culturally diverse contexts (Hachfeld et al., 2012), we conclude that an internship can even lead to de-professionalization, as pre-service teachers participating in an internship developed ignoring and rejecting diversity beliefs. Gregor, as the only participant in the control group who taught in classrooms with a high share of students of culturally minoritized groups, strengthened rejecting cultural diversity beliefs through practical experiences. This is in line with previous studies showing that teachers who work in more culturally diverse schools tend to have lower expectations about the ability of their students and problematize the existing linguistic diversity (Agirdag et al., 2013; Rumberger & Palardy, 2005).

Particularly Feline and Konrad in the control group strengthened ignoring cultural diversity beliefs through practical experiences. In line with previous research (Boutte et al., 2011), we suggest that they developed ignoring diversity beliefs due to limited confidence and lack of experience in teaching culturally diverse classrooms rather than an unwillingness,

motivation or intention. One of the most common and recurring forms of resistance to CRT, which were also identified in the cases of the current study, are expressed in fears of expected difficulties in its implementation (Gay, 2013). We suggest that Feline and Konrad resist the implementation of CRT practices and endorse ignoring cultural diversity in the classroom as they erroneously believe that emphasizing cultural differences is equated with racism and discrimination. Therefore, our results suggest that teacher education at university should provide psychological and pedagogical support during practical phases and offer multiple opportunities for self-reflection and critically questioning pre-service teachers' beliefs (Kyles & Olafson, 2008).

According to social learning theory (Bandura, 2002), indirect learning occurs through observing the behavior of other people. Mentors during practical phases and internships are usually experienced teachers who supervise pre-service teachers and share and develop different ideas and reflect together on teaching. Most participants of the intervention and control groups oriented and reflected critically on the teaching and behavior of observed teachers and mentors, and received support from them. In line with previous research, our results suggest that mentors can have a major impact on changing pre-service teachers' beliefs and self-efficacy (Moulding et al., 2014; Sheridan, 2016). Therefore, mentors should also receive additional training to fulfill their leading role in supporting pre-service teachers on their way to becoming culturally responsive teachers.

Regarding the third research question, we conclude that implementing the Identity Project in the classroom can have different effects on the CRT efficacy of pre-service teachers. Overall, implementing the Identity Project increased CRT efficacy of pre-service teachers, which they attributed to positive experiences in culturally diverse classrooms and theoretical considerations of the Identity Project. Perceiving their teaching performance as being successful seems to raise pre-service teachers' self-efficacy and contributes to their expectations of future success. Therefore, teachers' self-efficacy is a crucial condition for teachers' professional

development (Hachfeld et al., 2012). However, it is debatable whether the perceived efficacy to teach culturally diverse classrooms corresponds with the theoretical considerations of. The case of Gregor demonstrated that a perceived increase in efficacy through practical experience does not necessarily correspond with the theoretical considerations of CRT, as he assumes, for instance, that addressing educational inequalities does not require any specific competences.

Further, pre-service teachers in both the intervention and control groups attributed their doubts about teaching in culturally diverse classrooms to a lack of experience. However, when participants perceived low CRT efficacy after their practical experiences, they often attributed this to a general lack of preparation or theoretical knowledge. Becoming a culturally responsive teacher involves acquiring specific knowledge and skills, along with the self-efficacy beliefs to effectively apply these skills (Siwatu et al., 2016). In this context, coursework can contribute significantly to the enhancement of pre-service teachers' understanding of CRT. However, pre-service teachers also need to be able to apply this theoretical knowledge in practical situations.

3.4.1 Limitations and Future Directions

This study comes with some limitations that should be acknowledged. First, the qualitative methodology with a small sample offers a detailed description of the phenomena being investigated, among eight pre-service teachers in Eastern Germany. However, the results are limited in their generalizability, both in terms of the (East) German context and the specific group of predominantly culturally majoritized White pre-service teachers. As the Identity Project is currently being conducted in six other European countries, it would be useful to compare pre-service teachers' experiences implementing the Identity Project across contexts. Second, the investigation provides an overview of changes in critical reflection, cultural diversity beliefs and CRT self-efficacy. However, the study does not provide any information about the dynamic relationships between the phenomena examined, nor on the processes driving change. Using grounded theory methodology (Glaser & Strauss, 2017) could expand

the results of the current study by investigating the relationship between critical reflection and beliefs to develop a comprehensive theory of CRT development.

Third, literature reviews have acknowledged that qualitative methods have been largely neglected in research on teachers' self-efficacy beliefs (Wyatt, 2014). However, despite the call for qualitative longitudinal research, there is limited evidence of uptake (Civitillo et al., 2018). The present study follows the call for qualitative longitudinal studies in teacher education research. Although self-efficacy is context specific and includes the belief in one's own abilities and competencies, it does not necessarily reflect actual teaching practices in the classroom. We suggest using video observations to document the reciprocal relationships between cultural diversity beliefs, behaviors, and classroom context to strengthen conclusions about the effects of a training (Civitillo et al., 2018).

Fourth, intercoder reliability is moderate, which we attribute to the complexity of the coding guide consisting of latent and manifest subthemes. To increase intercoder reliability, a stepwise coding according to the research questions and related themes is recommended to reduce the complexity of coding. At the same time, the moderate intercoder reliability could also reflect the different backgrounds and experiences of the two coders. This shows how important it is to have diverse coders with different perspectives, who then come to an agreement in discussion.

Fifth, we did not randomly assign participants to conditions, which may have introduced selection bias on the basis of participants' motivation for involvement. Since participation in the Identity Project was voluntary, compared to the compulsory internship, it is expected that pre-service teachers who were most in need of an intervention, were less motivated to participate in an intervention and thus less likely to change. In addition, both the intervention group and the control group had practical experience in school over a comparable period of time, but they are only comparable to a limited extent. The intervention group conducted the Identity Project guided by a structured manual, while the control group planned the lessons.

3.5 Conclusion

Our study follows the call for qualitative research on trainings with pre-service teacher using an innovative, rigorous research design with a pre- and post-test and a control group (Civitillo et al., 2018). Our study provides a unique insight into pre-service teachers' individual development of critical reflection, diversity beliefs and CRT efficacy. Our findings also contribute to the discussion on the education and preparation of pre-service teachers for cultural diversity and have several practical implications. Exploring one's own sociocultural identity as well as students' sociocultural identities in classroom is a crucial opportunity to promote critical reflection and should be considered in teacher education. Further, teachers' diversity beliefs play a significant role in creating a more or less supportive learning environment and influencing students' perspectives (Hoffman & Seidel, 2014). Teachers who explore the sociocultural identities of their students, can challenge their own diversity beliefs to create a more inclusive and equitable educational setting. Teacher education at university should therefore not only provide theoretical knowledge about culturally responsive practices, but also tailored practical phases, where CRT can be practiced, guided by trained mentors who provide feedback and can stimulate further self-reflection.

3.6 References

Acquah, E. O., & Commins, N. L. (2015). Critical reflection as a key component in promoting pre-service teachers' awareness of cultural diversity. *Reflective Practice*, *16*(6), 790-805. https://doi.org/10.1080/14623943.2015.1095729

Agirdag, O., Van Avermaet, P., & Van Houtte, M. (2013). School Segregation and Math Achievement: A Mixed-Method Study on the Role of Self-Fulfilling Prophecies. *Teachers College Record*, *115*(3), 1-50. https://doi.org/10.1177/016146811311500305

Allport, G. W., Clark, K., & Pettigrew, T. (1954). *The nature of prejudice*. Addison-Wesley.

Bandura, A. (2002). Social foundations of thought and action. In D. F. Marks (Ed.), *Social foundations of thought and action* (pp. 94-106). SAGE Publications. https://doi.org/10.4135/9781446221129.n6

Baysu, G., Celeste, L., Brown, R., Verschueren, K., & Phalet, K. (2016). Minority Adolescents in Ethnically Diverse Schools: Perceptions of Equal Treatment Buffer Threat Effects. *Child Development*, *87*(5), 1352-1366. https://doi.org/10.1111/cdev.12609

Bonilla-Silva, E. (2015). The Structure of Racism in Color-Blind, "Post-Racial" America. *American Behavioral Scientist*, *59*(11), 1358-1376. https://doi.org/10.1177/0002764215586826

Boutte, G. S., Lopez-Robertson, J., & Powers-Costello, E. (2011). Moving Beyond Colorblindness in Early Childhood Classrooms. *Early Childhood Education Journal*, *39*(5), 335-342. https://doi.org/10.1007/s10643-011-0457-x

Branch, A. J. (2020). Promoting ethnic identity development while teaching subject matter content: A model of ethnic identity exploration in education. *Teaching and Teacher Education*, *87*, 102918. https://doi.org/10.1016/j.tate.2019.102918

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Buetow, S. (2010). Thematic Analysis and Its Reconceptualization as 'Saliency Analysis'. *Journal of Health Services Research & Policy*, *15*(2), 123-125. https://doi.org/10.1258/jhsrp.2009.009081

Byrd, C. M. (2016). Does Culturally Relevant Teaching Work? An Examination From Student Perspectives. *Sage Open*, *6*(3), 2158244016660744. https://doi.org/10.1177/2158244016660744

Calleja, C. (2014). Jack Mezirow's Conceptualisation of Adult Transformative Learning: A Review. *Journal of Adult and Continuing Education*, *20*(1), 117-136. https://doi.org/10.7227/JACE.20.1.8

Carter, D. J. (2008). Cultivating a critical race consciousness for African American school success. *The Journal of Educational Foundations*, *22*(1), 11-28.

Causadias, J. M., Vitriol, J. A., & Atkin, A. L. (2018). Do we overemphasize the role of culture in the behavior of racial/ethnic minorities? Evidence of a cultural (mis)attribution bias in American psychology. *American Psychologist*, *73*(3), 243-255. https://doi.org/10.1037/amp0000099

Celeste, L., Baysu, G., Phalet, K., Meeussen, L., & Kende, J. (2019). Can School Diversity Policies Reduce Belonging and Achievement Gaps Between Minority and Majority Youth? Multiculturalism, Colorblindness, and Assimilationism Assessed. *Personality and Social Psychology Bulletin*, *45*(11), 1603-1618. https://doi.org/10.1177/0146167219838577

Christie, M., Carey, M., Robertson, A., & Grainger, P. (2015). Putting transformative learning theory into practice. *Australian Journal of Adult Learning*, *55*(1), 9-30. https://search.informit.org/doi/10.3316/ielapa.069076554869878

Chu, S.-Y., & Garcia, S. (2014). Culturally responsive teaching efficacy beliefs of in-service special education teachers. *Remedial and Special Education*, *35*(4), 218-232. https://doi.org/10.1177/0741932513520511

Civitillo, S., Juang, L. P., Badra, M., & Schachner, M. K. (2019). The interplay between culturally responsive teaching, cultural diversity beliefs, and self-reflection: A multiple case study. *Teaching and Teacher Education*, *77*, 341-351. https://doi.org/10.1016/j.tate.2018.11.002

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. *Educational Research Review*, *24*, 67-83. https://doi.org/10.1177/0741932513520511

Civitillo, S., Juang, L. P., & Schachner, M. K. (2021). Stressing similarities or ignoring differences? Shedding light into different forms of color-evasive ideology with pre- and in-service teachers. *Zeitschrift für Erziehungswissenschaft*, *24*(1), 135-153. https://doi.org/10.1007/s11618-021-00995-9

Civitillo, S., & Jugert, P. (2022). ‚Sie kümmern sich nicht und haben es eh verdient '–Mythen über den Zusammenhang von Armut und Bildung. In B. S. G. Steins, S. Dutke, M. Roth, & M. Limbourg (Eds.), *Mythen, Fehlvorstellungen, Fehlkonzepte und Irrtümer in Schule und Unterricht* (pp. 181-196). Springer. https://doi.org/10.1007/978-3-658-36260-7

Civitillo, S., Schachner, M., Juang, L., van de Vijver, F. J. R., Handrick, A., & Noack, P. (2017). Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study. *Learning, Culture and Social Interaction*, *12*, 1-14. https://doi.org/10.1016/j.lcsi.2016.09.002

Cruz, R. A., Manchanda, S., Firestone, A. R., & Rodl, J. E. (2020). An examination of teachers' culturally responsive teaching self-efficacy. *Teacher Education and Special Education*, *43*(3), 197-214. https://doi.org/10.1177/0888406419875194

Cushner, K., & Mahon, J. (2009). Intercultural Competence in Teacher Education—Developing the Intercultural Competence of Educators and Their Students: Creating the Blueprints. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 304-320). Sage Publications. https://doi.org/10.4135/9781071872987

Diemer, M. A., & Li, C.-H. (2011). Critical Consciousness Development and Political Participation Among Marginalized Youth. *Child Development*, *82*(6), 1815-1833. https://doi.org/10.1111/j.1467-8624.2011.01650.x

Diemer, M. A., Rapa, L. J., Voight, A. M., & McWhirter, E. H. (2016). Critical consciousness: A developmental approach to addressing marginalization and oppression. *Child Development Perspectives*, *10*(4), 216-221. https://doi.org/10.1111/cdep.12193

El-Amin, A., Seider, S., Graves, D., Tamerat, J., Clark, S., Soutter, M., Johannsen, J., & Malhotra, S. (2017). Critical consciousness:A key to student achievement. *Phi Delta Kappan*, *98*(5), 18-23. https://doi.org/10.1177/0031721717690360

Fàbregues, S., Sáinz, M., Romano, M. J., Escalante-Barrios, E. L., Younas, A., & López-Pérez, B. S. (2022). Use of mixed methods research in intervention studies to increase young people's interest in STEM: A systematic methodological review. *Frontiers in Psychology*, *13*, 956300. https://doi.org/10.3389/fpsyg.2022.956300

Fitchett, P. G., Starker, T. V., & Salyers, B. (2012). Examining Culturally Responsive Teaching Self-Efficacy in a Preservice Social Studies Education Course. *Urban Education*, *47*(3), 585-611. https://doi.org/10.1177/0042085912436568

Gay, G. (2002). Preparing for Culturally Responsive Teaching. *Journal of Teacher Education*, *53*(2), 106-116. https://doi.org/10.1177/0022487102053002003

Gay, G. (2010). Acting on Beliefs in Teacher Education for Cultural Diversity. *Journal of Teacher Education*, *61*(1-2), 143-152. https://doi.org/10.1177/0022487109347320

Gay, G. (2013). Teaching To and Through Cultural Diversity. *Curriculum Inquiry*, *43*(1), 48-70. https://doi.org/10.1111/curi.12002

Gay, G. (2018). *Culturally Responsive Teaching: Theory, Research, and Practice* (3 ed.). Teachers College Press. https://www.tcpress.com/culturally-responsive-teaching-9780807758762

Gay, G., & Kirkland, K. (2003). Developing Cultural Critical Consciousness and Self-Reflection in Preservice Teacher Education. *Theory Into Practice*, *42*(3), 181-187. https://doi.org/10.1207/s15430421tip4203_3

Gibson, W., & Brown, A. (2009). *Working with qualitative data*. Sage. https://doi.org/10.4135/9780857029041

Glaser, B., & Strauss, A. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge. https://doi.org/10.4324/9780203793206

Godfrey, E. B., & Burson, E. (2018). Interrogating the Intersections: How Intersectional Perspectives Can Inform Developmental Scholarship on Critical Consciousness. *New Directions for Child and Adolescent Development*, *2018*(161), 17-38. https://doi.org/10.1002/cad.20246

Godfrey, E. B., & Wolf, S. (2016). Developing critical consciousness or justifying the system? A qualitative analysis of attributions for poverty and wealth among low-income racial/ethnic minority and immigrant women. *Cultural Diversity and Ethnic Minority Psychology*, *22*(1), 93-103. https://doi.org/10.1037/cdp0000048

Gomolla, M. (2021). Educational Inequalities, Vulnerability for Discrimination and the Politics of School Change in Germany as a Post-migration Society. In A. J. N. Fromm, & H. Safouane (Eds.), *Power in Vulnerability* (pp. 175-198). Springer. https://doi.org/10.1007/978-3-658-34052-09

Gorski, P. C. (2009). What we're teaching teachers: An analysis of multicultural teacher education coursework syllabi. *Teaching and Teacher Education*, *25*(2), 309-318. https://doi.org/10.1016/j.tate.2008.07.008

Gorski, P. C., & Dalton, K. (2019). Striving for Critical Reflection in Multicultural and Social Justice Teacher Education: Introducing a Typology of Reflection Approaches. *Journal of Teacher Education*, *71*(3), 357-368. https://doi.org/10.1177/0022487119883545

Guest, G., & McLellan, E. (2003). Distinguishing the Trees from the Forest: Applying Cluster Analysis to Thematic Qualitative Data. *Field Methods*, *15*(2), 186-201. https://doi.org/10.1177/1525822X03015002005

Guimond, S., de la Sablonnière, R., & Nugier, A. (2014). Living in a multicultural world: Intergroup ideologies and the societal context of intergroup relations. *European Review of Social Psychology*, *25*(1), 142-188. https://doi.org/10.1080/10463283.2014.957578

Gulya, N., & Fehérvári, A. (2024). Fostering culturally responsive pedagogy related competencies among pre-service teachers: a systematic review of the recent research literature. *Research Papers in Education*, *39*(2), 348-378. https://doi.org/10.1080/02671522.2023.2228312

Guo, Y. (2015). 'Unlearning Privileges': Interrupting Pre-Service Teachers Deficit Thinking of Immigrant Students with Origins in the South. *Cultural and Pedagogical Inquiry*, *7*(1), 34-59.

Hachfeld, A. (2013). *Kulturelle Überzeugungen und professionelle Kompetenz von Lehrenden im Umgang mit kultureller Heterogenität im Klassenzimmer* [Doctoral dissertation, Freie Universität Berlin]. Refubium - Repositorium der Freien Universität Berlin. https://doi.org/10.17169/refubium-13096

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education*, *48*, 44-55. https://doi.org/10.1016/j.tate.2015.02.001

Hachfeld, A., Schroeder, S., Anders, Y., Hahn, A., & Kunter, M. (2012). Multikulturelle Überzeugungen. *Zeitschrift für Pädagogische Psychologie*, *26*(2), 101-120. https://doi.org/10.1024/1010-0652/a000064

Hagenaars, M., Maene, C., Willems, S., Vantieghem, W., D'hondt, F., & Stevens, P. A. J. (2023). Diversity ideologies in Flemish education: explaining variation in teachers' implementation of multiculturalism, assimilation and colourblindness. *Journal of Education Policy*, *38*(6), 985-1006. https://doi.org/10.1080/02680939.2023.2167236

Hoffman, B. H., & Seidel, K. (2014). Measuring teachers' beliefs: for what purpose? In M. G. G. H. Fives (Ed.), *International handbook of research on teachers' beliefs* (pp. 106-127). Routledge. https://doi.org/10.4324/9780203108437

Juang, L. P., Schachner, M. K., Pevec, S., & Moffitt, U. (2020). The Identity Project intervention in Germany: Creating a climate for reflection, connection, and adolescent identity development. *New Directions for Child and Adolescent Development*, *2020*(173), 65-82. https://doi.org/10.1002/cad.20379

Karataş, S., Eckstein, K., Noack, P., Rubini, M., & Crocetti, E. (2023). Meeting in school: Cultural diversity approaches of teachers and intergroup contact among ethnic minority and majority adolescents. *Child Development*, *94*(1), 237-253. https://doi.org/10.1111/cdev.13854

Kyles, C. R., & Olafson, L. (2008). Uncovering Preservice Teachers' Beliefs About Diversity Through Reflective Writing. *Urban Education*, *43*(5), 500-518. https://doi.org/10.1177/0042085907304963

Merritt, A. (2021). *Leveling the Opportunity for Achievement: White Teachers' Critical Consciousness Development as an Entry Point* [Doctoral dissertation, Virginia Commonwealth University]. VCU Theses and Dissertations. https://scholarscompass.vcu.edu/etd/6854/

Mezirow, J. (2003). Transformative Learning as Discourse. *Journal of Transformative Education*, *1*(1), 58-63. https://doi.org/10.1177/1541344603252172

Milner, R. H. (2005). Stability and change in US prospective teachers' beliefs and decisions about diversity and learning to teach. *Teaching and Teacher Education*, *21*(7), 767-786. https://doi.org/10.1016/j.tate.2005.05.010

Morgan, A. (2017). Cultivating critical reflection: educators making sense and meaning of professional identity and relational dynamics in complex practice. *Teaching Education*, *28*(1), 41-55. https://doi.org/10.1080/10476210.2016.1219335

Moulding, L. R., Stewart, P. W., & Dunmeyer, M. L. (2014). Pre-service teachers' sense of efficacy: Relationship to academic ability, student teaching placement characteristics, and mentor support. *Teaching and Teacher Education*, *41*, 60-66. https://doi.org/10.1016/j.tate.2014.03.007

Nelson, S. W., & Guerra, P. L. (2014). Educator Beliefs and Cultural Knowledge:Implications for School Improvement Efforts. *Educational Administration Quarterly*, *50*(1), 67-95. https://doi.org/10.1177/0013161x13488595

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International journal of qualitative methods*, *19*, 1-13. https://doi.org/10.1177/1609406919899220

Paetsch, J., Heppt, B., & Meyer, J. (2023). Pre-service teachers' beliefs about linguistic and cultural diversity in schools: the role of opportunities to learn during university teacher training. *Frontiers in Education*, *8*, 1236415. https://doi.org/10.3389/feduc.2023.1236415

Park, B., & Judd, C. M. (2005). Rethinking the Link Between Categorization and Prejudice Within the Social Cognition Perspective. *Personality and Social Psychology Review*, *9*(2), 108-130. https://doi.org/10.1207/s15327957pspr0902_2

Pettigrew, T. F. (1998). Intergroup contact theory. *Annu Rev Psychol*, *49*, 65-85. https://doi.org/10.1146/annurev.psych.49.1.65

Pevec-Zimmer, S., Juang, L. P., & Schachner, M. K. (2024). Promoting Awareness and Self-Efficacy for Culturally Responsive Teaching of Pre-Service Teachers Through the Identity Project – a Mixed Methods Study. *Identity*, 1-19. https://doi.org/10.1080/15283488.2024.2344086

Powell, M. B., Hughes-Scholes, C. H., & Sharman, S. J. (2012). Skill in Interviewing Reduces Confirmation Bias. *Journal of Investigative Psychology and Offender Profiling*, *9*(2), 126-134. https://doi.org/10.1002/jip.1357

Pulinx, R., Van Avermaet, P., & Agirdag, O. (2017). Silencing linguistic diversity: the extent, the determinants and consequences of the monolingual beliefs of Flemish teachers. *International Journal of Bilingual Education and Bilingualism*, *20*(5), 542-556. https://doi.org/10.1080/13670050.2015.1102860

Rumberger, R. W., & Palardy, G. J. (2005). Does segregation still matter? The impact of student composition on academic achievement in high school. *Teachers College Record*, *107*(9), 1999-2045. https://doi.org/10.1111/j.1467-9620.2005.00583.x

Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural Diversity Climate and Psychological Adjustment at School-Equality and Inclusion Versus Cultural Pluralism. *Child Development*, *87*(4), 1175-1191. https://doi.org/10.1111/cdev.12536

Schachner, M. K., Schwarzenthal, M., Moffitt, U., Civitillo, S., & Juang, L. (2021). Capturing a nuanced picture of classroom cultural diversity climate: Multigroup and multilevel analyses among secondary school students in Germany. *Contemporary Educational Psychology*, *65*, 101971. https://doi.org/10.1016/j.cedpsych.2021.101971

Sheridan, L. (2016). Examining changes in pre-service teachers' beliefs of pedagogy. *Australian Journal of Teacher Education*, *41*(3), 1-20. https://doi.org/10.14221/ajte.2016v41n3.1

Simola, S. K. (2021). Teaching for intersectionality: insights from a relational cultural perspective. *Journal for Multicultural Education*, *15*(1), 38-51. https://doi.org/10.1108/JME-11-2019-0082

Siwatu, K. O., Chesnut, S. R., Alejandro, A. Y., & Young, H. A. (2016). Examining Preservice Teachers' Culturally Responsive Teaching Self-Efficacy Doubts. *The Teacher Educator*, *51*(4), 277-296. https://doi.org/10.1080/08878730.2016.1192709

Smith, L. V., Wang, M.-T., & Hill, D. J. (2020). Black Youths' perceptions of school cultural pluralism, school climate and the mediating role of racial identity. *Journal of School Psychology*, *83*, 50-65. https://doi.org/10.1016/j.jsp.2020.09.002

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1

Ulbricht, J., Schachner, M. K., Civitillo, S., & Noack, P. (2022). Teachers' acculturation in culturally diverse schools - How is the perceived diversity climate linked to intercultural self-efficacy? *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.953068

Umana-Taylor, A. J., Kornienko, O., Douglass Bayless, S., & Updegraff, K. A. (2018). A Universal Intervention Program Increases Ethnic-Racial Identity Exploration and Resolution to Predict Adolescent Psychosocial Functioning One Year Later. *Journal of Youth and Adolescence*, *47*(1), 1-15. https://doi.org/10.1007/s10964-017-0766-5

Vázquez-Montilla, E., Just, M., & Triscari, R. (2014). Teachers' Dispositions and Beliefs about Cultural and Linguistic Diversity. *Universal Journal of Educational Research*, *2*(8), 577-587. https://doi.org/10.13189/ujer.2014.020806

Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. Suny Press. https://doi.org/10.2307/4129631

Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. *New Directions for Child and Adolescent Development*, *2011*(134), 43-57. https://doi.org/10.1002/cd.310

White, J. W., & Chant, R. H. (2014). Challenging Idealism: Pre-Service Teachers' Core Beliefs Before, During, and after an Extended Field-Based Experience. *Teacher Education Quarterly*, *41*(2), 73-92.

Wyatt, M. (2014). Towards a re-conceptualization of teachers' self-efficacy beliefs: tackling enduring problems with the quantitative research and moving on. *International Journal of Research & Method in Education*, *37*(2), 166-189. https://doi.org/10.1080/1743727X.2012.742050

4. Study 3: How Do Pre-service Teachers' Cultural Diversity Beliefs Change Over the Course of a Practical Experience in Schools?– A Grounded Theory Study

Jolina Ulbricht*[1], Maja K. Schachner[1], Anna Schnitzer[1]

[1] Martin-Luther-University Halle-Wittenberg, Germany

Abstract

With increasing cultural diversity in classrooms, teachers' cultural diversity beliefs have become an increasingly important focus in teacher education research and have been conceptualized as a central component of teachers' professional development (Hachfeld, 2013). However, more research is needed on how pre-service teachers' cultural diversity beliefs develop and under what conditions they change (Bayram Özdemir et al., 2024; Civitillo et al., 2018). This study examines the development of pre-service teachers' cultural diversity beliefs, considering the conditions and recurring patterns that shape this process. We conducted interviews with eight pre-service teachers at two time points, before and after different practical experiences in classrooms. Using a constructivist grounded theory methodology (Charmaz, 2017), we analyzed three anchor cases to illustrate the complex relation between pre-service teachers' White cultural identity development and cultural diversity beliefs. The results construct a contextually relevant theory of White pre-service teachers' development of cultural diversity beliefs in East Germany, elucidating their defining characteristics and the conditions under which they emerge. The findings highlight the importance of critical reflection on identity and experiences with rejection, discrimination, and racism, as well as a nuanced conceptualization of culture, in shaping pre-service teachers' cultural diversity beliefs, pointing to the need for teacher education programs to intentionally foster these processes to support culturally responsive teaching.

4.1 Introduction

In the 21st century, schools are characterized by increasing diversity, including individual differences that arise within and between groups on the basis of race, ethnicity, religion, language, gender, and social class (Banks & Banks, 2007). In most European societies, and particularly in Germany, students from minoritized racial, cultural[9], linguistic, or socioeconomic groups[10] are often structurally disadvantaged, resulting in lower academic achievement and lower representation (Gogolin et al., 2019; OECD, 2021). These inequalities arise not from a lack of ability but from broader historical and institutional mechanisms that systematically disadvantage certain groups, perpetuating their marginalized status across generations (Diehl et al., 2016; Gomolla, 2021). In this context, teachers are crucial as they have the potential to transform interactions and learning processes within the classroom, ultimately enhancing educational outcomes for marginalized students (Villegas & Davis, 2008). As pre-service teachers often feel unprepared to constructively address cultural diversity in the classroom (Slot et al., 2017), there is a call for professional development programs for (pre-service) teachers that not only provide knowledge and foster the skills needed to effectively teach students from diverse cultural, linguistic, religious, and gender backgrounds, but also promote belief systems that value differences and support all learners (Civitillo et al., 2018; Pohan et al., 2009).

Teachers' beliefs are conceptualized as individual cognitive conceptions articulating values and behaviors leading to certain decisions that impact teachers' actions, which, at the

---

[9] In psychological research, culture is generally conceptualized as a group property, encompassing shared beliefs, symbols, ideals, and behavioral patterns characteristic of a particular society (Causadias et al., 2018). Despite varying conceptualizations, most definitions highlight common characteristics: culture is transmissible, dynamic, and changes over time, shapes both individual and societal behavior, and serves as an expression of power. Culture functions as an expression of power by reproducing the values, norms, and worldviews of dominant social groups, thereby legitimizing certain forms of knowledge, behavior, and identity while marginalizing others within institutional and societal frameworks (Swartz, 2009).

[10] The term "minoritized" refers to individuals belonging to racial, cultural, linguistic, or socioeconomic groups whose limited power is not simply a result of being smaller in number, but rather a consequence of societal structures and historical oppression that enforce inequality and injustice (APA [American Psychological Association], 2023)

same time, influence students' achievement. Research suggested that beliefs vary in terms of their stability, ranging along a spectrum where long-standing, deeply ingrained beliefs (e.g., beliefs formed during childhood) are more stable, while recently formed beliefs (e.g., through education) are less stable and potentially more changeable (Fives & Buehl, 2012). However, further research on teachers' implicit and explicit beliefs is needed because teachers' explicit beliefs about diversity do not always match their implicit beliefs due to social desirability (De Houwer, 2006). Moreover, there is a large body of literature on general teacher beliefs, but domain-specific (e.g., teachers' diversity beliefs) and context-specific (e.g., teachers' beliefs in (East) Germany) studies considering the multidimensional and complex nature of belief systems remain scarce. Research indicated that teachers' cultural diversity beliefs can be influenced through teacher training, especially through practical experiences, but there is limited evidence on the specific conditions that facilitate this change (Bayram Özdemir et al., 2024; Civitillo et al., 2018).

The present study builds on a previous intervention study that investigated the implementation of the Identity Project (Umaña-Taylor & Douglass, 2017), an eight-week classroom-based intervention, focusing on changes in pre-service teachers' cultural diversity beliefs compared to those completing a regular internship. The results of the intervention study by Ulbricht et al. (2024) suggest that pre-service teachers implementing the Identity Project developed stronger valuing cultural diversity beliefs, while pre-service teachers who participated in the regular internship mostly developed beliefs ignoring and rejecting cultural diversity. Although the study provides an overview of changes in cultural diversity beliefs, it does not provide any information about the conditions for the development and change of cultural diversity beliefs among pre-service teachers, nor does the study provide any insight into the processes that facilitate change.

Thus, this study aims to investigate how certain conditions facilitate development and change in White teachers' implicit and explicit cultural diversity beliefs in Germany based on

on three exemplary cases. The following section outlines the specific context of cultural diversity in Germany and presents the current state of research on teachers' cultural diversity beliefs, as well as the mechanisms and conditions that facilitate change in teacher beliefs.

4.1.1 Cultural diversity in Germany

In Germany, narratives have emerged that often interpret culture through an essentialist perspective, viewing it as an unchanging, inherently homogeneous, monolithic, and stable entity (Albrecht, 2016). However, these essentialist conceptualizations of culture have been criticized for positing a universal essence that transcends time and culture, and oversimplifying the complexity of human experience and identity (Delanty, 1995). Cultural essentialism may be prevented by conceptualizations such as polyculturalism and constructivism. In contrast to cultural essentialism, which tends to categorize people on the basis of static, predefined cultural traits, polyculturalism defines culture as a constantly evolving, flexible, and interconnected system, shaped by the ongoing exchange of ideas and practices over time (Morris et al., 2015; Rosenthal & Levy, 2010). Constructivist conceptualizations on culture, in particular, stress that cultural constructions are "always ideological, always situated with respect to the forms and modes of power operating in a given time and space" (Ortner, 1998, p. 4). Thus, culture is deeply embedded in systems of power and can be used in a racialized way, functioning as a mechanism through which power relations between social groups are structured, reinforced, or challenged. Consequently, culture is not only tied to symbolic expressions but also intersects with various diversity dimensions such as race, ethnicity, religion, and language.

Specific conceptualization of culture may hinder teachers' ability to address cultural diversity consistently in the classroom and may hinder teachers from developing an awareness of inequality and power differences between cultural groups. Studies from the United States revealed that most pre-service teachers associated the notion of culture with ethnicity, race, religious affiliation, ability, and language (Karabon & Johnson, 2020). In-service teachers' beliefs and practices often focused only on the observable factors of students' cultural

background, such as language, clothing, and holidays (Kintner-Duffy et al., 2022). However, studies in Germany examining pre-service teachers' conceptualizations of culture are rare, and the relation between these conceptualizations and teachers' cultural diversity beliefs in the classroom remains underexplored.

4.1.2 Teachers' cultural diversity beliefs

Teacher beliefs act as filter of information and experience, frame situations and problems and guide intention and action (Fives & Buehl, 2012). In the context of culturally diverse classrooms, teachers' diversity beliefs are conceptualized as central components of teachers' professional development (Hachfeld, 2013; Romijn et al., 2021). Most of the teacher diversity belief literature focuses on the divide between valuing, ignoring and rejecting cultural diversity beliefs (Hagenaars et al., 2023; Ulbricht et al., 2024).

Valuing cultural diversity is a core element of cultural pluralism (Civitillo et al., 2017; Schachner et al., 2016) or multiculturalism (Hachfeld et al., 2012), emphasizing the importance of acknowledging diversity and differences within the school context. For instance, teachers' with multicultural beliefs endorse strategies that address students' sociocultural and linguistic identities in the classroom (Karuppiah & Berthelsen, 2011). Critical multiculturalism (Gorski, 2009), goes beyond celebrating differences and recognizes educational inequalities that are reinforced and maintained in schools by uncovering power relations and understanding teaching within a larger sociopolitical context.

Ignoring cultural diversity beliefs, often termed as color-evasiveness, are rooted in the idea that culture, ethnicity, and race do not matter, and may have different meanings and take different forms, such as individualism, equal treatment, or stressing similarities (Civitillo et al., 2021; Guimond et al., 2014). Ignoring cultural diversity beliefs may stem from the belief that prejudice and discrimination arise from focusing on group categories (Rosenthal & Levy, 2010). Studies on school climate in Germany suggest that emphasizing similarities is the

predominant approach embedded in the curriculum (Civitillo et al., 2017; Schachner, 2019; Schwarzenthal et al., 2020).

Rejecting cultural diversity often manifests in assimilationist and deficit beliefs about minoritized students. Deficit thinking stems from the ethnocentric perspective that the beliefs and standards of the culturally majoritized group are inherently correct (Nelson & Guerra, 2014). Teachers with deficit beliefs blame students from marginalized and oppressed groups for the challenges and inequalities they face (Davis & Museus, 2019) and assume that these deficiencies may be remedied by assimilating students into the culturally majoritized group with its norms and values, language, or religion (Kehl et al., 2024).

4.1.3 Conditions and theories of changing teachers' cultural diversity beliefs

Teachers' cultural diversity beliefs are considered susceptible to change through interactions and experiences, as well as professional training and teaching practice (see Civitillo et al., 2018, for a review). These experiences give rise to cognitive processes that are gradually internalized, influencing memory, perception, and identity (O'Shea Brown, 2021). Research suggests that practical experiences in schools can change cultural diversity beliefs of (pre-service) teachers (Milner, 2005; Ulbricht et al., 2024). However, the extent of change in pre-service teachers' beliefs and practices is explicitly related to their interactions and experiences with diverse people and contexts. In the following, conditions that facilitate changes in beliefs will be outlined.

As research has found that teachers' rejecting beliefs toward minoritized students are associated with negative professional outcomes, including increased levels of diversity-related burnout and reduced self-efficacy (Dubbeld et al., 2019), there are efforts to promote beliefs that value diversity. School climate and teacher beliefs reflecting cultural pluralism are associated with the most positive outcomes, such as better teacher-student relationships, more positive peer interactions, and higher CRT efficacy of teachers (Smith et al., 2020; Ulbricht et al., 2022). According to the contact hypothesis (Allport et al., 1954), having more frequent

intercultural contact experiences can reduce prejudice and may also deconstruct pre-service teachers' prejudices and dismantle deficit beliefs. A meta-analysis indicated that teachers with more teaching experience show less biased attitudes, which may be explained by increased intergroup contact (Pit-ten Cate & Glock, 2019). Indeed, some research indicates that greater teaching experience, particularly in diverse classrooms, is associated with reduced bias among teachers (de Boer et al., 2011; Glock et al., 2019). However, the question remains how practical experiences in more or less culturally diverse contexts are associated with pre-service teachers' diversity beliefs.

Further, research emphasizes that certain aspects of color-evasive beliefs, such as the emphasis on equal treatment, may foster positive intergroup interactions and mitigate perceived discrimination (Baysu et al., 2016; Karataş et al., 2023a) and reduce intergroup anxiety (Schofield et al., 2010). Color-evasive beliefs have also been linked to a reduced willingness among teachers to adjust their teaching practices to meet the needs of culturally diverse students (Hachfeld et al., 2015). However, there is limited evidence when and why teachers develop ignoring cultural diversity beliefs. Pre-service teachers' reflection on their own sociocultural identity and interconnectedness with power structures, as well as an understanding of different belief systems becomes essential in fostering valuing diversity beliefs and overcoming potential limitations of color-evasive approaches. Teachers' development of their own identity is assumed to impact their teaching practices and beliefs (Pennington, 2014; Schutz et al., 2018). Ladson–Billings (1998) argues that, if culturally majoritized teachers do not see themselves as cultural beings, they may not appreciate the cultural richness that their students bring into the classroom.

Helms (1995) proposed a White Racial Identity Development (WRID) model, identifying racism as the foundational system shaping the racial identity development of White individuals. In a more recent model, the stages were replaced with "schemas" as fluid, non-linear lenses, positioning them as the lenses through which White individuals perceive ethnicity

and their racialized experiences (Helms, 2014). The WRID model includes two phases, each comprising three schemas that represent different strategies, perspectives, and behaviors. Phase 1 consists of the first three schemas: 1) contact, characterized by a lack of awareness of racial identity and the assumption that ethnicity is only relevant for minoritized ethnic groups; 2) disintegration, marked by the recognition of Whiteness and acknowledgment of racism, leading to feelings of guilt, anxiety, and moral conflict about White privilege; and 3) reintegration, involving the idealization of Whiteness and the adoption of a defensive stance toward the racial status quo. Phase 2 encompasses the next three schemas: 4) pseudo-independence, defined by the intellectual acceptance of one's racial privilege without acknowledging personal responsibility or engaging in critical self-reflection; 5) immersion/emersion, involving active exploration of racism as a systemic issue and the beginning of unlearning internalized biases; and 6) autonomy, reflecting the development of a positive, antiracist White identity. The model proposes that individuals are typically situated within one phase at a time, with the transition to Phase 2 requiring a conscious shift away from the beliefs and behaviors of Phase 1 through critical reflection on power structures and systemic dynamics.

In summary, teachers' critical reflection on their own sociocultural identity and interconnectedness with power structures may be a crucial step to change cultural diversity beliefs toward appreciative, critical multicultural beliefs (Acquah & Commins, 2015; Calleja, 2014). Engaging in critical reflection on different, intersecting social categories may help pre-service teachers to reflect on their own cultural assumptions and biases initiate a process of questioning how these influence their teaching practices. This, in turn, leads to a deeper understanding of cultural diversity and promotes appreciative diversity perspectives (Gulya & Fehérvári, 2024). Since the development of a White cultural identity among pre-service teachers was a central focus of the Identity Project in teacher education, the current study investigated how pre-service teachers' White cultural identity development is related to their implicit and explicit cultural diversity beliefs and will be described in the following section.

4.1.4 The present study

A systematic review of the literature on cultural diversity beliefs showed that teacher training can be effective (e.g., regarding the development of positive teacher beliefs), particularly when incorporating experiential learning (Civitillo et al., 2018). The Identity Project (Umaña-Taylor & Douglass, 2017), an eight-week classroom-based intervention initially created to support secondary school students in exploring their ethnic-racial identities (Umaña-Taylor & Douglass, 2017), was implemented in teacher education to provide pre-service teachers valuable opportunities to reflect on their own identities and their role in fostering more equitable classrooms.

The 16-week Identity Project seminar at a university in Eastern Germany was designed to prepare pre-service teachers for implementing the Identity Project in classrooms, blending theoretical foundations, in-depth reflection on their own cultural identity, and an emphasis on addressing societal inequities in education (Pevec-Zimmer et al., 2024a). An additional teacher training program enabled pre-service teachers to implement the Identity Project in classrooms and practice culturally responsive teaching (Gay, 2018) through various activities, such as guiding students to reflect on their diverse social identities and the stereotypes associated with different, intersecting social categories (Ulbricht et al., 2024). The White Racial Identity Development (WRID) model (Helms, 1995, 2014), which conceptualizes racial identity development as a fluid, non-linear process shaped by systemic racism, provides a critical framework for understanding how pre-service teachers may critically reflect on and transform their sociocultural identities through the Identity Project.

The present study extends previous research on the implementation of the Identity Project with pre-service teachers by not only examining changes in their cultural diversity beliefs but also exploring the underlying conditions and processes that facilitate these changes. While Ulbricht et al. (2024) found that teachers who implemented the Identity Project strengthened valuing cultural diversity beliefs, and those in a regular internship tended to

develop more ignoring and rejecting cultural diversity beliefs, it was beyond the scope of the previous study to provide insights into the specific conditions and mechanisms influencing these changes. Since the development of a White cultural identity among teachers was a central focus of the Identity Project in teacher education, the current study investigated how teachers' White cultural identity development is related to teachers' implicit and explicit cultural diversity beliefs. The present study, taking a multiple case study approach, addresses the described research gap by investigating the processes behind these belief changes and following the call for qualitative longitudinal research using grounded theory methodology for a deeper understanding of teacher beliefs (Civitillo et al., 2018; Ulbricht et al., 2024).

4.2 Method

4.2.1 Research design and procedure

To answer the research question, the present study builds on and extends previous research on the implementation of the Identity Project with pre-service teachers. The study draws on the work of Ulbricht et al. (2024), which employed a qualitative, quasi-experimental design using semi-structured interviews conducted at two time points (T1 and T2) and suggests a change in pre-service teachers' cultural diversity beliefs. The aim of the current study is to investigate the conditions and mechanisms facilitating change in pre-service teachers' cultural diversity beliefs. In doing so, a multiple case-study approach is used to develop a theory that explains the development of each type of belief, namely the development of valuing, ignoring, rejecting cultural diversity belief.

We go beyond the previous study in several ways: 1) This study used a Grounded Theory approach (Charmaz, 2017) to investigate teachers' implicit and explicit beliefs, allowing for a deep exploration of how these beliefs are formed, shaped, and influenced by various factors (Olafson et al., 2014). Semi-structured interviews are suitable for a grounded theory study if the researcher has identified some areas (e.g., cultural identity, beliefs dealing with cultural diversity in the classroom) in which the investigation is already situated and which can then be extended through

the interview (Conlon et al., 2015; Foley et al., 2021). Additionally, semi-structured interviews ensure that the data collected from each participant is both similar and comparable.

2) The audio-recorded interviews were transcribed again by a research assistant as the investigation of implicit beliefs is not only transmitted through the content of language (the "what"), but also through the way in which they are presented (the "how"). Therefore, the investigation of teachers' implicit beliefs requires a detailed verbatim transcription of the interview data (Halcomb & Davidson, 2006). The detailed verbal transcript provides a comprehensive record of spoken interactions, capturing every utterance, including filler words, false starts, and repetitions, to reflect the conversation accurately. The detailed verbal transcription consistently identifies the speakers throughout the dialogue, as pauses are noted at specific time intervals and important nonverbal cues such as laughter, sighs, or changes in tone are described to provide context for the verbal content. Interruptions and overlapping speech are indicated, highlighting the natural flow of conversation. Emphasis and variations in intonation are marked to reflect the speaker's intent or emotional state.

3) We analyzed all open-ended questions to reduce confirmation bias, i.e., the tendency to give answers that interviewees believe confirm the interviewer's assumptions or beliefs (Powell et al., 2012).

4.2.2 Participants and selection of cases

This study uses a case study approach to develop theories that explain the development of different beliefs, namely the valuing, ignoring, and rejecting cultural diversity beliefs, using one exemplary case for each type of belief. The cases were selected from 16 interviews with eight prospective teachers (two interviews with one participant each). Of the eight original participants, three identified as female and five as male. They were between 21 and 27 years old (M = 23.9) and lived in eastern Germany. Of the eight original participants, three identified as female and five identified as male, and they were aged between 21 and 27 years ($M = 23.9$), and lived in Eastern Germany.

The selection of cases was guided by the following sampling criteria in qualitative research (Moser & Korstjens, 2018): 1) We met the criterion sampling to select participants by referring to samples that are relevant to the research question, i.e., we examined cases in which a change or strengthening of cultural diversity beliefs occurred. 2) The maximum variation sampling criterion captures the range of variation to ensure that the theory is broadly applicable and not limited to a narrow set of conditions. We met the criterion by selecting cases that are different in several characteristics, e.g., variation of cultural diversity beliefs, experiences, and demographics, to ensure that the researchers better understand how certain factors and conditions influence teachers' diversity beliefs. 3) The criterion of extreme case sampling focuses on contrasting and extreme cases. From the reanalysis of 16 interviews with eight pre-service teachers, Hanna represents an extreme case of valuing cultural diversity beliefs among participants who implemented the Identity Project in culturally diverse classrooms. In contrast, Feline showed the most significant change in ignoring cultural diversity beliefs within the sample of participants undergoing a regular internship. Feline changed from a combination of valuing and ignoring cultural diversity beliefs to predominantly ignoring cultural diversity beliefs. Gregor represents a case in which beliefs changed from predominantly valuing to predominantly rejecting cultural diversity beliefs after a regular internship.

4.2.3 Analytical approach and data analysis

Grounded Theory Methodology (GTM) is particularly recommended given the nature of the research question and the existing gap in understanding the conditions that change teachers' cultural diversity beliefs. GTM is valuable in examining teacher education programs, offering new perspectives on how pre-service teachers are prepared, and ultimately contributing to more effective and responsive educational practices (Lin et al., 2001). The original Grounded Theory by Glaser and Strauss (1998) focused on a systematic, structured process of data collection and analysis. Later, the method was further developed by various researchers, including Kathy Charmaz, who introduced a constructivist perspective. We preferred the

constructivist GTM Charmaz (2017) as it builds on a relativistic epistemology that assumes multiple realities, truth as provisional, and social life as processual. GTM is characterized by an iterative and inductive approach that enables the generation of hypotheses directly from the data, rather than following pre-established assumptions. By grounding the theory in participants' experiences and the broader context, constructivist GTM ensures that the resulting insights are both empirically robust and deeply reflective of the lived realities of those involved in the development of beliefs.

We follow the literature on constructivist GTM, dividing the data analysis process into three stages: 1) initial coding, 2) axial coding, and 3) selective coding, and guided by a coding paradigm that encompasses the causes, strategies, and consequences of the phenomenon under investigation (Mills et al., 2006, Charmaz, 2017). We thereby focus on classroom strategies dealing with cultural diversity, referring to broad, intentional approaches and practices addressing cultural diversity. Since we are not investigating the actual strategies teachers employ, we refer to teacher beliefs as cognitive strategies used to understand, evaluate, reflect on, and interpret cultural diversity, and that guide pre-service teachers in how they approach diversity-related situations.

During the initial coding, we became familiar with the data by reading each interview transcript and developed codes, i.e., short labels that the researcher constructs when interacting with the data. We were guided by the analytical questions (e.g., when, how, and with what consequences are participants acting?) (Charmaz, 2012). We discussed our initial codes, developed categories, and concepts to determine coherent patterns. This approach was chosen to gain an in-depth understanding of the phenomenon under investigation while capturing the complexity of the underlying social processes. In this stage, preliminary hypotheses were formulated based on recurring patterns in the data. For instance, analyzing similar actions or statements of respondents allowed for initial assumptions about relationships between certain factors. Next, we assessed which codes and concepts can best explain or interpret the empirical

phenomenon of teachers' diversity beliefs. During axial coding, we further investigated the relationship between emerging categories and concepts (see Table 7). We analyzed explicit beliefs on a content level and implicit beliefs on a semantic level based on the detailed verbal transcript. At this stage, the initial hypotheses were systematically expanded and refined by linking central categories (e.g., causal conditions, cognitive strategies, or consequences). Through this process, differentiated hypotheses about the structure and dynamics of the phenomenon under investigation were derived. During selective coding, we selected the most frequent and significant concepts and categories.

The first coder (first author) identifies as a White woman, born and raised in Eastern Germany, who studied to become a teacher and contributed her knowledge and experience of the school system. The second coder, a woman who immigrated to Germany from Georgia to study psychology and political science, enriched the data analysis through experiences with othering and micro-aggression and previous commitment to women's equality. The analysis was also discussed with the co-authors on several occasions. The second and the third author identify as female White Germans, born and raised in Western Germany, the second with a background in developmental and educational psychology, the third with a background in sociology and educational science. All authors are living or have lived in Eastern Germany for a longer period, are familiar with the German education system, and have been involved in teacher training at university.

Table 7

Typical Relationship Structure and Connotation of Main Categories

Relationship structure	Relationship structure connotation	Events or actions that refer to the relation
Own conceptualization of culture – cultural identity development	A persons' conceptualization of culture is the basis for cultural identity development	Own theories and reflections
Reflection on experiences rejection, discrimination, racism – cultural identity development	A persons' reflection on experiences with rejection, discrimination, racism is the basis for cultural identity development	Reflections on experiences abroad Reflections on experiences in schools as a student Reflections on experiences in schools as a pre-service teacher
Critical Reflection on Power Structures	Critical Reflection on Power Structures form cultural identity development	Critical Reflection based on seminar content Critical Reflection based on observations Critical Reflection on own experiences
Cultural identity development – cultural diversity beliefs	A persons' own cultural identity is the basis for cultural diversity beliefs	Reflections on one's own identity, e.g., in the context of courses at university Reflection on challenging experiences regarding interactions in the classroom

4.3 Results

4.3.1 Introduction of the cases for the case analysis

As the aim of this study is to take a case-study approach to develop a theory that explains

the development of each type of belief, exemplary cases were selected and will be introduced

in the following: Hanna, Feline, and Gregor differ in their White cultural identity development,

their conceptualizations of culture, and experiences of perceived rejection, discrimination, and

racism. Hanna perceived discrimination, vicarious racism, and rejection when not adhering to

group norms. Feline perceived rejection due to low school achievement, and Gregor perceived

rejection abroad. Hanna, Feline, and Gregor endorsed different strategies dealing with cultural

identities in the classroom. While Hanna developed valuing cultural diversity beliefs, Feline

developed ignoring, and Gregor developed rejecting cultural diversity beliefs. In the following,

we present a case analysis explaining the development of teachers' cultural diversity beliefs by

examining the relationship between White identity development and beliefs as cognitive strategies to address culturally diverse identities in the classroom. The outcomes of these case analyses lead to a theory that explains the development of valuing, ignoring, and rejecting beliefs.

Hanna is studying to become a teacher of natural and social science subjects. Hanna generally feels that she belongs to Germany because she grew up in this country and represents many values that "are largely represented" in Germany, but also emphasizes that it is difficult to say this in a uniform way. Hanna identifies as "German" and "North German" due to her upbringing, but also feels connected to the Eastern German city where she lives. However, she does not identify as either "East German" or "West German"[11]. Hanna described that she identifies with the group of students and feels connected to the values she was raised with, which were influenced by her parents.

Feline is studying to become a teacher of natural and social science subjects and languages. Feline described that she grew up in Eastern Germany and identifies as a woman and a student. She described herself as German because she lives in Germany, but this would not define who she is as a person. Feline lived abroad (Australia) for an extended period of time and identifies with the "English-speaking world". Further, Feline identifies with a family that "is not as typical as one of those nice, good families that many come from, where parents take a lot of time […] and really care". With this statement, Feline described her own family situation in contrast to an idealized notion of a good family and expressed that she did not grow up in a family where "parents spent a lot of time" with her and were deeply involved in her care.

Gregor is studying to become a teacher of natural and social science subjects. Gregor identifies as an East German, "heterosexual cisgender man" and "son of two academics". Even

---

[11] The terms "East German" and "West German" reflect historical divisions after World War II, which continue to cause economic, social, and political inequalities. Despite reunification in 1990, differences persist, with the former East Germany facing higher unemployment and lower wages. Social and political contrasts also remain, influencing values, lifestyles, and voting patterns, with Eastern regions often supporting support far-left and far-right parties.

though Gregor was raised as a Christian and identifies with "socially established German Christian values", he does not feel that he belongs to the Christian religion anymore. Gregor spent five months each in Australia and Thailand.

4.3.2 The dynamic relation between pre-service teachers' White cultural identity development and their beliefs addressing cultural diversity in the classroom

The dynamic relationship between the development of White cultural identity among pre-service teachers and their valuing, ignoring and rejecting cultural diversity beliefs about is illustrated below using case analysis (see also figure 5).

Figure 5

Conceptual Model of Conditions Facilitating Change in Teachers' Cultural Diversity Beliefs
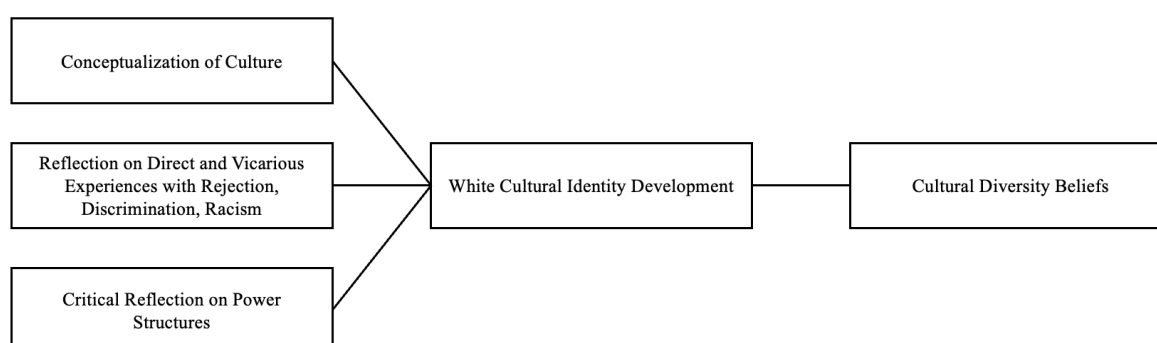
4.3.2.1 The role of White cultural identity development for the development of valuing cultural diversity beliefs

According to Hanna, culture is characterized by place-relatedness, i.e., culture is strongly associated with places and regions where a person grew up and related to familial heritage, including traditions, rituals, and practices passed down through generations. Regarding her own cultural identity, Hanna retrospectively described how she "didn't think at all" about her cultural background so far. However, at T1, Hanna shared past experiences from

her childhood with gender-related stereotypes and sexism, describing them as moments of shock:

> That was somehow something new and a stark experience for me, because I had somehow learned it differently, and then I was shocked that somehow the world is not the way it is in my head, that not everyone sees it that way. I think that was definitely a decisive point, because I then simply became more engaged with it over the next few years [T1].

Although Hanna recognized gender-related discrimination, a lack of awareness about her cultural background suggested that she was in the contact scheme of Helms' (2014) White racial identity development, where individuals are largely unaware of their ethnic-racial identity. Hanna reflected retrospectively on her own teaching experiences, which aligned with ignoring cultural diversity beliefs: "I can remember that [cultural diversity], I believe, didn't play any role at all in my teaching practice back then, at least not in my considerations" [T1]. However, after the Identity Project seminar, Hanna demonstrated a shift in awareness by recognizing the importance of her cultural identity and stated: "As a result, now that I'm dealing with the whole Identity Project, it [the cultural background] has become more conscious and also much more important" [T1]. This suggests that she has moved beyond the contact scheme. Hanna also acknowledged that her cultural background influences her social interactions, stating, "It probably also plays a role in interactions with other people" [T1].

This indicated that Hanna has moved away from a color-evasive perspective and has begun to see how cultural identity shapes experiences. Hanna acknowledged that belonging to the majoritized culture comes with privileges: "Whether you belong to the majority society or the majority culture […] that's already connected with great privileges, that you don't have to deal with racism, discrimination, at least in that area" [T1]. Hanna's statements reflect an understanding of White privilege, a characteristic of the pseudo-independence scheme (Helms, 2014). Moreover, individuals in the pseudo-independence scheme (Helms, 2014) often seek

further learning and intellectual engagement rather than immediate activism, as Hanna expressed by stating: "Of course, also in relation to every other dimension, where I think I have to deal with it a bit more and learn more about it so that I'm more confident and know how to address it properly" [T1].

In the second interview (after implementing the Identity Project in culturally diverse classrooms), Hanna expressed a more differentiated conceptualization of culture and described cultural identity predominantly as dynamic instead of static over time. Hanna explained that her contact experiences with various cultural identities in the classroom also made her reflect on her interaction, based on beliefs and her socialization: "[...] you simply react to certain things because you interpret them based on certain thought patterns, the way you have learned them" [T2]. Hanna explained that she reconsidered her views due to situations in the classroom that she perceived as difficult: "Of course, I also noticed in situations like this that I was reaching my limits, […] where I realized that I definitely had to think about it again and reflect on my own views" [T2]. In this context Hanna stated that reflection on own "views" requires "intercultural competences", which include in Hanna's perspective

> that you also understand your own culture and the own values and norms that are behind
> your own actions and ways of thinking and so on and that you can then perhaps reflect
> better in certain situations, why you have now acted in this way or, as I said, can also
> adapt there and can then deal better in intercultural contexts, can move better in them
> [T2].

Moreover, Hanna reported vicarious experiences of rejection from teachers and stereotypes and prejudices of peers towards culturally minoritized students. She not only reflects on individual cases, but also generalizes them:

> Yes, I think all students who are more likely to be exposed to discrimination are simply
> not privileged compared to others, simply because they are exposed to stress, etc., in

some way, including at school. Somehow, they are also exposed to it at school, if they encounter prejudice from teachers [T2].

Reflecting on her own cultural identity and the cultural identities of students in the classroom also led Hanna to develop cognitive strategies dealing with various cultural identities in the classroom in the sense of valuing cultural diversity beliefs. Hanna's beliefs included 1) deconstructing her prejudices about cultural groups and her stereotypical actions in the sense of critical multicultural beliefs, and (2) addressing and valuing cultural identities in the classroom in the sense of cultural pluralism beliefs. Regarding these cognitive strategies, Hanna stated:

> Yes, that you first reflect on yourself and think about what prejudices you have against groups and then try to be aware of when they determine your own actions and then of course try to somehow eliminate them and not to resort to such stereotypes yes, as I said, not to give the students the feeling that mmm cultural diversity is something bad, but to convey that it is something positive and that somehow all cultural backgrounds are something valuable and something very interesting that you definitely have to or should deal with [T2].

According to Helms (2014), the case of Hanna demonstrates a transition from the contact scheme (before the seminar) to the pseudo-independence scheme (after the seminar) and to the immersion/emersion scheme (after implementing the Identity Project). At the same time, Hanna's beliefs changed from ignoring to valuing cultural diversity beliefs that not only see cultural diversity as a resource, but also, in the sense of critical multicultural beliefs, question her stereotypes and act against cultural inequalities.

Based on Hanna's case, it can be shown that when White pre-service teachers explore their own cultural identity and recognize how their privilege shapes their experiences, they can develop cognitive strategies for addressing culturally diverse identities that align with valuing cultural diversity beliefs (see figure 5). Two key aspects seem to foster the development of

White cultural identity in pre-service teachers: First, a dynamic conceptualization of culture that recognizes its complex nature and the role of power is crucial for the second phase of Helms' White racial identity development. Second, direct or vicarious (e.g., through observations) experiences of discrimination can motivate pre-service teachers to recognize oppression in various forms, such as racism, and foster the development of an anti-racist identity committed to actively combating educational inequalities.

4.3.3 The role of White cultural identity development for the development of ignoring cultural diversity beliefs

Feline's conceptualization of culture encompasses traditions (e.g., Christmas) and a set of norms. We identified conceptualizations that essentialize culture by viewing a particular cultural or religious group as a fixed, homogenous entity, such as Feline's statement that students from certain cultural or religious groups must wear headscarves because of their parents' religious beliefs. Feline reported personal experiences of intragroup rejection at school due to low academic performance. When reflecting on her personal experience of intragroup rejection[12] at T1, she endorsed instructional strategies that provided varied tasks at different levels of difficulty, which aligned with ignoring cultural diversity beliefs. When Feline reflected on her own cultural identity in the first interview (after attending a seminar on identity), we identified a lack of awareness regarding her cultural background, as she stated:

> We talked a lot about that [identity] in the seminar and I always found it very, very difficult because, I have in my family, somehow in my circle of friends, they are all, I don't know if this expression sounds somehow wrong now, but for me they are somehow like German potatoes. So culturally there is somehow nothing else except somehow being German [T1].

---

[12] Intragroup rejection refers to the rejection of individuals within the same sociocultural group based on perceived differences, such as personal characteristics, behavior, or perceived deviations from group norms (Killen et al., 2013).

Feline showed a low level of cultural identity exploration and expressed negative affirmations when she talked about her own cultural identity:

> That's kind of how I felt in the seminar, because I felt like I was the only German there and I didn't really dare to talk about it [cultural identity] because you had the feeling: okay, if I say something, the way I think it, it's definitely going to be totally wrong. It was kind of really difficult [T1].

> Feline explained her insecurity, talking about her cultural identity with the "fear of being considered racist" [T1].

According to Helms (2014), Feline's responses suggest that she is in the reintegration scheme, which is characterized by feelings of discomfort, racial anxiety, and avoidance when talking about one's own cultural identity. When she developed cognitive strategies dealing with cultural diversity, she expressed ignoring cultural diversity beliefs by emphasizing students' individual personalities instead of the affiliations to cultural groups:

> Yes, I just find it somehow important to shape the personality, [...] to make a person [...] an independent person who is also open to the world – I also think that's much more important than somehow saying, 'Okay, you have to […] you have to pray at noon now' [T1].

Even after Feline's practical experiences in school, she expressed negative feelings about her cultural identity:

> So, if I now take this cultural origin, that I am German, [...] that is always somehow associated with being a Nazi. I find that now (.) more than ever, I feel. And that you almost feel bad, at least that's how it feels, that you almost have to feel bad when you say: 'I'm purely German' [T2].

> Feline further strengthened ignoring cultural diversity beliefs through practical experiences in the classroom. Feline reflected on a classroom observation about a student's exceptional drawing talent and expressed frustration that the teacher rejected the student due to

other low academic performance. This resonates deeply with Feline's own experiences as a student of being unjustly characterized as "lazy and dumb" in the past, which has prompted her to critically reject such simplistic and reductive categorizations. Feline argued that the student's unique abilities should be promoted in a more supportive environment, such as an art school, rather than being oppressed by societal expectations. However, Feline did not reflect on rejection and discrimination on the group level, which in turn strengthened her ignoring cultural diversity beliefs by focusing solely on individual student achievements:

> Everything related to ethnic origin, I would take it into account, but I'm not sure how exactly. Regarding diversity in terms of high and low performance, yes, I would try to assign different tasks or offer tasks with support [T2].

> According to Helms' (2014) WRID model, the case of Feline shows a persistence in an initial scheme of White identity development. At the same time, Feline's beliefs strengthened in the direction of ignoring cultural diversity beliefs through practical experiences. The case of Feline supports the theory that an oversimplified, essentialist conceptualization of culture focusing solely on its observable elements (e.g., traditions, rituals, holidays) and neglecting the dynamic nature of cultural identities may hinder White pre-service teacher in developing their cultural identity, resulting in a limited awareness of culture and engagement with students' cultural identities, and nurturing ignoring cultural diversity beliefs (see figure 5).

The case analysis indicates a relation between pre-service teachers' racial anxiety and ignoring cultural diversity beliefs. When pre-service teachers experience racial anxiety, they may feel that their White cultural identity is being challenged or devalued, increasing psychological distress and leading to avoidance strategies that ignore cultural diversity and meaningful engagement with diverse perspectives (Godsil & Richardson, 2017). Although the university seminar used the concept of all-inclusive multiculturalism (Stevens et al., 2008) to address culturally majoritized members in supporting organizational diversity efforts, it may

not have been perceived as such by all White pre-service teachers, which may lead to their resistance to multicultural education as they felt excluded.

Indeed, the results of the current study align with a five-study investigation on the reactions to diversity of culturally majoritized group members in the United States, which provides evidence of associations between multiculturalism and feelings of exclusion (Plaut et al., 2011). Particularly, culturally majoritized teachers in Germany may be hesitant to promote a multicultural approach that emphasizes all cultural identities in the classroom due to the distinct socio-historical context, which reflects an effort to distance from Nazi ideology by consciously emphasizing similarities and downplaying ethnic and cultural differences (Civitillo et al., 2021). A study of Shim (2020) investigated the relation between race and racism among pre-service teachers and found that, despite their anti-racist goals, participants experienced feelings of resentment, fear and frustration when critically reflecting on race and whiteness. In this context, the process of developing an anti-racist identity is not linear and often leads to a feeling of disempowerment, with critical reflection often being perceived as arduous and emotionally draining. Consequently, it is important to not only promote the integration of different student identities, but also actively engage with the cultural identity of teachers from a culturally majoritized group. This may help them develop a positive view of their identity so that they can see their own cultural identity as a meaningful contribution to a diverse society.

4.3.4 The role of White cultural identity development for the development of rejecting cultural diversity beliefs

At T1, for Gregor, we identified a conceptualization of culture that is conflictual and emphasizes culture as a central category of difference. Gregor associates cultural regions with different values and distinguishes between "progressive" and "tradition-oriented" cultures and societies. Gregor stated (after attending the Identity Project Seminar): "I would describe myself as open-minded and relatively modern in terms of values, so more dismissive of conservative

views. Accordingly, I [am] quite progressive. That's how I would categorize myself". Gregor reported experiences of rejection and systemic oppression abroad: Gregor reflected critically on the class system in Thailand and described his observations that the economy heavily depends on tourism, with indigenous people being exploited through low wages. Gregor described that workers in Thailand seem primarily focused on sustaining the luxury lifestyle for tourists, especially Europeans, which contributes to a rigid class system and stated: "that is, quasi - so in my opinion you can hardly imagine a tougher class society. Yes, you definitely saw that there". However, Gregor noticed an underlying resentment and aggression towards the "European or Western culture", which, while not openly expressed due to the dependence on tourism, is understandable and even justified from the locals' perspective. After a personal experience, he believed that as a "White, very drunk guy", he became an "easy target for aggression from locals". Based on his personal experiences, Gregor makes a general assumption about conflicts between cultures that teachers should acknowledge: "Yes I think that if you are aware of the conflicts that are prevalent between cultures, as a teacher you should also be aware of them and somehow actively confront them".

In terms of the development of Gregor's White cultural identity, we have predominantly identified characteristics of the reintegration scheme (Helms, 2014). Although Gregor is beginning to show an awareness of systemic oppression (e.g., economic inequality and exploitation of indigenous workers by the tourism industry), which is consistent with the characteristics of the pseudo-independence scheme, the way Gregor frames his own experiences is problematic. Gregor's focus on personal victimization rather than critical self-examination suggests that he lacks a deeper understanding of his White privilege and the role of power in shaping intergroup rejection. This suggests that Gregor's awareness of racism is superficial, and his defensive reaction corresponds to the concept of White fragility, a state in which even a minimal amount of racial stress triggers a range of defensive responses (e.g., argumentation) and emotions (e.g., anger, fear) (DiAngelo, 2016).

At T1, Gregor emphasized that he had only limited teaching experience so far, but he endorsed contradictory beliefs about addressing cultural diversity: Gregor endorsed multicultural strategies in the classroom, aiming to "not exclude other people or other students" or "only assuming a German-centered perspective", but rather "including cultural diversity in the classroom". However, we also identified implicit and explicit rejecting cultural diversity beliefs, disguised as an attempt to foster respectful and tolerant interactions among culturally diverse students, based on the notion that these students "might not learn this from home".

At T2, we identified a hierarchical conceptualization of culture as Gregor presents the "German" cultural values (e.g., gender equality, democratic values, rule of law) as normative and superior. These values are framed as the "ideal" way of thinking about societal organization, implying that other cultures, especially those with different approaches to gender roles or social norms, are inferior and conflictual. When Gregor reflected on his own cultural identity, he considered his values as "normal". Gregor contrasts his own cultural identity with others' perceived lack of alignment with specific values, such as sustainability and ecological awareness. Gregor's statement "those who come from Israeli area, […] have no feeling for it at all and also no awareness and also no interest" [T2], construct individuals from Israel as deficient in ecological and sustainable values compared to Gregor's standards. After completing his school internship, Gregor stated: "Even if the students had an immigrant background, there were never any problems of disadvantages or discrimination, at least nothing culture-specific" [T2]. Gregor blames the individual for the inequality they face, seeing language as a fundamental barrier to integration. He perceives the students as linguistically different or deficient compared to the culturally majoritized group, as he stated: "If you look at the language that the students there have always created, problems are almost inevitable" [T1].

Gregors hierarchical conceptualization of culture, considering one's own culture as superior, categorizing 'other' cultures as problematic, and blaming minoritized students for the inequalities they face, aligns with the reintegration scheme of the WRID Model (Helms, 2014).

In addition to Gregors' implicit and explicit deficit beliefs, we identified assimilation beliefs, which advocate that students adapt to the culturally majoritized group with its norms, values and behaviors (e.g. regarding language and not wearing a headscarf). Gregor justifies this by stating that it is important "also in the students' own interest that they adapt, because otherwise, whether you like it or not, it will be difficult to find a foothold anywhere in the future" [T2].

Based on the data, it can be shown that fostering White cultural identity development in teacher education is limited, namely when a cultural superiority mindset arises. The case of Gregor shows how resistance to positive White cultural identity development and developing rejecting cultural diversity beliefs are interlinked. When pre-service teachers like Gregor view the culturally majoritized group as inherently superior, they may inadvertently adopt the belief that culturally minoritized students need to assimilate in order to succeed. This hierarchical conceptualization of culture and cultural groups, positioning culturally majoritized norms as "modern" or "progressive", may prevent pre-service teachers like Gregor from valuing cultural diversity and implementing culturally responsive teaching practices. To overcome their rejecting cultural diversity beliefs, White teachers like Gregor need to develop their White cultural identity, rethink their own hierarchical conceptions of culture, and develop a deeper understanding of how White privilege and power shape their own interactions and experiences (see figure 5). When teachers recognize how White privilege perpetuates inequalities in the school system, they may develop valuing cultural diversity beliefs and implement culturally responsive practices (Arsenault, 2018; Priester-Hanks, 2023).

4.4 Limitations and future research

This study comes with some limitations that should be acknowledged. The qualitative methodology, applied to a small sample, provides an in-depth exploration of the relation between pre-service teachers' White cultural identity development and their cultural diversity beliefs in Eastern Germany. Future research should therefore investigate the extent to which

the present extended theory on teachers' cultural diversity beliefs can be applied to different cultural groups and contexts.

Second, a stringent application of the GTM requires the data to be analyzed and re-collected until saturation occurs. Although some authors argue that repeatability is not necessary, as the processual nature of social phenomena makes it difficult to reproduce identical conditions (Strübing, 2021), meaning that exact replication is neither feasible nor required in GTM, others argue that repeating data collection can enhance the robustness of the emerging theory (Charmaz, 2008; Corbin & Strauss, 1990).

The study was implemented as a qualitative study with an experimental design. Three of the eight cases were then selected as examples of a particular trajectory towards a particular set of diversity beliefs. However, due to the nature of the study, data collection was limited to the designated time points, which may have limited the depth and scope of the findings. This approach is not entirely consistent with Grounded Theory Methodology (Charmaz, 2017), which generally relies on iterative data collection and analysis to allow theory to develop from the data.

Third, the distinct sociopolitical and historical context of East Germany as well as the experiences of marginalization, including social and economic disadvantages following reunification and ongoing stereotyping in broader German society (Kubiak, 2019) may affect pre-service teachers' conceptualizations of culture and diversity and their willingness or ability to engage in critical reflection on privilege, power, and identity. As a result, findings may not be easily transferable to other German regions or international contexts.

4.5 Conclusion

Our study follows the call for qualitative, longitudinal research on pre-service teachers' cultural diversity beliefs and investigating mechanism of change (Civitillo et al., 2018). The current study is the first to investigate the relationship between pre-service teachers' White cultural identity development and cultural diversity beliefs in Eastern Germany, thus extending

the theory on White identity development as an important process influencing teachers' cultural diversity beliefs. Based on the central findings, the following conclusions for teacher training are drawn:

First, the relation between teachers' identity development and their cultural diversity beliefs in the classroom suggests the need for reflective practices as valuing cultural diversity beliefs requires pre-service teachers to develop their White cultural identity through critical reflection on their own cultural identity, socialization, and positioning. Our findings highlight the need for teacher education to encourage pre-service teachers to explore their own cultural identity and provide opportunities to reflect on the role of their own identity in their actions in the classroom, especially during the practical teaching phases.

Second, the way pre-service teachers conceptualize culture is crucial for their White cultural identity development. If pre-service teachers have a limited understanding of culture, focusing solely on observable aspects such as traditions and rituals, they may endorse cognitive strategies that inadequately consider students' cultural identities in the sense of culturally responsive teaching (Gay, 2018). In teacher education, promoting a more nuanced understanding of culture and cultural groups that incorporates the complexities of power, privilege and identity can lead to a deeper appreciation of cultural diversity in the classroom. In this context, teacher education should encourage pre-service teachers to critically examine various definitions of culture and cultural groups, prompting them to move beyond superficial understandings and consider the limitations of their own conceptualizations of culture and cultural groups (McVee, 2014).

Third, pre-service teachers' direct or vicarious experiences of rejection, discrimination, and racism can either hinder or support their White cultural identity development. Such experiences can trigger emotional responses like fear, frustration, guilt, or shame, which may prevent individuals from fully recognizing or addressing their own privilege and power dynamics. This, in turn, might lead them to adopt defensive beliefs, such as rejecting or ignoring

cultural diversity as a coping mechanism. On the other hand, direct or vicarious experiences of rejection, discrimination, and racism may also motivate White pre-service teachers to actively engage in efforts to combat discrimination and racism, fostering the development of valuing cultural diversity beliefs. In the context of teacher education, the WRID model (Helms, 2014) can serve as an important tool for self-reflection, helping White teachers understanding their own White cultural identity development and its connection to student outcomes and culturally responsive teaching practices.

4.6 References

Acquah, E. O., & Commins, N. L. (2015). Critical reflection as a key component in promoting pre-service teachers' awareness of cultural diversity. *Reflective Practice*, *16*(6), 790-805. https://doi.org/10.1080/14623943.2015.1095729

Albrecht, M. (2016). On the Invention of an "Essentialist View of Culture": Thinking outside the Prevalent Cultural Studies Discourse on Culturally and Ethnically Heterogeneous Germany. *The German Quarterly*, *89*(4), 395-410. https://doi.org/10.1111/gequ.12011

Arsenault, C. (2018). *How white teachers'identity development translates to classroom interactions with minority students* (Publication No. 80) [Doctoral Dissertation, University of Kentucky]. UKnowledge. https://uknowledge.uky.edu/edp_etds/80/

Bayram Özdemir, S., Özdemir, M., & Amouri, L. (2024). Unveiling the Unspoken Stories and Experiences of Pre-Service and In-Service Teachers About Ethnic/Racial Issues: Insights and Directions for Moving Forward. *Identity*, *24*(4), 399-409. https://doi.org/10.1080/15283488.2024.2404506

Baysu, G., Celeste, L., Brown, R., Verschueren, K., & Phalet, K. (2016). Minority Adolescents in Ethnically Diverse Schools: Perceptions of Equal Treatment Buffer Threat Effects. *Child Development*, *87*(5), 1352-1366. https://doi.org/10.1111/cdev.12609

Calleja, C. (2014). Jack Mezirow's Conceptualisation of Adult Transformative Learning: A Review. *Journal of Adult and Continuing Education*, *20*(1), 117-136. https://doi.org/10.7227/JACE.20.1.8

Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 155-170). The Guilford Press.

Charmaz, K. (2012). The power and potential of grounded theory. *Medical sociology online*, *6*(3), 2-15. https://www.epicpeople.org/wp-content/uploads/2023/06/Charmaz-2012.pdf

Charmaz, K. (2017). Constructivist grounded theory. In S. N. Hesse-Biber & P. Leavy (Eds.), *The Journal of Positive Psychology* (Vol. 12, pp. 299-300). Routledge. https://doi.org/10.1080/17439760.2016.1262612

Civitillo, S. (2019). Teachers' cultural diversity beliefs and culturally responsive practices [Doctoral dissertation, Potsdam University]. https://doi.org/10.25932/publishup-42776

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. *Educational Research Review*, *24*, 67-83. https://doi.org/10.1016/j.edurev.2018.01.003

Civitillo, S., Juang, L. P., & Schachner, M. K. (2021). Stressing similarities or ignoring differences? Shedding light into different forms of color-evasive ideology with pre- and in-service teachers. *Zeitschrift für Erziehungswissenschaft*, *24*(1), 135-153. https://doi.org/10.1007/s11618-021-00995-9

Civitillo, S., Schachner, M., Juang, L., van de Vijver, F. J. R., Handrick, A., & Noack, P. (2017). Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study. *Learning, Culture and Social Interaction*, *12*, 1-14. https://doi.org/10.1016/j.lcsi.2016.09.002

Conlon, C., Carney, G., Timonen, V., & Scharf, T. (2015). 'Emergent reconstruction'in grounded theory: learning from team-based interview research. *Qualitative Research*, *15*(1), 39-56. https://doi.org/10.1177/1468794113495038

Corbin, J., & Strauss, A. (1990). Grounded Theory Research: Procedures, Canons and Evaluative Criteria. *Zeitschrift für Soziologie*, *19*(6), 418-427. https://doi.org/10.1515/zfsoz-1990-0602

Delanty, G. (1995). The limits and possibilities of a European identity:A critique of cultural essentialism. *Philosophy & Social Criticism*, *21*(4), 15-36. https://doi.org/10.1177/019145379502100402

DiAngelo, R. (2016). White Fragility. *Counterpoints*, *497*, 245-253. http://www.jstor.org/stable/45157307

Diehl, C., Hunkler, C., & Kristen, C. (2016). Ethnische Ungleichheiten im Bildungsverlauf. Eine Einführung. In C. Diehl, C. Hunkler, & C. Kristen (Eds.), *Ethnische Ungleichheiten im Bildungsverlauf: Mechanismen, Befunde, Debatten* (pp. 3-31). Springer. https://doi.org/10.1007/978-3-658-04322-3_1

Dubbeld, A., de Hoog, N., den Brok, P., & de Laat, M. (2019). Teachers' multicultural attitudes and perceptions of school policy and school climate in relation to burnout. *Intercultural Education*, *30*(6), 599-617. https://doi.org/10.1080/14675986.2018.1538042

Fives, H., & Buehl, M. M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham, T. Urdan, S. Graham, J. M. Royer, & M. Zeidner (Eds.), *APA educational psychology handbook, Vol 2: Individual differences and cultural and contextual factors* (pp. 471-499). American Psychological Association. https://doi.org/10.1037/13274-019

Foley, G., Timonen, V., Conlon, C., & O'Dare, C. E. (2021). Interviewing as a vehicle for theoretical sampling in grounded theory. *International journal of qualitative methods*, *20*, 1609406920980957. https://doi.org/10.1177/1609406920980957

Gay, G. (2018). *Culturally Responsive Teaching: Theory, Research, and Practice* (3 ed.). Teachers College Press. https://www.tcpress.com/culturally-responsive-teaching-9780807758762

Glaser, B. G., & Strauss, A. L. (1998). *Grounded theory. Strategien qualitativer Forschung* (3rd ed., Trans. A. T. Paul & S. Kaufmann). Huber. (Original work published 1967)

Godsil, R. D., & Richardson, L. S. (2017). Racial Anxiety, *Iowa Law Review*, *102*(5), 2235–2263. https://ilr.law.uiowa.edu/print/volume-102-issue-5/racial-anxiety

Gogolin, I., McMonagle, S., & Salem, T. (2019). Germany: Systemic, Sociocultural and Linguistic Perspectives on Educational Inequality. In P. A. J. Stevens & A. G. Dworkin (Eds.), *The Palgrave Handbook of Race and Ethnic Inequalities in Education* (pp. 557-602). Springer. https://doi.org/10.1007/978-3-319-94724-2_14

Gomolla, M. (2021). Educational Inequalities, Vulnerability for Discrimination and the Politics of School Change in Germany as a Post-migration Society. In A. J. N. Fromm, & H. Safouane (Eds.), *Power in Vulnerability* (pp. 175-198). Springer. https://doi.org/10.1007/978-3-658-34052-09

Gorski, P. C. (2009). What we're teaching teachers: An analysis of multicultural teacher education coursework syllabi. *Teaching and Teacher Education*, *25*(2), 309-318. https://doi.org/10.1016/j.tate.2008.07.008

Guimond, S., de la Sablonnière, R., & Nugier, A. (2014). Living in a multicultural world: Intergroup ideologies and the societal context of intergroup relations. *European Review of Social Psychology*, *25*(1), 142-188. https://doi.org/10.1080/10463283.2014.957578

Gulya, N., & Fehérvári, A. (2024). Fostering culturally responsive pedagogy related competencies among pre-service teachers: a systematic review of the recent research literature. *Research Papers in Education*, *39*(2), 348-378. https://doi.org/10.1080/02671522.2023.2228312

Hachfeld, A. (2013). *Kulturelle Überzeugungen und professionelle Kompetenz von Lehrenden im Umgang mit kultureller Heterogenität im* Klassenzimmer [Doctoral dissertation, Freie Universität Berlin]. Refubium - Repositorium der Freien Universität Berlin. https://doi.org/10.17169/refubium-13096

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of

teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education*, *48*, 44-55. https://doi.org/10.1016/j.tate.2015.02.001

Hachfeld, A., Schroeder, S., Anders, Y., Hahn, A., & Kunter, M. (2012). Multikulturelle Überzeugungen: Herkunft oder Überzeugung? Welche Rolle spielen der Migrationshintergrund und multikulturelle Überzeugungen für das Unterrichten von Kindern mit Migrationshintergrund? *Zeitschrift für Pädagogische Psychologie*, *26*(2), 101-120. https://doi.org/10.1024/1010-0652/a000064

Hagenaars, M., Maene, C., Willems, S., Vantieghem, W., D'hondt, F., & Stevens, P. A. J. (2023). Diversity ideologies in Flemish education: explaining variation in teachers' implementation of multiculturalism, assimilation and colourblindness. *Journal of Education Policy*, *38*(6), 985-1006. https://doi.org/10.1080/02680939.2023.2167236

Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, *19*(1), 38-42. https://doi.org/10.1016/j.apnr.2005.06.001

Helms, J. E. (1995). An update of Helm's White and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181–198). Sage Publications.

Helms, J. E. (2014). A review of White racial identity theory: The sociopolitical implications of studying White racial identity in psychology. In S. Cooper & K. Ratele (Eds.), *Psychology serving humanity: Proceedings of the 30th International Congress of Psychology, Volume 2: Western psychology.* (pp. 12-27). Psychology Press. https://doi.org/10.4324/9781315777184

Karabon, A., & Johnson, K. G. (2020). Conceptualizing Culture: How Preservice Teachers in the Rural Midwest Confront Subjectivities. *Teacher Education Quarterly*, *47*(3), 32-54. https://www.jstor.org/stable/26977514

Karataş, S., Eckstein, K., Noack, P., Rubini, M., & Crocetti, E. (2023). Meeting in school: Cultural diversity approaches of teachers and intergroup contact among ethnic minority and majority adolescents. *Child Development*, *94*(1), 237-253. https://doi.org/10.1111/cdev.13854

Karuppiah, N., & Berthelsen, D. (2011). Multicultural Education: The Understandings of Preschool Teachers in Singapore. *Australasian Journal of Early Childhood*, *36*(4), 38-42. https://doi.org/10.1177/183693911103600406

Kehl, J., Krachum Ott, P., Schachner, M., & Civitillo, S. (2024). Culturally responsive teaching in question: A multiple case study examining the complexity and interplay of teacher

practices, beliefs, and microaggressions in Germany. *Teaching and Teacher Education*, *152*, 104772. https://doi.org/10.1016/j.tate.2024.104772

Killen, M., Mulvey, K. L., & Hitti, A. (2013). Social exclusion in childhood: A developmental intergroup perspective. *Child Development*, *84*(3), 772-790. https://doi.org/10.1111/cdev.12012

Kintner-Duffy, V. L., Scott-Little, C., & Smith, N. (2022). "I'm gonna teach them all the same way": teachers' beliefs about, experiences of, and classroom practices with children of color. *Journal of Early Childhood Teacher Education*, *43*(1), 127-147. https://doi.org/10.1080/10901027.2021.1902433

Kubiak, D. (2019). East German Identity: A Never-Ending Story? In D. S. Caudill, S. N. Conley, M. E. Gorman, & M. Weinel (Eds.), *The Third Wave in Science and Technology Studies: Future Research Directions on Expertise and Experience* (pp. 151-173). Springer. https://doi.org/10.1007/978-3-030-14335-0_9

Ladson–Billings, G. (1998). Teaching in Dangerous Times: Culturally Relevant Approaches to Teacher Assessment. *The Journal of Negro Education*, *67*(3), 255-267. https://doi.org/10.2307/2668194

McVee, M. B. (2014). The challenge of more light, the complexity of culture: lessons learned in exploring the cultural positioning of literacy teachers. *Discourse: Studies in the Cultural Politics of Education*, *35*(1), 1-15. https://doi.org/10.1080/01596306.2012.739463

Mills, J., Bonner, A., & Francis, K. (2006). The Development of Constructivist Grounded Theory. *International journal of qualitative methods*, *5*(1), 25-35. https://doi.org/10.1177/160940690600500103

Morris, M. W., Chiu, C.-y., & Liu, Z. (2015). Polycultural Psychology. *Annual Review of Psychology*, *66*, 631-659. https://doi.org/10.1146/annurev-psych-010814-015001

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, *24*(1), 9-18. https://doi.org/10.1080/13814788.2017.1375091

Nelson, S. W., & Guerra, P. L. (2014). Educator Beliefs and Cultural Knowledge:Implications for School Improvement Efforts. *Educational Administration Quarterly*, *50*(1), 67-95. https://doi.org/10.1177/0013161x13488595

O'Shea Brown, G. (2021). The Power of Belief. In G. O'Shea Brown (Ed.), *Healing Complex Posttraumatic Stress Disorder: A Clinician's Guide* (pp. 91-102). Springer. https://doi.org/10.1007/978-3-030-61416-4_7

OECD. (2021). *Education at a Glance 2021: OECD Indicators.* https://doi.org/10.1787/b35a14e5-en

Ortner, S. B. (1998). Identities: The Hidden Life of Class. *Journal of Anthropological Research*, *54*(1), 1-17. https://doi.org/10.1086/jar.54.1.3631674

Pevec-Zimmer, S., Juang, L. P., & Schachner, M. K. (2024). Promoting Awareness and Self-Efficacy for Culturally Responsive Teaching of Pre-Service Teachers Through the Identity Project – a Mixed Methods Study. *Identity*, *24*(4), 288-306. https://doi.org/10.1080/15283488.2024.2344086

Pit-ten Cate, I. M., & Glock, S. (2019). Teachers' Implicit Attitudes Toward Students From Different Social Groups: A Meta-Analysis. *Frontiers in Psychology*, *10*, 1-18. https://doi.org/10.3389/fpsyg.2019.02832

Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). "What about me?" Perceptions of exclusion and Whites' reactions to multiculturalism. *Journal of personality and social psychology*, *101*(2), 337-353. https://doi.org/10.1037/a0022832

Pohan, C. A., Ward, M., Kouzekanani, K., & Boatright, C. (2009). The Impact of Field Placement Sites on Preservice Teachers' Beliefs about Teaching Diverse Students. *School-University Partnerships*, *3*(1), 43-53.

Powell, M. B., Hughes-Scholes, C. H., & Sharman, S. J. (2012). Skill in Interviewing Reduces Confirmation Bias. *Journal of Investigative Psychology and Offender Profiling*, *9*(2), 126-134. https://doi.org/10.1002/jip.1357

Priester-Hanks, M. L. (2023). *Critically Conscious White Teachers: A Case Study* [Doctoral Dissertation. Indiana University-Purdue University Indianapolis]. ScholarWorks Repository, Indiana University-Purdue University Indianapolis. https://doi.org/10.7912/C2/3145

Romijn, B. R., Slot, P. L., & Leseman, P. P. M. (2021). Increasing teachers' intercultural competences in teacher preparation programs and through professional development: A review. *Teaching and Teacher Education*, *98*, 103236. https://doi.org/10.1016/j.tate.2020.103236

Rosenthal, L., & Levy, S. R. (2010). The Colorblind, Multicultural, and Polycultural Ideological Approaches to Improving Intergroup Attitudes and Relations. *Social Issues and Policy Review*, *4*(1), 215-246. https://doi.org/10.1111/j.1751-2409.2010.01022.x

Schachner, M. K. (2019). From equality and inclusion to cultural pluralism – Evolution and effects of cultural diversity perspectives in schools. *European Journal of Developmental Psychology*, *16*(1), 1-17. https://doi.org/10.1080/17405629.2017.1326378

Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural Diversity Climate and Psychological Adjustment at School-Equality and Inclusion Versus Cultural Pluralism. *Child Development*, *87*(4), 1175-1191. https://doi.org/10.1111/cdev.12536

Schofield, J. W., Hausmann, L. R. M., Ye, F., & Woods, R. L. (2010). Intergroup friendships on campus: Predicting close and casual friendships between White and African American first-year college students. *Group Processes & Intergroup Relations*, *13*(5), 585-602. https://doi.org/10.1177/1368430210362437

Schwarzenthal, M., Schachner, M. K., Juang, L. P., & van de Vijver, F. J. R. (2020). Reaping the benefits of cultural diversity: Classroom cultural diversity climate and students' intercultural competence. *European Journal of Social Psychology*, *50*(2), 323-346. https://doi.org/10.1002/ejsp.2617

Shim, J. M. (2020). Meaningful Ambivalence, Incommensurability, and Vulnerability in an Antiracist Project: Answers to Unasked Questions. *Journal of Teacher Education*, *71*(3), 345-356. https://doi.org/10.1177/0022487119842054

Slot, P. L., Halba, B., & Romijn, B. R. (2017). *The role of professionals in promoting diversity and inclusiveness*. ISOTIS. https://dspace.library.uu.nl/bitstream/handle/1874/356986/ISOTIS.pdf?sequence=1

Smith, L. V., Wang, M.-T., & Hill, D. J. (2020). Black Youths' perceptions of school cultural pluralism, school climate and the mediating role of racial identity. *Journal of School Psychology*, *83*, 50-65. https://doi.org/10.1016/j.jsp.2020.09.002

Stevens, F. G., Plaut, V. C., & Sanchez-Burks, J. (2008). Unlocking the Benefits of Diversity:All-Inclusive Multiculturalism and Positive Organizational Change. *The Journal of Applied Behavioral Science*, *44*(1), 116-133. https://doi.org/10.1177/0021886308314460

Strübing, J. (2021). Was ist ‚gute' Grounded Theory? Konsequenzen einer pragmatistischen Epistemologie für Qualitätssicherung und Gütekriterien. In J. Strübing (Ed.), *Grounded Theory: Zur sozialtheoretischen und epistemologischen Fundierung eines pragmatistischen Forschungsstils* (pp. 85-105). Springer. https://doi.org/10.1007/978-3-658-24425-5_6

Ulbricht, J., Schachner, M. K., Civitillo, S., & Juang, L. (2024). Fostering Culturally Responsive Teaching with the Identity Project intervention: A qualitative quasi-experiment with pre-service teachers. *Identity*, *24*(4), 307–330. https://doi.org/10.1080/15283488.2024.2361890

Ulbricht, J., Schachner, M. K., Civitillo, S., & Noack, P. (2022). Teachers' acculturation in culturally diverse schools - How is the perceived diversity climate linked to intercultural self-efficacy? *Frontiers in Psychology*, *13,* 953068. https://doi.org/10.3389/fpsyg.2022.953068

Umaña-Taylor, A. J., & Douglass, S. (2017). Developing an Ethnic-Racial Identity Intervention from a Developmental Perspective: Process, Content, and Implementation of the Identity Project. In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook on Positive Development of Minority Children and Youth* (pp. 437-453). Springer https://doi.org/10.1007/978-3-319-43645-6_26

Villegas, A. M., & Davis, D. E. (2008). Preparing teachers of color to confront racial/ethnic disparities in educational outcomes. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 583-605). Routledge. https://doi.org/10.4324/9780203938690

5. General Discussion

The overarching goal of this dissertation was to investigate how contextual conditions and psychological interventions are associated with components of pre-service and in-service teachers' Culturally Responsive Teaching (CRT). To answer the overarching research question, three research aims were pursued: 1) Investigate the contextual conditions of in-service teachers' acculturation attitudes and CRT efficacy as components of CRT, 2) Investigate how pre-service teachers can be prepared for CRT through a teacher training program, 3) Investigate how White pre-service teachers in Germany develop their implicit and explicit cultural diversity beliefs and explore the processes that facilitate changes in these beliefs.

To pursue these research aims, three empirical studies were conducted. These studies investigated pre-service and in-service teachers in Germany, using quantitative, qualitative, and intervention data. The following sections summarize the findings, connecting them to the three research aims of this dissertation. Subsequently, the strengths and limitations are evaluated, and directions for future research are suggested. Finally, the overarching research question is answered, and the result is discussed based on the three empirical studies. Practical implications are derived from the findings, followed by a conclusion.

5.1 Research Aim 1

5.1.1 Overview of Findings

To answer the overarching research question, the first research aim was to investigate the contextual conditions of components of CRT. In Chapter 2 of this dissertation, an empirical study employed a cross-sectional study with in-service teachers to investigate how school climate and school composition are associated with in-service teachers' acculturation attitudes and CRT efficacy.

As expected, findings indicated that school climate was associated with higher CRT efficacy among in-service teachers. Specifically, stronger perceptions of an equality and inclusion climate were associated with higher teaching-related efficacy, meaning that teachers

were more confident in coping with the challenges of a multicultural classroom and adapting their teaching to the cultural diversity of their students, as well as adequately responding to students with different abilities and cultural preconditions. However, no association was found between perceived norms of equality and inclusion and the efficacy of promoting positive intercultural relations. A stronger perception of cultural pluralism climate was not only associated with higher teaching-related efficacy, but also higher efficacy regarding the promotion of positive intercultural relations, i.e., they were more confident in advancing relationships between students of different cultural backgrounds, contributing to greater mutual understanding among students from different cultural groups, and helping to reduce mutual prejudices between students.

Overall, the results align with existing research suggesting that school climate is associated with teacher outcomes (Zee & Koomen, 2016), while also extending research to the context of cultural diversity. The results of the present dissertation are also in line with the findings of a cross-national study across 46 countries with over 90,000 teachers by Schwarzenthal et al. (2023), revealing that a perceived multicultural school climate is associated with teachers' CRT self-efficacy at the school level.

However, the findings of the current dissertation suggest that teachers' acculturation attitudes do not mediate the association between school climate and CRT self-efficacy. To date, this is the first study applying an acculturation framework to teachers, limiting direct comparisons with previous research. Further, the results of the current dissertation suggest that teachers' acculturation attitudes mediate the association between school composition and CRT self-efficacy. In-service teachers working in schools with a higher proportion of students of culturally minoritized groups are more supportive of cultural maintenance, suggesting that greater cultural diversity and intergroup contact may foster more inclusive attitudes. The findings are consistent with previous research by Brault et al. (2014), revealing that schools' ethnic composition can influence a variety of teacher expectations. In summary, with regard to

the first research aim, it can be concluded that school climate and school composition are associated with components of CRT and are therefore important contextual conditions for CRT.

5.1.2 Strengths, Limitations, and Implications for Future Research

The current dissertation makes several important contributions to the understanding of contextual conditions of CRT by applying a robust quantitative approach. This dissertation is the first to apply an acculturation framework to teachers, expanding the scope of acculturation research beyond students. The results provide new insights into how teachers' acculturation attitudes and CRT efficacy are associated with the broader school context. By integrating perspectives from both CRT and acculturation research, the study provides a more comprehensive understanding of the conditions shaping CRT practices.

Given the conflicting findings of previous studies on the relationship between school climate and CRT efficacy, future research should address several considerations: First, CRT efficacy and school climate were measured on the basis of self-reported data, which are sensitive to response tendencies and socially desirable responses and might not align with the perceptions by others (Kreitchmann et al., 2019; Paulhus, 2017). Therefore, future studies could obtain more reliable and robust data and provide valuable insights into potential differences between teachers' and students' perceptions by evaluating CRT practices also from students' perspectives or through classroom observations (Grazia & Molinari, 2021; Mitchell et al., 2010). Furthermore, there is a lack of research on implicit culture-related attitudes and beliefs, which is needed because teachers' explicit cultural diversity beliefs do not always align with their implicit beliefs due to social desirability (Bhatia & Walasek, 2023). The use of quantitative measurements, such as the Implicit Association Test (De Houwer et al., 2015) and the Implicit Relational Assessment Procedure (Barnes-Holmes et al., 2010), are suggested for future research to assess also implicit attitudes and beliefs about cultural diversity. Future qualitative research could explore how teacher trainings shape teachers' implicit attitudes and beliefs

toward cultural diversity, using in-depth interviews and observational methods to uncover underlying biases that may not be self-reported.

5.2 Research Aim 2

5.2.1 Overview of Findings

To answer the overarching research question, the second research aim was to investigate how pre-service teachers can be prepared for CRT through a teacher training program. This dissertation addresses the research gap in intervention studies by using a qualitative, longitudinal, quasi-experimental design to examine teachers' professional development in CRT (Civitillo et al., 2018). In particular, this dissertation investigated how the implementation of the Identity Project in the classroom promoted the development of components of CRT, namely, critical reflection, cultural diversity beliefs, and CRT efficacy. Using thematic analysis (Braun & Clarke, 2006), findings suggest that implementing the Identity Project in classrooms promotes pre-service teachers' quality of critical reflection, contributes to valuing cultural diversity beliefs, and promotes CRT efficacy. Further, the results suggest that there are intraindividual differences in pre-service teachers' perceptions of self-efficacy, while pre-service teachers felt more confident in dealing with culturally diverse students, they often felt less confident in combating discrimination and racism.

The general findings are consistent with a critical review of teacher training, emphasizing the positive effects of experiential learning on pre-service teachers' outcomes regarding CRT (Civitillo et al., 2018). Similar to the study by Pevec et al. (2024), which investigated the Identity Project Seminar in schools, this dissertation found that engaging with themes related to cultural diversity and related identities can increase pre-service teachers' CRT efficacy. While the Identity Project Seminar provided pre-service teachers with opportunities for experiential learning by doing student activities themselves, the implementation of the Identity Project in classrooms offered real-life teaching experiences. In contrast to the results of the intervention study on the Identity Project Seminar (Pevec et al., 2024), which found no

changes in deficit thinking about minoritized students, this dissertation found that the practical implementation of the Identity Project in the classroom facilitates the reconstruction of deficit beliefs and promotes valuing cultural diversity beliefs. However, the results of this dissertation suggest that practical experiences per se do not contribute to CRT, as pre-service teachers who completed a regular school internship rarely developed valuing cultural diversity beliefs but rather beliefs that ignore or reject cultural diversity.

In summary, with regard to the second research aim, it can be concluded pre-service teachers can be effectively prepared for CRT through teacher training programs that combine seminar-based learning with practical implementation in culturally diverse environments, and that center not only cultural identities but also related social themes related to power dynamics, such as stereotypes, racism, and intersectionality, as exemplified by the Identity Project. These findings emphasize the importance of structured, reflective, and experiential learning opportunities as essential elements in preparing teachers for CRT.

5.2.2 Strengths, Limitations, and Implications for Future Research

The current dissertation makes several important contributions to the understanding of pre-service teachers' professional development for CRT by employing a rigorous qualitative, longitudinal design, combining pre- and post-intervention assessments with a control group. The investigation is one of the first investigations to investigate multiple components of CRT, namely, critical reflection, cultural diversity beliefs, and CRT efficacy, rather than investigating them in isolation. Another strength of this dissertation lies in the exploration of an additional dimension of CRT efficacy, specifically its relationship to power structures such as racism and discrimination. Power relations, although central to the concept of CRT, have rarely been considered in existing measurement scales of CRT efficacy (see limitations in chapter 6.1.2). This dissertation offers a more comprehensive understanding of intraindividual differences and development in pre-service teachers' CRT efficacy by exploring various dimensions. The findings highlight the need for future quantitative research to develop and validate

measurements that explicitly incorporate power-related dimensions of CRT efficacy, enabling a more nuanced assessment. However, the results based on a small sample are limited in their generalizability. Future quantitative research could examine whether the identified dimensions of CRT efficacy are consistent across larger, more diverse samples of pre-service teachers, including those from different regions in Germany and varying levels of teaching experience.

Regarding pre-service teachers' cultural diversity beliefs, the findings of this dissertation suggest intraindividual inconsistencies in participants' cultural belief systems. For instance, a pre-service teacher may explicitly express support for cultural diversity, but simultaneously make stereotypical comments about culturally diverse students. Such inconsistencies highlight the complex interplay between explicit (conscious) and implicit (unconscious) beliefs. Thus, future research investigating teachers' cultural diversity beliefs should utilize methodologies such as Grounded Theory Methodology (Glaser & Strauss, 1998) to explore the complex and often contradictory nature of explicit and implicit beliefs.

5.3 Research Aim 3

5.3.1 Overview of Findings

To answer the overarching research question, the third research aim was to investigate how White pre-service teachers in Germany develop their explicit and implicit cultural diversity beliefs and explore the conditions that facilitate changes in these beliefs to develop a grounded theory. In Chapter 3 of this dissertation, an empirical study used a grounded theory approach to investigate the relation between White identity development and cultural diversity beliefs in the context of Eastern Germany. In doing so, this dissertation expands on CRT by highlighting the role of White identity development as a condition in shaping pre-service teachers' cultural diversity beliefs.

First, the findings suggest that White pre-service teachers need to critically reflect on power dynamics and their own positioning in order to develop their White cultural identity, which in turn supports the development of valuing cultural diversity beliefs. Second, the

findings suggest that White pre-service teachers who conceptualize culture in a simplistic and essentialist or hierarchical way, focusing exclusively on observable characteristics such as clothing, customs, or rituals, often avoid addressing the deeper complexities of cultural identities in the classroom and tend to develop beliefs that ignore or reject cultural diversity. In contrast, the findings suggest that the dynamic conceptualization of culture, which acknowledges its complex nature and the role of power, is an important condition for the development of a White cultural identity, which in turn is crucial for the development of valuing cultural diversity beliefs. Third, pre-service teachers' direct or vicarious experiences of rejection, discrimination, and racism can either hinder or support their White cultural identity development and cultural diversity beliefs: Experiences of rejection, discrimination, and racism can trigger emotional responses such as fear, frustration, guilt, or shame that can hinder individuals from fully recognizing or addressing their own privilege and power dynamics, leading to the development of rejecting and ignoring cultural diversity beliefs. However, direct or vicarious experiences of rejection, discrimination and racism can foster self-awareness and reflection about their own cultural identity and privilege or disadvantage and motivate White pre-service teachers to actively engage in combating discrimination and racism and developing valuing cultural diversity beliefs. Although previous literature on CRT describes critical reflection on power dynamics and identity development as important components (Gay, 2013), these have not been investigated in relation to beliefs and described as important conditions for the development of appreciative beliefs.

In summary, with regard to the third research aim, it can be concluded White pre-service teachers in Germany develop their White cultural identity based on their conceptualization of culture, the quality of their critical reflection on power dynamics and their own identity, as well as experiences with rejection, discrimination, and racism, which in turn are important conditions for developing cultural diversity beliefs.

5.3.2 Strengths, Limitations, and Implications for Future Research

In addressing the third research aim, this dissertation considers the research gap concerning the conditions under which cultural diversity beliefs develop, with particular attention to the limited focus on implicit cultural diversity beliefs. A key strength in answering the third research aim lies in the application of a grounded theory approach that enables an in-depth qualitative investigation of the conditions that facilitate the development of implicit and explicit cultural diversity beliefs among pre-service teachers (Charmaz, 2017). In doing so, this dissertation makes an important contribution to existing research on CRT by identifying the development of White cultural identity as a crucial intraindividual psychological process that shapes teachers' cultural diversity beliefs. Moreover, this dissertation provides an understanding of how pre-service teachers in East Germany develop their cultural identities and identifies the experiences and processes that facilitate this development.

Some limitations with respect to this dissertation should be noted. First, in accordance with the constructivist position of grounded theory, this study does not claim to offer an exact representation of reality but rather an interpretive portrayal of teachers' cultural diversity beliefs and their White cultural identity. The findings are partial, provisional, and fallible interpretations and should therefore be viewed as a working model that remains open to revision as further data and perspectives emerge (Charmaz, 2017). Moreover, the study's small and non-probability sample, limited to pre-service teachers from two schools in a particular region of East Germany, reflects specific contextual factors that limit the generalizability of the findings. However, rather than relying on statistical generalization, qualitative research encourages generalization through context similarity and pattern recognition (Hammar Chiriac et al., 2023). Readers are invited to reflect on whether the findings resonate with their own contexts and whether the identified patterns are recognizable in the educational environments and teacher populations they engage with (Larsson, 2009). Lastly, while the grounded theory approach allowed for rich, context-sensitive insights, the study's reliance on a single participant group

and specific methods of data collection limits the diversity of perspectives included. Future research should therefore seek to incorporate multiple data sources, such as students, parents, principals, policymakers, and relevant documents, and a wider range of data collection methods, including interviews, surveys, and ethnographic observations across various levels of the education system. Future studies are encouraged to examine how teachers in other educational and cultural settings interpret and develop cultural diversity beliefs and White cultural identities under differing contextual conditions.

5.4 Overarching Aim

5.4.1 Overview of Findings

The overarching research aim of the present dissertation was to investigate how contextual conditions and psychological interventions are associated with components of pre-service and in-service teachers' CRT. Results suggest that the development of CRT in both in-service and pre-service teachers is shaped by a complex interplay of contextual, experiential, and individual conditions.

First, quantitative research revealed that school climate and school composition are important contextual conditions associated with in-service teachers' CRT efficacy, particularly when characterized by a climate of cultural pluralism, and equality and inclusion. However, qualitative findings indicated that pre-service teachers practicing in schools with a high proportion of culturally minoritized students do not necessarily increase their CRT efficacy or support for cultural maintenance, as in some cases, such experiences may even reinforce deficit beliefs.

Second, findings from intervention data suggest that pre-service teachers benefit most from training programs that combine reflective, seminar-based learning with structured practical experiences in culturally diverse environments, promoting critical reflection, CRT efficacy, and valuing cultural diversity beliefs.

Third, the development of White pre-service teachers' explicit and implicit cultural diversity beliefs is associated with their White cultural identity development. White pre-service teachers' cultural identity development is shaped by how they conceptualize culture, their critical reflection on power dynamics, and their reflection on personal or vicarious experiences with rejection, discrimination, and racism. Together, these findings emphasize the importance of structurally embedding experiential, critically reflective, and cultural identity-focused learning opportunities into teacher education, while also fostering a cultural pluralism school climate, to effectively prepare teachers for CRT.

5.4.2 Strengths, Limitations, and Implications for Future Research

A great strength of this dissertation is that various dimensions of CRT were investigated, and the contextual perspective was considered in the investigations. Drawing on bioecological systems theory (Bronfenbrenner & Morris, 2007) teachers' professional development constitutes proximal processes (i.e. enduring forms of interaction in the immediate environment) that are crucial for development, and whose effects vary depending on the context, for example on factors in microsystem (i.e., schools) and macrosystems (i.e., sociocultural context of East Germany). This dissertation highlights contextual characteristics, such as school composition, school climate, and teacher education (microsystem), that play a crucial role in shaping various intraindividual psychological processes related to culturally responsive teaching (e.g., the development of pre-service teachers' White cultural identity, CRT efficacy, and cultural diversity beliefs). Another key strength is the investigation of both in-service and pre-service teachers, which allows for a broader understanding of CRT across different stages of teacher development. Moreover, the dissertation stands out for its methodological richness. This dissertation integrates a variety of research methods, incorporating both qualitative and quantitative approaches to provide a nuanced and multifaceted understanding of the different components of CRT. For the qualitative analysis, longitudinal intervention data with a control group were conducted and analyzed through

thematic analysis (Braun & Clarke, 2006) and constructivist grounded theory (Charmaz, 2017). The quantitative methods involved cross-sectional data, and path analysis was conducted. This mixed-methods approach enhances the depth and validity of the findings through methodological triangulation (Olsen, 2004).

Qualitative and quantitative research both offer unique strengths when investigating components of CRT. Quantitative methods, provide more robust, generalizable data on how contextual factors such as school climate and composition influence teachers' CRT efficacy. In contrast, qualitative approaches provide deeper insight into the complex and developing cultural diversity beliefs of pre-service teachers and their cultural identity development, capturing the nuanced, intraindividual psychological processes that are often limited in representation through numerical data. Furthermore, qualitative research extends existing research by exploring deviations from the quantitative relationships studied, offering explanations for unexpected or contradictory findings, and illustrating how general patterns manifest in particular, deviant, individual cases, thus enriching and deepening the understanding of CRT development.

One limitation of this dissertation concerns the temporal and regional differences in data collection across the individual studies. The data presented in Chapter 2 were collected in 2011 as part of a larger study on cultural diversity climate and acculturation in schools, whereas the data in Chapters 3 and 4 were collected a decade later, in 2021 and 2022. These temporal gaps may limit the comparability of findings, as societal, educational, and political contexts have changed over time, potentially influencing teacher attitudes and experiences. For instance, the 2013 update to the resolution on intercultural education puts a stronger emphasis on intercultural competence and anti-discrimination (Kultusministerkonferenz [KMK], 2013). In addition, increased migration to Germany since 2015, including the arrival of displaced individuals from various regions (e.g., Syria, Afghanistan), and more recently from Ukraine in 2022, has contributed to changes in school composition and the broader societal discourse on

cultural diversity. These developments at the macro level are likely to have an impact on the school climate (microsystem). The changing school composition and school climate may, in turn, change teachers' diversity-related attitudes and beliefs as well as CRT self-efficacy. As a result, the findings from Chapter 2 may have limited applicability to the current educational context, and comparisons with more recent data from Chapters 3 and 4 should be interpreted with caution and highlights the need for ongoing, context-sensitive research.

As teachers differ in their conceptualizations of culture and diversity beliefs, future research could explore whether subject-specific contexts (e.g., history or geography education) influence these understandings and how they intersect with the development of CRT practices. Future research should also examine how CRT can be integrated into subject-specific instruction, since themes like culture, identity, and power are highly relevant across various subjects.

Another important limitation is that the data used in this dissertation is based solely on self-report surveys and interviews. While the data provide valuable insights into teachers' explicit and implicit cultural diversity beliefs, attitudes and experiences, they are inherently subject to bias due to social desirability, memory problems and individual interpretations of the researcher. Moreover, the self-reported data may not accurately reflect actual classroom practices (Paulhus, 2017; Kreitchmann et al., 2019) nor fully capture the complexity of interactions between various contextual systems and individual factors (Bronfenbrenner & Morris, 2007). Therefore, future research should incorporate a variety of sources (e.g., students, parents, principals, stakeholders, policy documents) as well as diverse data collection methods (e.g., interviews, questionnaires, and ethnographic observations across classrooms, schoolyards, staff rooms, and decision-making meetings at various levels within the educational system) (Hammar Chiriac et al., 2023). To address potential biases in future research, a combination of instruments is recommended. Quantitative studies can use the Social Desirability Gamma Short Scale (Nießen et al., 2019) and Implicit Association Tests

(Greenwald et al., 1998) to control for bias and uncover implicit attitudes. For qualitative research, methods such as the Culturally Responsive Instruction Observation Protocol (Powell et al., 2016), narrative interviews, and discourse analysis (Van Dijk, 2000) are valuable for capturing more objective classroom instructions and underlying assumptions.

5.5 Going Above and Beyond: Implications for Practice

The findings of this dissertation highlight the need for a comprehensive and multi-layered approach to developing culturally responsive teaching (CRT) among both pre-service and in-service teachers. The identified contextual conditions, experiences and intraindividual processes associated with the development of CRT point to several implementable strategies at different levels of the education system.

At the micro level, teachers can adopt concrete practices that are consistent with a cultural pluralism as well as an equality and inclusion climate and can have a positive impact on their culturally diverse students (e.g., more positive ethnic identities and positive intergroup experiences, lower prejudice and discrimination) (Schachner et al., 2021; Schwarzenthal et al., 2018). Teachers can promote norms of cultural pluralism in their classrooms by offering many opportunities to engage with diverse cultural norms, traditions, values, and specifically showing an interest in and valuing the cultural backgrounds of the families of their culturally diverse students. Teachers can also promote equality and inclusion by encouraging collaboration on common goals through cooperative learning techniques (Banks, 2015; Schachner et al., 2016). In addition, teachers are encouraged to critically reflect on their CRT practices, supported by self-evaluation tools designed for this purpose (Lawson et al., 2024). Similarly, the WRID model (Helms, 2014) can serve as an important tool for self-reflection, helping White teachers to understand their own White cultural identity development and its connection to student outcomes and CRT practices, and facilitating the development of their cultural diversity beliefs.

Furthermore, at an institutional level, school leadership practices can constantly prepare culturally responsive teachers and providing culturally responsive school environments, and

increasing teachers' CRT efficacy (Duyar et al., 2013; Khalifa et al., 2016). However, the implementation of CRT demands a systemic reform of the education system, including the revision of textbooks and curriculum that often reinforce ethnocentric narratives and racial stereotypes (Zabel, 2022; Ziai & Marmer, 2023). Schools can only close opportunity and achievement gaps by adopting culturally responsive practices through a whole-school approach, involving all levels from classroom instruction to leadership and policy (Mayfield & Garrison-Wade, 2015)

At the institutional level, higher education institutions and policymakers should offer culturally responsive training programs for both pre-service and in-service teachers. Teacher education must prepare teachers by establishing a strong theoretical and evidence-based foundation. Coursework should introduce essential theories such as Social Identity Theory (Tajfel & Turner, 1986), which explains how teachers sense of self and group memberships can shape their behavior, and Critical Race Theory (Ladson-Billings & Tate, 1995), which provides a framework for reflecting on racial inequalities in education by examining how systemic racism, including discriminatory practices and policies, impacts culturally minoritized students. Additionally, reflecting on various conceptualizations and its limitations as well as introducing key concepts intersectionality and CRT should be integrated to provide a comprehensive foundation for working in culturally diverse classrooms. However, many teachers challenging to translate abstract theoretical knowledge into practical classroom strategies. Therefore, seminars must not only provide opportunities to explore different facets of one's own sociocultural identity and reflect on personal social positioning, but also integrate theory into practice through applied methods such as case-based instructions (Carbonneau et al., 2025) and classroom simulations (Kelley et al., 2025). Moreover, theory and practice should be combined to create meaningful and transformative learning experiences, enabling pre-service teachers not only to translate theoretical concepts into practice but also to apply them in ways that strengthen their self-efficacy, an essential foundation for confidently and competently implementing CRT

in diverse classroom settings. To support this process, service-learning opportunities in culturally diverse communities can deepen cultural understanding and reinforce practical application of CRT principles (Brown & Howard, 2005), while mentoring and supervision are critical to provide feedback and can stimulate further self-reflection (Zaffini, 2022).

5.6 Conclusion

This dissertation offers a significant contribution to teacher preparation for cultural diversity, particularly considering the limited engagement with international discourses on cultural diversity, discrimination, and racism within the German context. In conclusion, this dissertation emphasizes the multifaceted development of CRT among pre-service and in-service teachers, highlighting the complex interplay of contextual, experiential, and intraindividual psychological factors and processes. Drawing on both quantitative and qualitative data, this research highlights the significance of contextual conditions such as a school climate of cultural pluralism, and equality and inclusion in shaping teachers' CRT efficacy. However, it has also been shown that contact with culturally diverse students alone is not sufficient in preparing teachers in CRT as in some cases it can even reinforce deficit beliefs if it is not combined with critical reflection and structured learning. The findings further demonstrate that CRT development is most effectively supported through interventions that integrate theoretical instruction with experiential and critically reflective opportunities. In particular, teacher training programs that promote identity exploration, critical self-reflection, and application in practical school settings can foster pre-service teachers' CRT efficacy and cultural diversity beliefs. Notably, the development of White pre-service teachers' cultural diversity beliefs is associated with their White cultural identity development, which is shaped by their conceptualization of culture, critical reflection on identity, and reflection on experiences of rejection, discrimination and racism. These findings point to the essential role of identity development in preparing teachers for CRT, as well as the need to structurally embed such opportunities within teacher education.

References for the German Summary, Introduction, and Discussion

Abacioglu, C. S., Fischer, A. H., & Volman, M. (2022). Professional development in multicultural education: What can we learn from the Australian context? *Teaching and Teacher Education*, *114*, 103701. https://doi.org/10.1016/j.tate.2022.103701

Acquah, E. O., & Commins, N. L. (2015). Critical reflection as a key component in promoting pre-service teachers' awareness of cultural diversity. *Reflective Practice*, *16*(6), 790-805. https://doi.org/10.1080/14623943.2015.1095729

Agirdag, O., Merry, M. S., & Van Houtte, M. (2016). Teachers' Understanding of Multicultural Education and the Correlates of Multicultural Content Integration in Flanders. *Education and Urban Society*, *48*(6), 556-582. https://doi.org/10.1177/0013124514536610

Albrecht, M. (2016). On the Invention of an "Essentialist View of Culture": Thinking outside the Prevalent Cultural Studies Discourse on Culturally and Ethnically Heterogeneous Germany. *The German Quarterly*, *89*(4), 395-410. https://doi.org/10.1111/gequ.12011

Aldridge, J. M., & Fraser, B. J. (2016). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, *19*(2), 291-307. https://doi.org/10.1007/s10984-015-9198-x

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

Allport, G. W., Clark, K., & Pettigrew, T. (1954). The nature of prejudice.

Alvesson, M., & Sköldberg, K. (2000) *Reflexive Methodology: New Vistas for Qualitative Research*. Sage Publications.

Arends-Tóth, J., & van de Vijver, F. J. R. (2006). Assessment of psychological acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 142-160). Cambridge University Press. https://doi.org/10.1017/CBO9780511489891.013

Aron, L. (2000). Self-reflexivity and the therapeutic action of psychoanalysis. *Psychoanalytic Psychology*, *17*(4), 667–689. https://doi.org/10.1037/0736-9735.17.4.667

Aronson, B., & Laughter, J. (2016). The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas. *Review of Educational Research*, *86*(1), 163-206. https://doi.org/10.3102/0034654315582066

Baggett, H. (2020). Relevance, Representation, and Responsibility: Exploring World Language Teachers' Critical Consciousness and Pedagogies. *L2 Journal*, *12*, 34-54. https://doi.org/10.5070/L212246037

Baldwin, J. R., Faulkner, S. L., & Hecht, M. L. (2005). A Moving Target: The Illusive Definition of Culture. In J. R. Baldwin, S. L. Faulkner, M. L. Hecht, & S. L. Lindsley (Eds.), *Redefining Culture: Perspectives Across the Disciplines* (1 ed., pp. 1-25). Routledge. https://doi.org/10.4324/9781410617002

Bañales, J., Mathews, C., Hayat, N., Anyiwo, N., & Diemer, M. A. (2020). Latinx and Black young adults' pathways to civic/political engagement. *Cultural Diversity & Ethnic Minority Psychology*, *26*(2), 176-188. https://doi.org/10.1037/cdp0000271

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/ Henry Holt & Co.

Bandura, A. (2002). Social foundations of thought and action. In D. F. Marks (Ed.), *Social foundations of thought and action* (pp. 94-106). SAGE Publications. https://doi.org/10.4135/9781446221129.n6

Banks, J. A. (2015). Multicultural education, school reform, and educational equality. *Opening the doors to opportunity for all: Setting a research agenda for the future*, 54-63.

Banks, J. A., & Banks, C. A. M. (2004). Handbook of research on multicultural education.

Barnes-Holmes, D., Barnes-Holmes, Y., Stewart, I., & Boles, S. (2010). A Sketch of the Implicit Relational Assessment Procedure (IRAP) and the Relational Elaboration and Coherence (REC) Model. *The Psychological Record*, *60*(3), 527-542. https://doi.org/10.1007/BF03395726

Bayram Özdemir, S., Özdemir, M., & Amouri, L. (2024). Unveiling the Unspoken Stories and Experiences of Pre-Service and In-Service Teachers About Ethnic/Racial Issues: Insights and Directions for Moving Forward. *Identity*, *24*(4), 399-409. https://doi.org/10.1080/15283488.2024.2404506

Baysu, G., Celeste, L., Brown, R., Verschueren, K., & Phalet, K. (2016). Minority Adolescents in Ethnically Diverse Schools: Perceptions of Equal Treatment Buffer Threat Effects. *Child Development*, *87*(5), 1352-1366. https://doi.org/10.1111/cdev.12609

Baysu, G., Hillekens, J., Phalet, K., & Deaux, K. (2021). How Diversity Approaches Affect Ethnic Minority and Majority Adolescents: Teacher–Student Relationship Trajectories and School Outcomes. *Child Development*, *92*(1), 367-387. https://doi.org/10.1111/cdev.13417

Berry, J. W. (2003). *Conceptual approaches to acculturation*. American Psychological Association.

Berry, J. W. (2017). Theories and models of acculturation. In S. J. Schwartz & J. B. Unger (Eds.), *The Oxford handbook of acculturation and health* (pp. 15–28). Oxford University Press.

Berry, J.W. (1987). Immigration, Acculturation, and Adaptation. *Applied Psychology, 46*, 5-34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Bhatia, S. (2007). Rethinking culture and identity in psychology: Towards a transnational cultural psychology. *Journal of Theoretical and Philosophical Psychology*, *27-28*(2-1), 301-321. https://doi.org/10.1037/h0091298

Bhatia, S., & Walasek, L. (2023). Predicting implicit attitudes with natural language data. *Proceedings of the National Academy of Sciences*, *120*(25), e2220726120. https://doi.org/doi:10.1073/pnas.2220726120

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education*, *23*(2), 191–206. https://doi.org/10.1080/03075079812331380384

Bourhis, R. Y., Moise, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International journal of psychology*, *32*(6), 369-386. https://doi.org/10.1080/002075997400629

Brault, M.-C., Janosz, M., & Archambault, I. (2014). Towards an interactive effect of school composition and school climate on teacher expectations of students: A multilevel analysis. *Teaching and Teacher Education, 44*, 148–159. https://doi.org/10.1016/j.tate.2014.08.008

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Bravo, M. A., Mosqueda, E., Solís, J. L., & Stoddart, T. (2014). Possibilities and Limits of Integrating Science and Diversity Education in Preservice Elementary Teacher Preparation. *Journal of Science Teacher Education*, *25*(5), 601-619. https://doi.org/10.1007/s10972-013-9374-8

Bronfenbrenner, U., & Morris, P. A. (2007). The bioecological model of human development. In R. M. Lerner (Ed.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). Wiley.

Brown, C. S., & Chu, H. (2012). Discrimination, Ethnic Identity, and Academic Outcomes of Mexican Immigrant Children: The Importance of School Context. *Child Development*, *83*(5), 1477-1485. https://doi.org/10.1111/j.1467-8624.2012.01786.x

Brown, E. L., & Howard, B. R. (2005). Becoming culturally responsive teachers through service-learning: a case study of five novice classroom teachers. *Multicultural Education*, *12*(4), 2-8.

Cadenas, G. A., Cisneros, J., Spanierman, L. B., Yi, J., & Todd, N. R. (2021). Detrimental Effects of Color-Blind Racial Attitudes in Preparing a Culturally Responsive Teaching Workforce for Immigrants. *Journal of Career Development*, *48*(6), 926-941. https://doi.org/10.1177/0894845320903380

Calleja, C. (2014). Jack Mezirow's Conceptualisation of Adult Transformative Learning: A Review. *Journal of Adult and Continuing Education*, *20*(1), 117-136. https://doi.org/10.7227/JACE.20.1.8

Carbonneau, K., Barrio, B., Ardasheva, Y., & Newcomer, S. (2025). The Effect of Case-Based Instruction on Teacher Candidates' Culturally Responsive Knowledge. *Journal of the Scholarship of Teaching and Learning*, *25*(1) 29-51.

Carter, D. J. (2008). Cultivating a critical race consciousness for African American school success. *The Journal of Educational Foundations*, *22*(1), 11-28.

Castagno, A.E. (2008). "I don't want to hear that!": Legitimating whiteness through silence in schools. *Anthropology & Education Quarterly*, *39*(3), 314-333. https://doi.org/10.1111/j.1548-1492.2008.00024.x

Causadias, J. M. (2020). What is culture? Systems of people, places, and practices. *Applied Developmental Science*, *24*(4), 310-322. https://doi.org/10.1080/10888691.2020.1789360

Causadias, J. M., Vitriol, J. A., & Atkin, A. L. (2018). Do we overemphasize the role of culture in the behavior of racial/ethnic minorities? Evidence of a cultural (mis)attribution bias in American psychology. *American Psychologist*, *73*(3), 243-255. https://doi.org/10.1037/amp0000099

Celeste, L., Baysu, G., Phalet, K., Meeussen, L., & Kende, J. (2019). Can School Diversity Policies Reduce Belonging and Achievement Gaps Between Minority and Majority Youth? Multiculturalism, Colorblindness, and Assimilationism Assessed. *Personality and Social Psychology Bulletin*, *45*(11), 1603-1618. https://doi.org/10.1177/0146167219838577

Charmaz, K. (2017). Constructivist grounded theory. In S. N. Hesse-Biber & P. Leavy (Eds.), *The Journal of Positive Psychology* (Vol. 12, pp. 299-300). Routledge. https://doi.org/10.1080/17439760.2016.1262612

Chiner, E., Cardona-Moltó, M. C., & Gómez Puerta, J. M. (2015). Teachers' beliefs about diversity: an analysis from a personal and professional perspective. *Journal of New Approaches in Educational Research*, *4*(1), 18-23. https://doi.org/10.7821/naer.2015.1.113

Christie, M., Carey, M., Robertson, A., & Grainger, P. (2015). Putting transformative learning theory into practice. *Australian Journal of Adult Learning*, *55*(1), 9-30. https://search.informit.org/doi/10.3316/ielapa.069076554869878

Civitillo, S., Juang, L., Schachner, M., & Börnert-Ringleb, M. (2016). Validierung einer deutschen Version der "Culturally Responsive Classroom Management Self-Efficacy Scale". *Empirische Sonderpädagogik*, *3*, 279-288. https://doi.org/10.25656/01:12595

Civitillo, S., Juang, L. P., Badra, M., & Schachner, M. K. (2019). The interplay between culturally responsive teaching, cultural diversity beliefs, and self-reflection: A multiple case study. *Teaching and Teacher Education*, *77*, 341-351. https://doi.org/10.1016/j.tate.2018.11.002

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. *Educational Research Review*, *24*, 67-83. https://doi.org/10.1016/j.edurev.2018.01.003

Civitillo, S., Juang, L. P., & Schachner, M. K. (2021). Stressing similarities or ignoring differences? Shedding light into different forms of color-evasive ideology with pre- and in-service teachers. *Zeitschrift für Erziehungswissenschaft*, *24*(1), 135-153. https://doi.org/10.1007/s11618-021-00995-9

Civitillo, S., Schachner, M., Juang, L., van de Vijver, F. J. R., Handrick, A., & Noack, P. (2017). Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study. *Learning, Culture and Social Interaction*, *12*, 1-14. https://doi.org/10.1016/j.lcsi.2016.09.002

Crul, M., Keskiner, E., Schneider, J., Lelie, F., & Ghaeminia, S. (2016). No lost generation? Education for refugee children. A comparison between Sweden, Germany, The Netherlands and Turkey. In R. Bauböck & M. Tripkovic (Eds.), *The integration of migrants and refugees. Florence: European University Institute* (pp. 62-79). https://doi.org/10.2870/30835

Cruz, R. A., Manchanda, S., Firestone, A. R., & Rodl, J. E. (2020). An examination of teachers' culturally responsive teaching self-efficacy. *Teacher Education and Special Education*, *43*(3), 197-214. https://doi.org/10.1177/0888406419875194

Cushner, K., & Mahon, J. (2002). Overseas Student Teaching: Affecting Personal, Professional, and Global Competencies in an Age of Globalization. *Journal of Studies in International Education*, *6*(1), 44-58. https://doi.org/10.1177/1028315302006001004

De Houwer, J., Heider, N., Spruyt, A., Roets, A., & Hughes, S. (2015). The relational responding task: toward a new implicit measure of beliefs. *Frontiers in Psychology*, *6,* 319. https://doi.org/10.3389/fpsyg.2015.00319

Diemer, M. A., McWhirter, E. H., Ozer, E. J., & Rapa, L. J. (2015). Advances in the Conceptualization and Measurement of Critical Consciousness. *The Urban Review*, *47*(5), 809-823. https://doi.org/10.1007/s11256-015-0336-7

Diemer, M. A., Rapa, L. J., Park, C. J., & Perry, J. C. (2017). Development and Validation of the Critical Consciousness Scale. *Youth & Society*, *49*(4), 461-483. https://doi.org/10.1177/0044118x14538289

Diemer, M. A., Rapa, L. J., Voight, A. M., & McWhirter, E. H. (2016). Critical consciousness: A developmental approach to addressing marginalization and oppression. *Child Development Perspectives*, *10*(4), 216-221. https://doi.org/10.1111/cdep.12193

Diemer, M. A., & Li, C.-H. (2011). Critical Consciousness Development and Political Participation Among Marginalized Youth. Child Development, *82*(6), 1815-1833. https://doi.org/10.1111/j.1467-8624.2011.01650.x

Dignath, C., Fink, J., & Kunter, M. (2022). Reading Persuasive Texts Affects Preservice Teachers' Beliefs About Cultural Diversity in the Classroom. *Journal of Teacher Education*, *73*(2), 188-200. https://doi.org/10.1177/00224871211002460

Dray, B., & Wisneski, D. (2011). Mindful Reflection as a Process for Developing Culturally Responsive Practices. *Teaching Exceptional Children*, *44*, 28-36. https://doi.org/10.1177/004005991104400104

Durksen, T. L., Klassen, R. M., & Daniels, L. M. (2017). Motivation and collaboration: The keys to a developmental framework for teachers' professional learning. *Teaching and Teacher Education*, *67*, 53-66. https://doi.org/10.1016/j.tate.2017.05.011

Duyar, I., Gümüş, S., & Bellibaş, M. (2013). Multilevel analysis of teacher work attitudes (Teacher Self-Efficacy and Job Satisfaction): The influence of principal leadership and teacher collaboration. *International Journal of Educational Management*, *27*(7). https://doi.org/10.1108/IJEM-09-2012-0107

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt brace Jovanovich college publishers.

Edele, A., & Stanat, P. (2022). Zuwanderung und soziale Ungleichheit. In H. Reinders, D. Bergs-Winkels, A. Prochnow, & I. Post (Eds.), *Empirische Bildungsforschung: Eine elementare Einführung* (pp. 1105-1126). Springer. https://doi.org/10.1007/978-3-658-27277-7_58

Egitim, S., & Akaliyski, P. (2024). Intercultural experience facilitates majority-group acculturation through ethnocultural empathy: Evidence from a mixed-methods investigation in Japan. *International Journal of Intercultural Relations*, *98*, 101908. https://doi.org/10.1016/j.ijintrel.2023.101908

El-Amin, A., Seider, S., Graves, D., Tamerat, J., Clark, S., Soutter, M., Johannsen, J., & Malhotra, S. (2017). Critical consciousness:A key to student achievement. *Phi Delta Kappan*, *98*(5), 18-23. https://doi.org/10.1177/0031721717690360

Faas, D. (2008). From Foreigner Pedagogy to Intercultural Education: An Analysis of the German Responses to Diversity and its Impact on Schools and Students. *European Educational Research Journal*, *7*(1), 108-123. https://doi.org/10.2304/eerj.2008.7.1.108

Fackler, S., & Malmberg, L.-E. (2016). Teachers' self-efficacy in 14 OECD countries: Teacher, student group, school and leadership effects. *Teaching and Teacher Education*, *56*, 185-195. https://doi.org/10.1016/j.tate.2016.03.002

Finlay, L. (2002). Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research,* *2*(2), 209–230. https://doi.org/10.1177/146879410200200205

Fitchett, P. G., Starker, T. V., & Salyers, B. (2012). Examining Culturally Responsive Teaching Self-Efficacy in a Preservice Social Studies Education Course. *Urban Education*, *47*(3), 585-611. https://doi.org/10.1177/0042085912436568

Fives, H., & Buehl, M. M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham, T. Urdan, S. Graham, J. M. Royer, & M. Zeidner (Eds.), *APA educational psychology handbook, Vol 2: Individual differences and cultural and contextual factors* (pp. 471-499). American Psychological Association. https://doi.org/10.1037/13274-019

Freire, P. (2018). The banking concept of education. In E. B. Hilty (Ed.), *Thinking about schools* (pp. 117-127). Routledge.

Garcia, S., & Guerra, P. (2004). Deconstructing Deficit ThinkingWorking with Educators to Create More Equitable Learning Environments. *Education and Urban Society - EDUC URBAN SOC*, *36*, 150-168. https://doi.org/10.1177/0013124503261322

Garmon, M. A. (2005). Six Key Factors for Changing Preservice Teachers' Attitudes/Beliefs about Diversity. *Educational Studies*, *38*(3), 275-286. https://doi.org/10.1207/s15326993es3803_7

Gay, G. (2002). Preparing for Culturally Responsive Teaching. *Journal of Teacher Education*, *53*(2), 106-116. https://doi.org/10.1177/0022487102053002003

Gay, G. (2010). Acting on Beliefs in Teacher Education for Cultural Diversity. *Journal of Teacher Education*, *61*(1-2), 143-152. https://doi.org/10.1177/0022487109347320

Gay, G. (2013a). Culturally responsive teaching principles, practices, and effects. In *Handbook of urban education* (pp. 391-410). Routledge.

Gay, G. (2013b). Teaching To and Through Cultural Diversity. *Curriculum Inquiry*, *43*(1), 48-70. https://doi.org/10.1111/curi.12002

Gay, G. (2014). Teachers' Beliefs about Cultural Diversity. In H. Fives & M. G. Gill (Eds.), International Handbook of Research on Teachers' Beliefs (1ed., pp. 436-452). Routledge. https://doi.org/10.4324/9780203108437-31

Gay, G. (2015). The what, why, and how of culturally responsive teaching: international mandates, challenges, and opportunities. *Multicultural Education Review*, *7*(3), 123-139. https://doi.org/10.1080/2005615X.2015.1072079

Gay, G. (2018). *Culturally Responsive Teaching: Theory, Research, and Practice* (3 ed.). Teachers College Press. https://www.tcpress.com/culturally-responsive-teaching-9780807758762

Geerlings, J., Thijs, J., & Verkuyten, M. (2018). Teaching in ethnically diverse classrooms: Examining individual differences in teacher self-efficacy. *Journal of School Psychology*, *67*, 134-147. https://doi.org/10.1016/j.jsp.2017.12.001

Gibson, W., & Brown, A. (2009). *Working with qualitative data*. Sage. https://doi.org/10.4135/9780857029041

Glaser, B. G., & Strauss, A. L. (1998). Grounded theory. Strategien qualitativer Forschung (3rd ed., Trans. A. T. Paul & S. Kaufmann). Huber. (Original work published 1967)

Godfrey, E. B., & Burson, E. (2018). Interrogating the Intersections: How Intersectional Perspectives Can Inform Developmental Scholarship on Critical Consciousness. *New Directions for Child and Adolescent Development*, *2018*(161), 17-38. https://doi.org/10.1002/cad.20246

Godfrey, E. B., & Rapa, L. J. (2023). *Developing critical consciousness in youth: Contexts and settings*. Cambridge University Press.

Godfrey, E. B., & Wolf, S. (2016). Developing critical consciousness or justifying the system? A qualitative analysis of attributions for poverty and wealth among low-income racial/ethnic minority and immigrant women. *Cultural Diversity and Ethnic Minority Psychology*, *22*(1), 93-103. https://doi.org/10.1037/cdp0000048

Gomolla, M. (2021). Educational Inequalities, Vulnerability for Discrimination and the Politics of School Change in Germany as a Post-migration Society. In A. J. N. Fromm, & H. Safouane (Eds.), *Power in Vulnerability* (pp. 175-198). Springer. https://doi.org/10.1007/978-3-658-34052-09

Gomolla, M. & Radtke, F.-O. (2009). *Institutionelle Diskriminierung. Die Herstellung ethnischer Differenz in der Schule*. Spinger. https://doi.org/10.1007/978-3-531-91577-7

Gorski, P. C. (2009). What we're teaching teachers: An analysis of multicultural teacher education coursework syllabi. *Teaching and Teacher Education*, *25*(2), 309-318. https://doi.org/10.1016/j.tate.2008.07.008

Gorski, P. C., & Dalton, K. (2019). Striving for Critical Reflection in Multicultural and Social Justice Teacher Education: Introducing a Typology of Reflection Approaches. *Journal of Teacher Education*, *71*(3), 357-368. https://doi.org/10.1177/0022487119883545

Grazia, V., & Molinari, L. (2021). School climate multidimensionality and measurement: a systematic literature review. *Research Papers in Education*, *36*(5), 561-587. https://doi.org/10.1080/02671522.2019.1697735

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of personality and social psychology*, *74*(6), 1464-1480. https://doi.org/10.1037/0022-3514.74.6.1464

Guimond, S., de la Sablonnière, R., & Nugier, A. (2014). Living in a multicultural world: Intergroup ideologies and the societal context of intergroup relations. *European Review of Social Psychology*, *25*(1), 142-188. https://doi.org/10.1080/10463283.2014.957578

Gutentag, T., Horenczyk, G., & Tatar, M. (2018). Teachers Approaches Toward Cultural Diversity Predict Diversity-Related Burnout and Self-Efficacy. *Journal of Teacher Education*, *69*(4), 408-419. https://doi.org/10.1177/0022487117714244

Guyton, E. M., & Wesche, M. V. (2005). The multicultural efficacy scale: Development, item selection, and reliability. *Multicultural perspectives*, *7*(4), 21-29. https://doi.org/10.1207/s15327892mcp0704_4

Hachfeld, A. (2013). *Kulturelle Überzeugungen und professionelle Kompetenz von Lehrenden im Umgang mit kultureller Heterogenität im Klassenzimmer* [Doctoral dissertation, Freie Universität Berlin]. *Refubium - Repositorium der Freien Universität Berlin.* https://doi.org/10.17169/refubium-13096

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education*, *48*, 44-55. https://doi.org/10.1016/j.tate.2015.02.001

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., Stanat, P., & Kunter, M. (2011). Assessing teachers' multicultural and egalitarian beliefs: The Teacher Cultural Beliefs Scale. *Teaching and Teacher Education*, *27*(6), 986-996. https://doi.org/10.1016/j.tate.2011.04.006

Hachfeld, A., Schroeder, S., Anders, Y., Hahn, A., & Kunter, M. (2012). Multikulturelle Überzeugungen. *Zeitschrift für Pädagogische Psychologie*, *26*(2), 101-120. https://doi.org/10.1024/1010-0652/a000064

Hagenaars, M., Maene, C., Willems, S., Vantieghem, W., D'hondt, F., & Stevens, P. A. J. (2023). Diversity ideologies in Flemish education: explaining variation in teachers' implementation of multiculturalism, assimilation and colourblindness. *Journal of Education Policy*, *38*(6), 985-1006. https://doi.org/10.1080/02680939.2023.2167236

Halley, J., Eshleman, A., & Vijaya, R. M. (2022). The invisibility of whiteness. In J. Halley, A. Eshleman, & R. Vijaya (Eds.), *Seeing white: An introduction to white privilege and race* (2nd ed., pp. 1-26). Rowman & Littlefield.

Hammar Chiriac, E., Camilla, F., & and Thornberg, R. (2023). Teachers' perspectives on factors influencing the school climate: A constructivist grounded theory case study. *Cogent Education*, *10*(2), 2245171. https://doi.org/10.1080/2331186X.2023.2245171

Han, S. (2016). Teaching diversity: a reflexive learning opportunity for a teacher educator. *Teaching Education*, *27*(4), 410-426. https://doi.org/10.1080/10476210.2016.1192115

Harlin, R., Sirota, E., & Bailey, L. (2009). Review of Research: The Impact of Teachers' Expectations on Diverse Learners'Academic Outcomes. *Childhood Education*, *85*(4), 253-256. https://doi.org/10.1080/00094056.2009.10523092

Haugen, I., & Kunst, J. R. (2017). A two-way process? A qualitative and quantitative investigation of majority members' acculturation. *International Journal of Intercultural Relations*, *60*, 67-82. https://doi.org/10.1016/j.ijintrel.2017.11.001

Helms, J. E. (1995). An update of Helm's White and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181–198). Sage Publications.

Helms, J. E. (2014). A review of White racial identity theory: The sociopolitical implications of studying White racial identity in psychology. In *Psychology serving humanity: Proceedings of the 30th International Congress of Psychology, Volume 2: Western psychology.* (pp. 12-27). Psychology Press. https://doi.org/10.4324/9781315777184

Hershberg, R. M., & Johnson, S. K. (2019). Critical reflection about socioeconomic inequalities among White young men from poor and working-class backgrounds. *Developmental Psychology*, *55*(3), 562-573. https://doi.org/10.1037/dev0000587

Ho, L.-C. (2020). 'Our students do not get that equal chance': teachers' perspectives of meritocracy. *Cambridge Journal of Education*, *51*, 173 - 193.

Hoffman, B. H., & Seidel, K. (2014). Measuring teachers' beliefs: for what purpose? In M. G. G. H. Fives (Eds.), *International handbook of research on teachers' beliefs* (pp. 106-127). Routledge. https://doi.org/10.4324/9780203108437

Hope, E. C., & Bañales, J. (2019). Black Early Adolescent Critical Reflection of Inequitable Sociopolitical Conditions: A Qualitative Investigation. *Journal of Adolescent Research*, *34*(2), 167-200. https://doi.org/10.1177/0743558418756360

Horenczyk, G., & Tatar, M. (2012). Conceptualizing the school acculturative context: School, classroom, and the immigrant student. In A. S. Masten, K. Liebkind, & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth* (pp. 359-375). Cambridge University Press. https://doi.org/10.1017/CBO9781139094696.018

Ialuna, F., Civitillo, S., Schachner, M. K., & Jugert, P. (2024). Culturally responsive teaching self-efficacy and cultural diversity climate are positively associated with the academic and psychological adjustment of immigrant and nonimmigrant students. *Cultural Diversity & Ethnic Minority Psychology*. Advance online publication. https://doi.org/10.1037/cdp0000697

Jemal, A. (2017). Critical Consciousness: A Critique and Critical Analysis of the Literature. *Urban Rev*, *49*(4), 602-626. https://doi.org/10.1007/s11256-017-0411-3

Juang, L. P., & Hwang, C. P. (2024). The Importance of Ethnic-Racialized Identities to Becoming and Being Culturally Responsive and Equity Minded Educators. *Identity*, *24*(4), 257-268. https://doi.org/10.1080/15283488.2024.2388248

Juang, L. P., Moffitt, U., Schachner, M. K., & Pevec, S. (2021). Understanding Ethnic-Racial Identity in a Context Where "Race" Is Taboo. *Identity*, *21*(3), 185-199. https://doi.org/10.1080/15283488.2021.1932901

Juang, L. P., Schachner, M. K., Pevec, S., & Moffitt, U. (2020). The Identity Project intervention in Germany: Creating a climate for reflection, connection, and adolescent identity development. *New Directions for Child and Adolescent Development*, *2020*(173), 65-82. https://doi.org/10.1002/cad.20379

Juang, L. P., Umaña-Taylor, A. J., Schachner, M. K., Frisén, A., Hwang, C. P., Moscardino, U., Motti-Stefanidi, F., Oppedal, B., Pavlopoulos, V., Abdullahi, A. K., Barahona, R., Berne, S., Ceccon, C., Gharaei, N., Moffitt, U., Ntalachanis, A., Pevec, S., Sandberg, D. J., Zacharia, A., & Syed, M. (2022). Ethnic-racial identity in Europe: Adapting the identity project intervention in five countries. *European Journal of Developmental Psychology*, *20*(6), 978-1006. https://doi.org/10.1080/17405629.2022.2131520

Karataş, S., Eckstein, K., Noack, P., Rubini, M., & Crocetti, E. (2023). Meeting in school: Cultural diversity approaches of teachers and intergroup contact among ethnic minority and majority adolescents. *Child Dev*, *94*(1), 237-253. https://doi.org/10.1111/cdev.13854

Kelley, M. H., Qualls, L. W., Scott, S. N., & Hirsch, S. E. (2025). Mixed-Reality Simulation to Prepare Preservice Teachers to Use Culturally Responsive Teaching Strategies: A Pilot Study. *Journal of Special Education Technology*, *40*(1), 65-78. https://doi.org/10.1177/01626434241262238

Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research, 86*(4), 1272–1311. https://doi.org/10.3102/0034654316630383

KMK. (2013). *Interkulturelle Bildung und Erziehung in der Schule. Beschluss der Kultusministerkonferenz vom 25.10.1996 i. d. F. vom 05.12.2013.*

Knox, J., Lawson, T. K., Goodwin, A. B., Golden, A. R., Arch, D. A. N., & Fallon, L. (2025). Supporting Cultural Responsiveness in the Classroom: An Exploratory Study of Teacher Profiles. *Journal of Educational and Psychological Consultation*, 1-26. https://doi.org/10.1080/10474412.2024.2449340

Kolluri, S., & Tichavakunda, A. A. (2023). The counter-deficit lens in educational research: Interrogating conceptions of structural oppression. *Review of Educational Research*, *93*(5), 641-678. https://doi.org/10.3102/00346543221125225

Koukoulidis, N. M., Kotluk, N., & Brown, J. C. (2024). The status of culturally relevant teacher education in the European context: A systematic review of research. *Review of Education*, *12*(3), e70002. https://doi.org/https://doi.org/10.1002/rev3.70002

Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Nieto, M. D., & Morillo, D. (2019). Controlling for Response Biases in Self-Report Scales: Forced-Choice vs. Psychometric Modeling of Likert Items. *Frontiers in Psychology*, *10,* 2309. https://doi.org/10.3389/fpsyg.2019.02309

Kubiak, D. (2019). East German Identity: A Never-Ending Story? In D. S. Caudill, S. N. Conley, M. E. Gorman, & M. Weinel (Eds.), *The Third Wave in Science and Technology Studies: Future Research Directions on Expertise and Experience* (pp. 151-173). Springer International Publishing. https://doi.org/10.1007/978-3-030-14335-0_9

Kunst, J. R., & Sam, D. L. (2014). "It's on Time That They Assimilate" – Differential acculturation expectations towards first and second generation immigrants. *International Journal of Intercultural Relations*, *39*, 188-195. https://doi.org/https://doi.org/10.1016/j.ijintrel.2013.10.007

Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology, 105*(3), 805-820. https://doi.org/10.1037/a0032583

Kyles, C. R., & Olafson, L. (2008). Uncovering Preservice Teachers' Beliefs About Diversity Through Reflective Writing. *Urban Education*, *43*(5), 500-518. https://doi.org/10.1177/0042085907304963

Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. *Teachers College Record*, *97*(1), 47-68. https://doi.org/10.1177/016146819509700104

Larsson, S. (2009). A pluralist view of generalization in qualitative research. *International Journal of Research & Method in Education*, *32*(1), 25-38. https://doi.org/10.1080/17437270902759931

Lawson, T. K., Knox, J., Romero, E., Molina Palacios, A., & Fallon, L. M. (2024). Check yourself! Exploring current culturally responsive teaching assessment measures. *Psychology in the Schools*, *61*(6), 2649-2667. https://doi.org/https://doi.org/10.1002/pits.23189

Levine, F. J. (2001). Professionalization of Social and Behavioral Scientists: United States. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social &*

Behavioral Sciences (pp. 12146–12154). Pergamon. https://doi.org/10.1016/B0-08-043076-7/00050-4

Liu, Q., Çolak, F. Z., & Agirdag, O. (2021). Teachers' beliefs and practices in culturally diverse schools: an empirical study in Southwest China. *Teachers and Teaching*, *27*(7), 672-695. https://doi.org/10.1080/13540602.2021.1987878

Makarova, E., 't Gilde, J., & Birman, D. (2019). Teachers as risk and resource factors in minority students' school adjustment: an integrative review of qualitative research on acculturation. *Intercultural Education*, *30*(5), 448-477. https://doi.org/10.1080/14675986.2019.1586212

Makarova, E., & Herzog, W. (2011). The integration of immigrant youth into the school context. *Problems of Education in the 21st Century*, *32*, 86-97.

Makarova, E., & Herzog, W. (2013). Teachers' Acculturation Attitudes and Their Classroom Management: An Empirical Study among Fifth-Grade Primary School Teachers in Switzerland. *European Educational Research Journal*, *12*(2), 256-269. https://doi.org/10.2304/eerj.2013.12.2.256

Mayfield, V., & Garrison-Wade, D. (2015). Culturally Responsive Practices as Whole School Reform. *Journal of Instructional Pedagogies*, *16*.

Mezirow, J. (2003). Transformative Learning as Discourse. *Journal of Transformative Education*, *1*(1), 58-63. https://doi.org/10.1177/1541344603252172

Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and Teacher Perceptions of School Climate: A Multilevel Exploration of Patterns of Discrepancy. *Journal of School Health*, *80*(6), 271-279. https://doi.org/https://doi.org/10.1111/j.1746-1561.2010.00501.x

Moulding, L. R., Stewart, P. W., & Dunmeyer, M. L. (2014). Pre-service teachers' sense of efficacy: Relationship to academic ability, student teaching placement characteristics, and mentor support. *Teaching and Teacher Education*, *41*, 60-66. https://doi.org/10.1016/j.tate.2014.03.007

Navas, M., García, M. C., Sánchez, J., Rojas, A. J., Pumares, P., & Fernández, J. S. (2005). Relative Acculturation Extended Model (RAEM): New contributions with regard to the study of acculturation. *International Journal of Intercultural Relations*, *29*(1), 21-37. https://doi.org/10.1016/j.ijintrel.2005.04.001

Nelson, S. W., & Guerra, P. L. (2014). Educator Beliefs and Cultural Knowledge:Implications for School Improvement Efforts. *Educational Administration Quarterly*, *50*(1), 67-95. https://doi.org/10.1177/0013161x13488595

Neville, H. A., Lilly, R. L., Duran, G., Lee, R. M., & Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitudes Scale (CoBRAS). *Journal of Counseling Psychology*, *47*(1), 59-70. https://doi.org/10.1037/0022-0167.47.1.59

Nießen, D., Partsch, M. V., Kemper, C. J., & Rammstedt, B. (2019). An English-language adaptation of the social desirability–gamma short scale (KSE-G). *Measurement Instruments for the Social Sciences*, *1*, 2 (2019)-2012 (2019).

OECD. (2019). *TALIS 2018 Results (Volume I)*: Teachers and school leaders as lifelong *learners*. OECD Publishing. https://doi.org/10.1787/1d0bc92a-en

OECD. (2023). *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*. Paris: OECD Publishing

Olsen, W. (2004). Triangulation in social research: qualitative and quantitative methods can really be mixed. *Developments in sociology*, *20*, 103-118.

Pajares, M. F. (1992). Teachers' Beliefs and Educational Research: Cleaning Up a Messy Construct. *Review of Educational Research*, *62*(3), 307-332. https://doi.org/10.3102/00346543062003307

Park, B., & Judd, C. M. (2005). Rethinking the Link Between Categorization and Prejudice Within the Social Cognition Perspective. *Personality and Social Psychology Review*, *9*(2), 108-130. https://doi.org/10.1207/s15327957pspr0902_2

Parkhouse, H., Lu, C. Y., & Massaro, V. R. (2019). Multicultural Education Professional Development: A Review of the Literature. *Review of Educational Research*, *89*(3), 416-458. https://doi.org/10.3102/0034654319840359

Paulhus, D. L. (2017). Socially Desirable Responding on Self-Reports. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1-5). Springer. https://doi.org/10.1007/978-3-319-28099-8_1349-1

Penninx, R. (2018). Old Wine in New Bottles? Comparing the Post-War Guest Worker Migration and the Post 1989 Migration from CEE-Countries to EU-Member Countries. In P. Scholten & M. van Ostaijen (Eds.), *Between Mobility and Migration: The Multi-Level Governance of Intra-European Movement* (pp. 77-97). Springer. https://doi.org/10.1007/978-3-319-77991-1_5

Pevec-Zimmer, S., Juang, L. P., & Schachner, M. K. (2024). Promoting Awareness and Self-Efficacy for Culturally Responsive Teaching of Pre-Service Teachers Through the Identity Project – a Mixed Methods Study. *Identity*, 1-19. https://doi.org/10.1080/15283488.2024.2344086

Phillips, C. (2011). Institutional racism and ethnic inequalities: an expanded multilevel framework. *Journal of social policy, 40*(1), 173-192. https://doi.org/10.1017/S0047279410000565

Pit-ten Cate, I. M., & Glock, S. (2019). Teachers' Implicit Attitudes Toward Students From Different Social Groups: A Meta-Analysis. *Frontiers in Psychology*, *10*, 1-18. https://doi.org/10.3389/fpsyg.2019.02832

Powell, R., Cantrell, S. C., Malo-Juvera, V., & Correll, P. (2016). Operationalizing Culturally Responsive Instruction: Preliminary Findings of CRIOP Research. *Teachers College Record*, *118*(1), 1-46. https://doi.org/10.1177/016146811611800107

Priester-Hanks, M. L. (2023). *Critically Conscious White Teachers: A Case Study* [Doctoral Dissertation. Indiana University-Purdue University Indianapolis]. ScholarWorks Repository, Indiana University-Purdue University Indianapolis. https://doi.org/10.7912/C2/3145

Pulinx, R., Van Avermaet, P., & Agirdag, O. (2017). Silencing linguistic diversity: the extent, the determinants and consequences of the monolingual beliefs of Flemish teachers. *International Journal of Bilingual Education and Bilingualism*, *20*(5), 542-556. https://doi.org/10.1080/13670050.2015.1102860

Reich, H. H. (1993). Intercultural Education in Germany. *European Journal of Intercultural studies*, *4*(3), 14-24. https://doi.org/10.1080/0952391930040303

Rissanen, I., Kuusisto, E., Timm, S., & Kaukko, M. (2023). Diversity beliefs are associated with orientations to teaching for diversity and social justice: A study among German and Finnish student teachers. *Teaching and Teacher Education*, *123*, 103996. https://doi.org/10.1016/j.tate.2022.103996

Romijn, Slot, P. L., Leseman, P. P. M., & Pagani, V. (2020). Teachers' self-efficacy and intercultural classroom practices in diverse classroom contexts: A cross-national comparison. *International Journal of Intercultural Relations*, *79*, 58-70. https://doi.org/10.1016/j.ijintrel.2020.08.001

Rosenthal, L., & Levy, S. R. (2010). The Colorblind, Multicultural, and Polycultural Ideological Approaches to Improving Intergroup Attitudes and Relations. *Social Issues and Policy Review*, *4*(1), 215-246. https://doi.org/10.1111/j.1751-2409.2010.01022.x

Ross, D. A. (2008). Culturally competent and socio-politically conscious teaching: A teacher educator works to model the journey to critical cultural competence. *International Journal of Multicultural Education*, *10*(1). https://doi.org/10.18251/ijme.v10i1.71

Roth, W. D., Van Stee, E. G., & Regla-Vargas, A. (2023). Conceptualizations of race: Essentialism and constructivism. *Annual Review of Sociology*, *49*(1), 39-58. https://doi.org/10.1146/annurev-soc-031021-034017

Russell, G. (2020). Reflecting on a way of being: Anchor principles of cultural competence. *Cultural Competence and the Higher Education Sector: Australian Perspectives, Policies and Practice*. In J. Frawley, G. Russell, & J. Sherwood (Eds.), Cultural Competence and the Higher Education Sector: Australian Perspectives, Policies and Practice (pp. 31-42). Springer. https://doi.org/10.1007/978-981-15-5362-2_3

Ryan, C. S., Casas, J. F., & Thompson, B. K. (2010). Interethnic Ideology, Intergroup Perceptions, and Cultural Orientation. *Journal of Social Issues*, *66*(1), 29-44. https://doi.org/10.1111/j.1540-4560.2009.01631.x

Saito, E., & Khong, T. D. H. (2017). Not just for special occasions: supporting the professional learning of teachers through critical reflection with audio-visual information. *Reflective Practice*, *18*(6), 837-851. https://doi.org/10.1080/14623943.2017.1361921

Sam, D. L., & Ward, C. (2021). Three Generations of Psychological Acculturation Research: Theoretical Advancements and Methodological Challenges. In M. Bender & B. G. Adams (Eds.), *Methods and Assessment in Culture and Psychology* (pp. 17-40). Cambridge University Press. https://doi.org/10.1017/9781108675475.003

Sanders, M. S., Haselden, K., & Moss, R. M. (2014). Teaching diversity to preservice teachers: Encouraging self-reflection and awareness to develop successful teaching practices. *Multicultural Learning and Teaching*, *9*(2), 171–185. https://doi.org/10.1515/mlt-2012-0012

Schachner, M. K. (2019). From equality and inclusion to cultural pluralism – Evolution and effects of cultural diversity perspectives in schools. *European Journal of Developmental Psychology*, *16*(1), 1-17. https://doi.org/10.1080/17405629.2017.1326378

Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural Diversity Climate and Psychological Adjustment at School-Equality and Inclusion Versus Cultural Pluralism. *Child Development*, *87*(4), 1175-1191. https://doi.org/10.1111/cdev.12536

Schachner, M. K., Schwarzenthal, M., Moffitt, U., Civitillo, S., & Juang, L. (2021). Capturing a nuanced picture of classroom cultural diversity climate: Multigroup and multilevel analyses among secondary school students in Germany. *Contemporary Educational Psychology*, *65*, 101971. https://doi.org/10.1016/j.cedpsych.2021.101971

Schimpl-Neimanns, B. (2000). Soziale Herkunft und Bildungsbeteiligung: empirische Analysen zu herkunftsspezifischen Bildungsungleichheiten zwischen 1950 und 1989. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *52*, 636-669.

Schlicht, R. (2011). *Determinanten der Bildungsungleichheit*. Springer.

Schwarzenthal, M., Daumiller, M., & Civitillo, S. (2022a). *Investigating the Sources of Teacher Intercultural Self-Efficacy: A Three-Level Study Using TALIS 2018*. https://doi.org/10.31234/osf.io/un5zv

Schwarzenthal, M., Juang, L. P., Moffitt, U., & Schachner, M. K. (2022b). Critical Consciousness Socialization at School: Classroom Climate, Perceived Societal Islamophobia, and Critical Action Among Adolescents. *Journal of Research on Adolescence*, *32*(4), 1452-1469. https://doi.org/https://doi.org/10.1111/jora.12713

Schwarzenthal, M., Pevec, S., & Juang, L. (2023). Wertschätzung kultureller Vielfalt und Abbau sozialer Ungerechtigkeiten als Schutzfaktoren gegen Lern-und Verhaltensschwierigkeiten. In B. S. G. Steins, S. Dutke, M. Roth, & M. Limbourg (Eds.), *Lern- und Verhaltensschwierigkeiten in der Schule: Erscheinungsformen-Entwicklungsmodelle-Implikationen für die Praxis* (pp. 79–88). Kohlhammer Verlag.

Schwarzenthal, M., Schachner, M. K., Juang, L. P., & van de Vijver, F. J. R. (2019). Reaping the benefits of cultural diversity: Classroom cultural diversity climate and students' intercultural competence. *European Journal of Social Psychology*, *50*(2), 323-346. https://doi.org/10.1002/ejsp.2617

Schwarzenthal, M., Schachner, M. K., Juang, L. P., & van de Vijver, F. J. R. (2020). Reaping the benefits of cultural diversity: Classroom cultural diversity climate and students' intercultural competence. *European Journal of Social Psychology*, *50*(2), 323-346. https://doi.org/10.1002/ejsp.2617

Schwarzenthal, M., Schachner, M. K., van de Vijver, F. J. R., & Juang, L. P. (2018). Equal but different: Effects of equality/inclusion and cultural pluralism on intergroup outcomes in multiethnic classrooms. *Cultural Diversity and Ethnic Minority Psychology*, *24*(2), 260-271. https://doi.org/10.1037/cdp0000173

Seider, S., Graves, D., El-Amin, A., Soutter, M., Tamerat, J., Jennett, P., Clark, S., Malhotra, S., & Johannsen, J. (2018). Developing sociopolitical consciousness of race and social class inequality in adolescents attending progressive and no excuses urban secondary schools. *Applied Developmental Science*, *22*(3), 169-187. https://doi.org/10.1080/10888691.2016.1254557

Sidler, P., Baysu, G., Kassis, W., Janousch, C., Chouvati, R., Govaris, C., Graf, U., & Rietz, C. (2022). Minority and Majority Adolescents' Attitudes toward Mutual Acculturation and its Association with Psychological Adjustment. *Journal of Youth and Adolescence*, *51*(8), 1511-1535. https://doi.org/10.1007/s10964-022-01604-6

Sincer, I., Severiens, S., & Volman, M. (2019). Teaching diversity in citizenship education: Context-related teacher understandings and practices. *Teaching and Teacher Education*, *78*, 183-192. https://doi.org/https://doi.org/10.1016/j.tate.2018.11.015

Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education*, *23*(7), 1086-1101. https://doi.org/10.1016/j.tate.2006.07.011

Siwatu, K. O., Chesnut, S. R., Alejandro, A. Y., & Young, H. A. (2016). Examining Preservice Teachers' Culturally Responsive Teaching Self-Efficacy Doubts. *The Teacher Educator*, *51*(4), 277-296. https://doi.org/10.1080/08878730.2016.1192709

Siwatu, K. O., Putman, S. M., Starker-Glass, T. V., & Lewis, C. W. (2015). The Culturally Responsive Classroom Management Self-Efficacy Scale: Development and Initial Validation. *Urban Education*, *52*(7), 862-888. https://doi.org/10.1177/0042085915602534

Siwatu, K. O. (2011). Preservice teachers' culturally responsive teaching self-efficacy-forming experiences: A mixed methods study. *The Journal of Educational Research, 104*(5), 360–369. https://doi.org/10.1080/00220671.2010.487507

Sleeter, C. E. (2008). Preparing White teachers for diverse students. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre, & K. E. Demers (Eds.), *Handbook of Research on Teacher Education* (3rd ed., pp. 559-582). Routledge.

Sliwka, A. (2010). From homogeneity to diversity in German education. In OECD (Ed.), *Educating Teachers for Diversity: Meeting the Challenge, Educational Research and Innovation* (pp. 205-217*)*. https://doi.org/10.1787/9789264079731-en.

Smith, E. (2011). Teaching critical reflection. *Teaching in Higher Education*, *16*(2), 211-223. https://doi.org/10.1080/13562517.2010.515022

Smith, L. V., Wang, M.-T., & Hill, D. J. (2020). Black Youths' perceptions of school cultural pluralism, school climate and the mediating role of racial identity. *Journal of School Psychology*, *83*, 50-65. https://doi.org/10.1016/j.jsp.2020.09.002

Smith, R., Moallem, M., & Sherrill, D. (1997). How preservice teachers think about cultural diversity: A closer look at factors which influence their beliefs towards equality. *Educational foundations*, *11*(2), 41-61.

Statistisches Bundesamt. (2023). Statistischer Bericht—Mikrozensus—Bevölkerung nach Migrationshintergrund—Erstergebnisse 2022.

Swartz, E. (2009). Diversity: Gatekeeping Knowledge and Maintaining Inequalities. Review of Educational Research, 79(2), 1044-1083. https://doi.org/10.3102/0034654309332560

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Hall Publishers.

Tajfel, H. E. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. Academic press.

Tatar, M., Ben-Uri, I., & Horenczyk, G. (2011). Assimilation attitudes predict lower immigration-related self-efficacy among Israeli immigrant teachers. *European Journal of Psychology of Education*, *26*(2), 247-255. https://doi.org/10.1007/s10212-010-0044-3

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A Review of School Climate Research. *Review of Educational Research*, *83*(3), 357-385. https://doi.org/10.3102/0034654313483907

Thijs, J., Krijnen, M., van Vemde, L., Hornstra, L., Mainhard, T., & Wansink, B. (2025). The diversity teaching beliefs scale: Addressing cultural diversity, communalities between cultures, and the national culture in the classroom. *Teaching and Teacher Education*, *153*, 104846. https://doi.org/10.1016/j.tate.2024.104846

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783-805. https://doi.org/10.1016/S0742-051X(01)00036-1

Tschannen-Moran, M., & Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944-956. https://doi.org/10.1016/j.tate.2006.05.003

Turetsky, K. M., Sinclair, S., Starck, J. G., & Shelton, J. N. (2021). Beyond students: how teacher psychology shapes educational inequality. *Trends in Cognitive Sciences*, *25*(8), 697-709. https://doi.org/10.1016/j.tics.2021.04.006

Umaña-Taylor, A. J., & Douglass, S. (2017). Developing an Ethnic-Racial Identity Intervention from a Developmental Perspective: Process, Content, and Implementation of the Identity Project. In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook on Positive Development of Minority Children and Youth* (pp. 437-453). Springer https://doi.org/10.1007/978-3-319-43645-6_26

Van Dijk, T. A. (2000). New (s) racism: A discourse analytical approach. *Ethnic minorities and the media*, *37*(1), 33-49.

Van Praag, L., Stevens, P. A. J., & Van Houtte, M. (2016). 'No more Turkish music!' The acculturation strategies of teachers and ethnic minority students in Flemish schools. *Journal of Ethnic and Migration Studies*, *42*(8), 1353-1370. https://doi.org/10.1080/1369183X.2015.1103171

Vavrus, M. (2008). Culturally responsive teaching. In T. L. Good (Ed.), *21st century education: A reference handbook* (Vol. 2, pp. 49–57). SAGE Publications. https://doi.org/10.4135/9781412964012

Vedder, P., Horenczyk, G., Liebkind, K., & Nickmans, G. (2006). Ethno-culturally diverse education settings; problems, challenges and solutions. *Educational Research Review*, *1*(2), 157-168. https://doi.org/https://doi.org/10.1016/j.edurev.2006.08.007

Verkuyten, M. (2011). Assimilation ideology and outgroup attitudes among ethnic majority members. *Group Processes & Intergroup Relations*, *14*(6), 789-806. https://doi.org/10.1177/1368430211398506

Verkuyten, M., & Thijs, J. (2013). Multicultural Education and Inter-Ethnic Attitudes: An Intergroup Perspective. *European Psychologist*, *18*(3), 179–190. https://doi.org/10.1027/1016-9040/a000152

Vervaet, R., Van Houtte, M., & Stevens, P. A. J. (2018). Multicultural school leadership, multicultural teacher culture and the ethnic prejudice of Flemish pupils. *Teaching and Teacher Education*, *76*, 68-77. https://doi.org/10.1016/j.tate.2018.08.009

Vieluf, S., Kunter, M., & van de Vijver, F. J. R. (2013). Teacher self-efficacy in cross-national perspective. *Teaching and Teacher Education*, *35*, 92-103. https://doi.org/10.1016/j.tate.2013.05.006

Villegas, A. M., & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. SUNY Press.

Wang, K. T., Castro, A. J., & Cunningham, Y. L. (2014). Are perfectionism, individualism, and racial color-blindness associated with less cultural sensitivity? Exploring diversity awareness in White prospective teachers. *Journal of Diversity in Higher Education*, *7*(3), 211-225. https://doi.org/10.1037/a0037337

Wang, M.-T., & Degol, J. L. (2016). School Climate: a Review of the Construct, Measurement, and Impact on Student Outcomes. *Educational Psychology Review*, *28*(2), 315-352. https://doi.org/10.1007/s10648-015-9319-1

Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. *New Directions for Child and Adolescent Development*, *2011*(134), 43-57. https://doi.org/10.1002/cd.310

Weick, K.E. (1999). Theory Construction as Disciplined Reflexivity: Tradeoffs in the 90s. *Academy of Management Review, 24*, 797-806. https://doi.org/10.5465/amr.1999.2553254

Wenzel, M. (2017). *Middle School Teacher Beliefs about Classroom Diversity and Their Influence on Differentiated Instructional Practices*. [Doctoral Dissertation, Portland State University]. Paper 3612. https://doi.org/10.15760/etd.5504

Wheatley, K. F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education*, *18*(1), 5-22. https://doi.org/10.1016/S0742-051X(01)00047-6

Wolsko, C., Park, B., & Judd, C. M. (2006). Considering the Tower of Babel: Correlates of Assimilation and Multiculturalism among Ethnic Minority and Majority Groups in the United States. *Social Justice Research*, *19*(3), 277-306. https://doi.org/10.1007/s11211-006-0014-8

Zabel, J. (2022). Eurozentrismus im Schulbuch. Eurozentrische Diskurse und Kolonialität (en) in deutschen Schulbüchern für den Spanischunterricht. *ON-Kölner Online Journal für Lehrer* innenbildung*(6, 2/2022), 152-170. https://doi.org/10.18716/ojs/kON/2022.2.9

Zaffini, E. (2022). Teaching and Mentoring toward Culturally Responsive Practices. *Music Educators Journal*, *108*(4), 37-44. https://doi.org/10.1177/00274321221107610

Zagefka, H., Lefringhausen, K., López Rodríguez, L., Urbiola, A., Moftizadeh, N., & Vázquez, A. (2023). Blindspots in acculturation research: An agenda for studying majority culture change. *European Review of Social Psychology*, *34*(1), 127-160. https://doi.org/10.1080/10463283.2022.2079813

Zee, M., & Koomen, H. M. Y. (2016). Teacher Self-Efficacy and Its Effects on Classroom Processes, Student Academic Adjustment, and Teacher Well-Being: A Synthesis of 40 Years of Research. *Review of Educational Research*, *86*(4), 981-1015. https://doi.org/10.3102/0034654315626801

Ziai, A., & Marmer, E. (2023). Fallstudie: Rassismus, Armut und "Entwicklung" in Schulbüchern. In K. Fischer, G. Hauck, & M. Boatcă (Eds.), *Handbuch Entwicklungsforschung* (pp. 323-327). Springer. https://doi.org/10.1007/978-3-658-32946-4_33

Table 8

Interview Guide Used for the Empirical Studies Presented in Chapters 3 and 4

Questions	Inquiries	Construct	Literature
What do you understand by culture?	To what extent do values, beliefs, behaviors play a role in their definition? Who determines which culture someone belongs to? And language and religion? Can people's values, beliefs and behavior change?	Conceptualization of Culture	
What defines you as a person/ your identity in general?		Identity exploration	Based on Douglass & Umaña-Taylor, 2015; Umaña-Taylor & Bámaca-Gómez, 2004
Which groups do you feel you belong to Some people feel, for example, that they are from Halle/ /Russian-German/Kurdish/German/East German/European	Are there any other groups to which you feel you belong, e.g. religious groups etc.?		
What role do norms and values play in your cultural identity? What role does language play in your cultural identity?	Could you add any other "cards" that play a role in your cultural identity?		
Can you talk to me about your experiences growing up as a child, teenager and young adult (social origin)?	What childhood and youth experiences were particularly formative for your identity? Is school a place that has shaped your identity? How or did you come to the decision to become a teacher and what influenced your decision? What influences have strengthened your cultural identity?		Based on Shower (2021)

Questions	Inquiries	Construct	Literature
How important is your cultural identity to you?	Can you give an example of the role your cultural identoty plays in your everyday life?	Identity resolution	Based on Douglass & Umaña-Taylor, 2015
When you think about your cultural identity or the group you feel you belong to, what feelings do you associate with it?	Is your cultural background more of an advantage or disadvantage for you?	Identity affirmation	
To what extent have you explore your own cultural identity so far?	What experiences have helped you understand or strengthen your cultural identity? For instance, have you reflected on cultural identity, discussed it with others (such as friends or family), read about it, sought information in other ways, attended events, visited meaningful places, or traveled?	Identity exploration	Based on Douglass & Umaña-Taylor, 2015
Was there a time when you struggled with yourself and your identity?	What were you struggling with, and what was the source of that struggle? Do you think your students are experiencing similar challenges with their own identity?	Identity affirmation	Based on Schauer (2021)
How strongly do you feel a sense of belonging to Germany?		Identity resolution	Based on Douglass & Umaña-Taylor, 2015
What does it mean to you to be German?		Identity exploration /Identity resolution	Based on Douglass & Umaña-Taylor, 2015
What is important to you when teaching?		Diversity beliefs	Based on Civitillo et al (2019)

APPENDIX

Questions	Inquiries	Construct	Literature
Can you explain what diversity means to you in the context of school?		Diversity beliefs	Based on Civitillo et al (2019)
Which aspects of diversity are particularly important to you?	Can you explain this with an example? In your opinion, which of these aspects should be taught more and which less?	Diversity beliefs	Based on Civitillo et al (2019)
Do you notice cultural diversity in your school?	In what ways do you perceive cultural diversity at your school? Have you noticed any changes or developments in recent years?	Cultural diversity beliefs	
How do you personally feel about this? Do you see it as beneficial, neutral, or as a burden?	Can you tell me about a specific experience when you perceived cultural diversity as a benefit or a burden?	Cultural diversity beliefs	
To what extent do you consider cultural diversity in your classroom?	Can you give examples, e.g. methods, content, to take cultural diversity into account in lessons? To what extent does your own environment/cultural identity influence your approach?	Culturally responsive teaching	
What should teachers pay particular attention to when dealing with culturally diverse students?	What skills should teachers have?	Culturally responsive teaching	
To what extent do you integrate your own life experiences, or the life experiences of your students, into your lessons?	Can you explain this with an example?	Culturally responsive teaching	
What opportunities and challenges arise in culturally diverse classrooms?	Can you talk about a specific experience? What do students gain from diversity?	Culturally responsive teaching	

APPENDIX

Questions	Inquiries	Construct	Literature
What steps would you take to foster positive interactions between culturally diverse students?		Culturally responsive teaching	
To what extent do you feel able to interact effectively with culturally diverse students and their parents?		Culturally responsive teaching efficacy	
To what extent do you have the confidence to address difficult topics such as racism and discrimination?		Culturally responsive teaching efficacy	
What experiences have helped you to be more confident in dealing with culturally heterogeneous classes?	What experiences and offers would you like to have in order to feel more competent in dealing with culturally heterogeneous classes?	Culturally responsive teaching efficacy	
How do you perceive the presence of privileged or disadvantaged students in your classroom?	Who are these students? Can you talk about a specific experience?	Critical consciousness	
When you reflect on your own school days, do you feel that you were privileged or disadvantaged?	Can you give examples?	Critical consciousness	
How does your world differ from that of today's students?		Critical consciousness	
How competent do you feel in dealing professionally with educational inequalities between different groups?	Are there any experiences that have helped you to feel better prepared?	Critical consciousness	

Questions	Inquiries	Construct	Literature
What can you imagine doing differently in your role as a teacher and how else could you act to better address educational inequalities between different groups?	What similarities and differences do you perceive between their living environment and that of your students? Can you give examples? Would you answer the question differently if you compared your childhood environment with that of your pupils?	Critical consciousness	Based on Heberle, et al. (2020)

Eidesstattliche Erklärung

Hiermit erkläre ich, Maria Jolina Ulbricht, an Eides Statt, dass ich die vorliegende Dissertation mit dem Titel "Conditions for Culturally Responsive Teaching among In-Service and Pre-Service Teachers" eigenständig verfasst habe. Ich versichere, dass ich keine anderen als die von mir angegebenen Quellen und Hilfsmittel verwendet habe und dass ich alle Stellen, die direkt aus anderen Werken übernommen oder inhaltlich angelehnt sind, deutlich als solche gekennzeichnet habe.

Weiterhin erkläre ich, dass ich bisher keine Promotionsversuche unternommen habe, die ohne Abschluss beendet wurden, und dass diese Dissertation in der gegenwärtigen oder in irgendeiner anderen Form noch keiner anderen Fakultät oder wissenschaftlichen Einrichtung zum Zweck der Erlangung eines akademischen Grades vorgelegt wurde.

Mir ist bewusst, dass eine falsche eidesstattliche Erklärung strafrechtliche Folgen nach sich ziehen und zur Aberkennung meines akademischen Grades führen kann.

Leipzig, den 06.05.2025