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Published in:
 Intercultural Education

DOI:
[10.1080/14675986.2022.2031904](https://doi.org/10.1080/14675986.2022.2031904)

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Document Version
 Publisher's PDF, also known as Version of record

Publication date:
 2022

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Okken, G. J., Jansen, E. P. W. A., Hofman, W. H. A., & Coelen, R. J. (2022). The relationship between intercultural teaching competence and school and classroom level characteristics. *Intercultural Education*, 33(2), 193-210. <https://doi.org/10.1080/14675986.2022.2031904>

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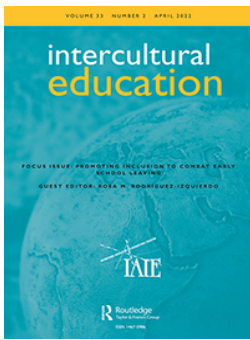
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To cite this article: G. J. Okken, E. P. W. A. Jansen, W. H. A. Hofman & R. J. Coelen (2022) The relationship between intercultural teaching competence and school and classroom level characteristics, *Intercultural Education*, 33:2, 193-210, DOI: [10.1080/14675986.2022.2031904](https://doi.org/10.1080/14675986.2022.2031904)

To link to this article: <https://doi.org/10.1080/14675986.2022.2031904>



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Published online: 21 Feb 2022.



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The relationship between intercultural teaching competence and school and classroom level characteristics

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ABSTRACT

The increasing levels of diversity in primary education make it essential to identify factors that influence Intercultural Teaching Competence (ITC). This study investigates which factors of Educational Effectiveness Research contribute to five dimensions of ITC: openness, classroom management, enriched lesson design, social initiative, and storytelling. Therewith, it contributes to the literature of both fields. Data collected through a cross-sectional survey among 155 Dutch primary school teachers were examined with linear regression analyses. The results showed that some characteristics at the classroom level have a strong significant relationship with dimensions of Intercultural Teaching Competence, whereas school characteristics did not.

ARTICLE HISTORY

Received 30 September 2020
Accepted 23 March 2021

KEYWORDS

Intercultural teaching competence; education effectiveness; primary education

Introduction

Literature shows that, around the globe, schools are becoming more diverse (e.g. Fine-Davis and Faas 2014; Guofang et al. 2021). This growing diversity has had an enormous impact on schools and teaching, but teachers are not fully prepared for these increasingly diverse classroom settings (Acquah, Tandon, and Lempinen 2016; Celeste et al. 2019; Delk 2019; Herzog-Punzenberger et al. 2020; Kiel, Syring, and Weiss 2017; Mayer et al. 2017; OECD 2019; Sleutjes, De Valk, and Ooijevaar 2018; Torrance 2017). Intercultural competencies and sensitivity, and cultural noticing and responding (Cunningham 2019; Deardorff 2020; Hammer, Bennett, and Wiseman 2003) are essential competencies for teachers to ‘ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’ (UN 2016). Aspects of these necessary competencies can be found in the concept of Intercultural Teaching Competence (ITC) (Dimitrov and Haque 2016). In our earlier study of ITC among Dutch primary school teachers, we were able to measure five dimensions of ITC: openness,

classroom management, enriched lesson design, social initiative, and storytelling. These findings are an interesting starting point for further investigation to find out which variables are related to the effectiveness of teachers' ITC.

Although the need for ITC has become more apparent and research recognises the influence of school and classroom characteristics on teaching, only little is known about this influence in relation to the five ITC dimensions. We, therefore, place the ITC dimensions in the context of Educational Effectiveness Research (EER) to see which variables might affect the ITC dimensions. The ITC dimensions can be recognised in the output box within the Basic Model of School Effectiveness (Scheerens and Blömeke 2016). This presumes for this study that inputs (teacher characteristics), context (teacher education), and process at school or classroom level (teaching) influence the five ITC dimensions. Most of the EER focuses on the implications of school, teacher, and teaching effectiveness (Day et al. 2006; Panayiotou et al. 2014; Scheerens 2015; Scheerens and Blömeke 2016) or teacher education effectiveness (Brouwer and Korthagen 2005) on student outcomes, instead of the intercultural aspect of teaching. To our knowledge, no research to date has considered the influence of school and classroom characteristics on ITC, although some cross-national perspectives were added to EER (Panayiotou et al. 2014). Since teacher effectiveness is central to teaching, more aspects of teacher and teacher education effectiveness should be included in research (Scheerens and Blömeke 2016). This study aims to respond to this gap in knowledge by exploring the relationship between school and classroom level characteristics and ITC dimensions as teaching effectiveness through a literature review and an empirical study. More insight into which school and classroom characteristics influence ITC might be helpful to prepare (prospective) teachers for the profession.

It is beyond the scope of this paper to review the entire literature on these topics, but instead, we zoom in on a few elements of EER and how this could be linked to ITC by exploring if and how the five dimensions of Intercultural Teaching Competence are related to aspects at various levels of Educational Effectiveness Research. This should help to clarify the reasoning inherent in the research model of this study and to answer the following question:

To what extent is there a relationship between school and classroom level characteristics and Intercultural Teaching Competence in terms of openness, classroom management, enriched lesson design, social initiative, and storytelling?

Theoretical background

Research on teacher behaviour and how this is affected by variables at distinct levels is guided by theory on school effectiveness, school improvement, teacher education effectiveness, teaching effectiveness and educational effectiveness (Brouwer and Korthagen 2005; Darling-Hammond, Wei, and Andree 2010;

Kyriakides and Creemers 2018; Scheerens 2015, 2018; Scheerens and Blömeke 2016). A causal pathway between all these levels could be across and within levels (Scheerens and Blömeke 2016). Namely, teacher effectiveness depends on teacher activities, which is depended on teacher knowledge and teacher education quality. Also, school and national level variables influence the behaviour of teachers. Educational effectiveness can therefore be used as referring to the collection of these terms (Scheerens and Blömeke 2016).

In this paper, we focus on a particular aspect of educational effectiveness as a dependent variable: ITC: 'The ability of instructors to support the learning of students who are linguistically, culturally, socially, or in other ways different from the instructor or from each other across a very wide definition of perceived difference and group identity'; and second, 'the ability to engage students effectively in global learning' (Dimitrov and Haque 2016). In our earlier work, we found five dimensions of ITC in the context of Dutch primary education: openness, classroom management, enriched lesson design, social initiative, and storytelling. These dimensions are essential for teachers in an increasingly intercultural primary school setting.

Following the more advanced Dynamic Model of Educational Effectiveness (Kyriakides, Creemers, and Panayiotou 2018; Kyriakides and Creemers 2009), we recognise possible influence of factors on ITC at four levels: student, teacher, school, and system. Also, the Integrated Multilevel Model of education (Scheerens 2015) shows that various relationships exist between system, school, classroom/learning group, and students. This model is conceptualised as a hierarchical system which includes across-level relationships that 'can be interpreted in terms of control, facilitation, and buffering from a higher level directed at the core process at the next lower level' (Scheerens 2015). These EER models illustrate the range of variables influencing the dependent variable, which was mostly student outcomes. However, as this study is focused on teaching, in particular ITC, within the category of classroom/learning group (Scheerens 2015) and teacher (Kyriakides and Creemers 2009), we reviewed the literature on school and classroom level and found potential factors related to ITC for the purpose of this research.

We consider the school level as the first layer of influence on ITC. The school context affects teacher behaviour, as teachers use or develop ITC dimensions through the interaction with the community in which they work. Scheerens (2015) writes about the school ecology and considers, among others, the ethnic composition of student cohorts as influential factor for educational effectiveness. If the ethnic composition of the teaching team is considered, we recognise an interaction between these two groups in a school. Due to multiculturalism in schools, teaching teams might differ from their pupil population in terms of ethnic background. Studies (Banerjee 2018; Driessen 2015) on the connection between ethnic backgrounds of teachers and students show that a disbalance of background might result into a culture gap. This, in turn, influences teacher

behaviour and the interaction between teachers and students. The level of diversity and multiculturalism might be connected to the residence of the pupils, whether the school is situated close to students' homes, and the locale (larger city, smaller town).

The category of school leadership, policies and organisation includes more practical aspects of the school environment level affecting educational effectiveness (Day et al. 2006; Scheerens 2015). This level explains whether the school workplace is seen as expansive or restrictive for teacher behaviour and learning (Billett 2001; Fuller and Unwin 2003). Expansive school environments stimulate teacher learning and behaviour and include close collaborative working, support for professional development, instruction-oriented leadership (Scheerens 2007), and opportunities to extend professional identity through boundary crossing (Hodkinson and Hodkinson 2005). Hodkinson and Hodkinson (2005) also highlight the importance of collaboration within teaching teams as this includes 'conversation and discussion, observing and taking an interest in what others do, and joint activity' (p. 116), leading to teacher improvements. Last, school diversity policies, which have increased in importance recently, influence how the concept of diversity is viewed within a school (Celeste et al. 2019) and might thus influence teacher behaviour.

The second level of possible influence on ITC is the classroom level. In this study, we make a clear distinction between characteristics at 1) classroom level, consisting of teachers (their characteristics and dispositions) and pedagogies (way of teaching), and 2) teaching (a process in which teacher behaviour including ITC is manifested), which is here the outcome variable (Scheerens and Blömeke 2016) (Figure 1).

Pre-existing teacher characteristics are part of the classroom-level influences, although these factors sometimes go beyond the classroom in influencing teaching. However, teacher characteristics become visible in how teachers offer curriculum and content and are therefore considered part of the classroom-level in this study. First, some researchers (Creemers 1994; Day et al. 2006; Huberman 1989; Scheerens 1992) refer to teacher experience or career stage affecting educational effectiveness. Huberman (1989) already described the influence of career stages through the career development process. It shows that there are distinct teaching career profiles and teachers have different aims and dilemmas at various moments in their professional cycle. Steffy and Wolfe (2001) reported six distinct phases of teacher development in a life cycle model, based on Mezirow's transformation theory (1997): novice, apprentice, professional, expert, distinguished, and emeritus. Every phase would lead to specific behaviour, tensions, and challenges. These findings indicate that career stage and work experience might influence ITC.

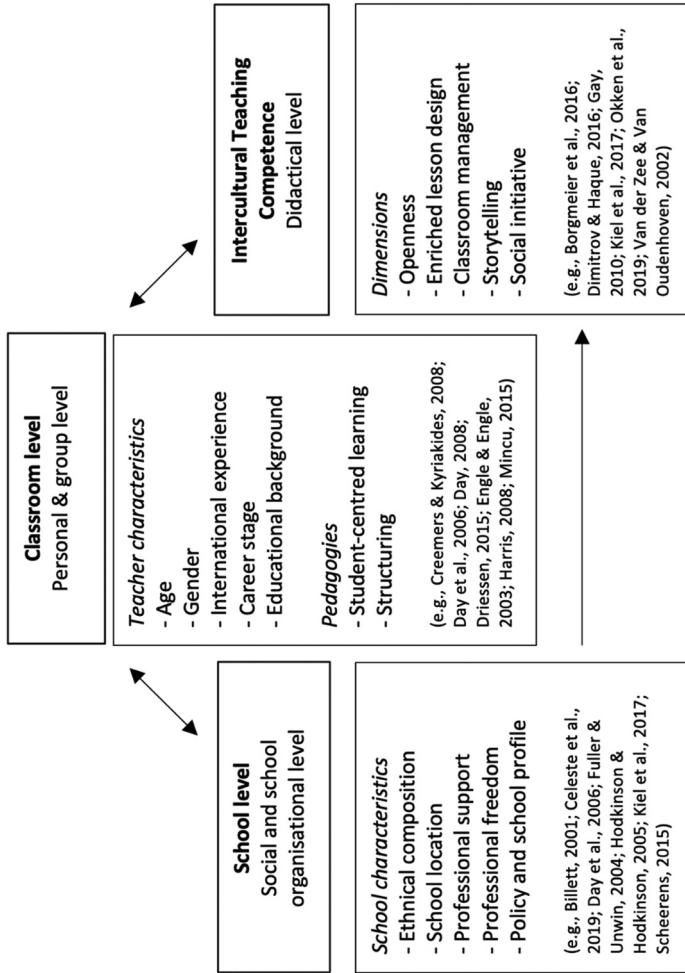


Figure 1. Research model of school and classroom level characteristics that might influence ITC.

Second, work by Kyriakides and Creemers (2018) and Muijs et al. (2014) touches slightly on actual teacher characteristics. These include teacher expectations, and pedagogical and subject knowledge. The context of this study also relates to Kiel, Syring, and Weiss (2017), who refer to cultural knowledge as an important characteristic for effective teacher behaviour.

Driessen (2015) argued that cultural background should be considered as an influential factor for educational effectiveness and that 'a stronger degree of ethnic match [between teachers and students] leads to predominantly positive results' (p. 188). It hints at the interaction between various levels of influence on ITC; cultural background of teachers at classroom level and cultural background of pupils at school level.

The educational background of teachers is another dimension of teacher characteristics that influences teaching behaviour (Brouwer and Korthagen 2005; Mincu 2015). Brouwer and Korthagen (2005) contend that student teaching activities during teacher education may impact teacher behaviour. In particular, study abroad (SA) as a teaching activity, part of a teacher education programme, appears to influence teaching effectiveness (Anderson et al. 2006; Authors 2019; Harris et al. 2018; Kuh, O'Donnell, and Reed 2013; Quezada 2004) and could be recognised in the context of the Basic Model of school effectiveness (Scheerens and Blömeke 2016). As SA could offer teachers the relevant insights into other cultures, ways of teaching, and opportunities for international collaboration, it might result in more effective ITC. This is also highlighted by other studies (Biraimah and Jotia 2013; Cushner and Mahon 2002; Klein and Wikan 2019; Lee 2011) that show the connection between SA learning outcomes and ITC dimensions. Namely, SA outcomes include results like appreciation for curricular materials, growth in use of teaching methods, empathy development, and openness. Our previous studies show a significant difference between teachers with and without SA regarding openness and the use of storytelling within primary schools.

Pedagogies, the other part of the classroom level, might also influence ITC. They include classroom composition, aspects of climate (rules, support), class size, and match of teachers and classes (Scheerens 2007). Kyriakides and Creemers (2018) describe eight factors for teachers' instructional role in the classroom which influence teacher behaviour: orientation, structuring, questioning, teaching, application, management of time, teacher role in making classroom a learning environment, and classroom assessment. Kyriakides, Creemers, and Panayiotou (2018) describe these factors in more depth and emphasise that the teaching context should be considered when measuring these factors. Azigwe et al. (2016) claim that these factors have statistically significant effects on student achievement, more so than school characteristics. Hattie's work (2003) on teacher effectiveness shows overlap with the eight factors of Kyriakides and Creemers (2018). They argue that teachers are most

powerful in creating educational effectiveness and that this includes factors such as giving feedback, questioning, teacher style, and creating a safe learning environment.

The five dimensions of ITC that we measured in our previous study are considered to be related to characteristics on school and classroom level. These ITC dimensions are here the outcome variables. As teachers need to respond to the challenges of intercultural learning environments, the dimensions openness, classroom management, enriched lesson design, social initiative, and storytelling are essential. These ITC dimensions are necessary aspects of teacher behaviour and include aspects of open-mindedness, cultural intelligence, intercultural competencies, differentiation and communication strategies, student-centred learning approaches, and general classroom management skills to create a safe learning environment and trust as a foundational competency for ITC (Dimitrov and Haque 2016). Kiel, Syring, and Weiss (2017) argue that classroom practices should include aspects of competencies which follow values such as tolerance and acceptance of diversity. An intercultural competent teacher should be able to transfer their attitudes to modelling appropriate behaviour to their students and should help pupils deal with uncertainty involved in exploring difference and perspective taking (Dimitrov and Haque 2016). This aligns with the school and teaching policy of Multiculturalism (Celeste et al. 2019) which focuses on including diversity in curriculum and instruction. All these aspects are included in the concept of ITC.

This research approaches ITC as essential for contemporary education and used EER to identify possible influential factors at school and classroom level. Our literature review shows that many factors are related to Educational Effectiveness. However, it is less clear how these factors influence the cultural aspect of teaching and in specific ITC. Therefore, this study investigated the possible relationship between characteristics at school and classroom level, and five ITC dimensions relevant for the Dutch primary teaching context: openness, classroom management, enriched lesson design, social initiative, and storytelling. Our model (Figure 1) illustrates the assumed relationships between the variables.

Methods

This descriptive study used a quantitative design to explore possible relationships between characteristics at school and classroom level and ITC dimensions (Figure 1). Respondents of this study reported on their teacher behaviour through a cross-sectional survey. The survey was first pilot-tested among teachers.

We sent participation invitations by email to 553 primary schools throughout the Netherlands. The email explained the research goals and the voluntary nature of the study, and included the link to the survey. All respondents signed the consent form digitally before being able to proceed.

Our final sample consisted of 155 teachers from primary schools in the Netherlands (89% female). The age of the teachers in our sample varied: The largest group (28%) was aged 20–29 and the second largest group (22%) was 50–59. Mostly, respondents indicated they worked in a particularly homogeneous school. However, 20% of the teachers responded that they worked in a school with great to extreme ethnic diversity. Forty-one teachers had SA experiences during their teacher education, varying from short-term ($n = 14$, < 4 weeks), to medium and long-term ($n = 27$). All respondents of this study completed their Teacher Education (TE) in the Netherlands, yet, the graduation year varied significantly (e.g. some respondents graduated 5 years ago, whereas another respondent completed their TE programme 40 years ago). Therefore, the content of the TE programme and the level of training on the intercultural teaching competency among respondents also varied. Although the current educator's competency profile includes some behavioural indicators linked to intercultural aspects of the teaching profession (e.g. being able to differentiate based on a diverse pupil population), until today, there are no explicit references to intercultural teaching competencies. Yet, the Ministry of Education, Culture, and Science did discuss more recent developments in terms of internationalisation with teachers, but concluded that the prerogative of how to implement these topics are made at the school level. This might lead to additional, but potentially varied, competency requirements for teachers. Also, TE programmes differ in how, and to what extent, they cover topics such as intercultural competencies and other learning outcomes of internationalisation in their programmes. Some TE programmes explicitly discuss topics such as superdiversity and identity while others describe this more broadly in terms of being aware of diverse socio-cultural backgrounds of pupils (HBO Bachelors, [forthcoming](#)). This might be the result of the location of the TE programme and the context in which graduates eventually work, as, for instance, Fukkink and Oostdam (2016) argued that teachers who end up working in larger cities – the urban professionals – need adapted teacher training with enhanced focus on diversity.

We conducted block-wise linear regression analyses to investigate the possible relationship between factors of EER at school and classroom level and ITC dimensions in the context of Dutch primary education. We looked at school and classroom characteristics as groups of independent variables and how these were separately related to every ITC dimension (five dependent variables) through block-wise regression analyses using SPSS.

The school characteristics items included the ethnic composition of the pupil population (1: primarily homogeneous Dutch – 5: primarily homogeneous other) and the school locale (1 = village, 2 = small city, 3 = large city). In addition, we investigated the factors school support (Cronbach's Alpha .73, consisting of three items of support: school leader, administrative, and teaching assistant) and professional freedom (Cronbach's Alpha .67; consisting of four items: professional development opportunities, professional initiative, collaboration, and curriculum

Table 1. Descriptive statistics school level characteristics: Means and standard deviations.

Variable	M	SD
Ethnic composition pupils	2.35	1.87
School location size	1.58	.78
School support	3.70	1.01
Professional freedom	4.36	.89
School profile Interculturality	.10	.29
School profile level Internationalisation	.08	.28
School profile religion	.32	.47

development time). These were assessed by asking how satisfied the respondents felt using a six point-Likert scale (1: totally disagree – 6: totally agree). We also included three measurements to explore school profile (yes/no) in terms of religion, level of internationalisation, and interculturality. [Table 1](#) shows the means and standard deviations of all variables at the school level.

At the classroom level we investigated the teacher characteristics (gender, age) and secondly, the pedagogies, which were examined through items on a six point-Likert scale in terms of student-centred learning approaches and structuring style. The items in the survey were both general and focused on intercultural aspects of teaching, to accommodate the varying levels of interculturality within the respondents' classrooms. Statements such as 'My role as a teacher is only to facilitate pupils in their own learning journey' (student-centred learning) and 'I always use the same teaching method in my lessons' (structuring style) were part of this category. [Table 2](#) shows the means and standard deviations of all variables at the classroom level.

Finally, the five ITC dimensions were investigated with the help of a six point-Likert scale. The teachers reflected on items related to the ITC dimensions and mentioned to which extent they agreed or disagreed. This part of the survey included items from validated instruments (MPQ short form of Van der Zee et al. 2013; CPSA of Borgmeier, Loman, and Hara 2016; Cultural Intelligence Scale of Ang, Rockstuhl, and Tan 2015; Ang and Van Dyne 2008). The items described precise behaviour to increase the self-perception accuracy, as specific measures tend to yield higher correlations with actual performance (Hertzog et al. 2000; Swann, Chang-Schneider, and McClarty 2007). [Table 3](#) shows an overview of all dimensions: sample items, number of items, and reliabilities.

Table 2. Descriptive statistics classroom level: Means and standard deviations.

Variable	M	SD
Gender	1.09	.29
Age	2.72	1.42
Educational degree	3.29	1.46
Work experience	3.28	1.75
Student-centred learning	4.02	1.17
Structuring	4.18	1.58

Table 3. Descriptive statistics intercultural teaching competence dimensions.

ITC dimension	Sample item	Nr. Of items	Cronbach's Alpha	Mean
Openness	'I value talking to pupils and parents with diverse cultural backgrounds'	7	.87	4.79
Enriched lesson design	'I integrate self-selected materials and learning content in my lessons to facilitate pupils' needs'	11	.80	4.91
Classroom Management	'I include clear routines in my lessons'	8	.74	5.20
Social initiative	'I like to take initiative'	7	.72	4.82
Storytelling	'I use storytelling to teach pupils about aspects of life'	3	.88	3.81

Results

We aimed to explore the relationship between school characteristics as independent variables and the ITC dimensions as five groups of dependent variables. A weak significant relationship ($p < .1$) appeared between the ITC dimension openness and variable location of school ($p .07$), and the ITC dimension storytelling and the two variables school profile international ($p .08$) and professional freedom ($p .05$) (Table 4). None of the school characteristics seemed to be related strongly significant to any of the ITC dimensions.

We also investigated the relationship between teacher and pedagogies characteristics as group of independent variables on classroom level and the five ITC dimensions as groups of dependent variables. Two of the classroom level variables (age and student-centred learning) showed a strong significant relationship ($p < .05$) with the ITC dimension openness ($p .02$, $p .004$). The classroom level characteristics explained 29% of the variance for the ITC dimension classroom management. Gender, educational background, and work experience had a strong significant relationship with this dimension. The third ITC dimension, enriched lesson design, showed a strong significant relationship with student-centred learning ($p .005$) and a weak significant relationship with gender ($p .08$).

Table 4. Linear regression results significant school and classroom level characteristics.

Variable	Openness		Storytelling		Classroom management		Enriched lesson design		Social Initiative	
	PEV	Sig.	PEV	Sig.	PEV	Sig.	PEV	Sig.	PEV	Sig.
School level	8%		10%		2%		4%		4%	
Location school		.07*		-		-		-		-
Profile international		-		.08*		-		-		-
Professional freedom		-		.05*		-		-		-
Classroom level	17%		11%		29%		13%		12%	
Age		.02**		.000**		-		-		-
Student-centred learning		.004**		-		-		.05**		.05**
Gender		-		-		.001**		.08*		-
Educational background		-		-		.001**		-		-
Work experience		-		.001**		.015**		-		-
International experience		-		-		-		-		.05**

* $p < .1$, ** $p < .05$

Twelve percent of the variance could be explained by the classroom level characteristics for the fourth ITC dimension social initiative, in which student-centred learning and international experience mattered the most by showing a strong significance (both $p < .05$). Age and work experience were two strong significant variables for the last ITC dimension storytelling. [Table 4](#) gives an overview of the weak and strong significant variables at both school and classroom level.

Conclusions and discussion

This research investigated the relationship between factors of Educational Effectiveness Research in terms of school and classroom characteristics and Intercultural Teaching Competence' dimensions. By linking these two streams of research in our model, we provided a new picture on the relationship between the various factors, and, thereby, broadened the existing knowledge in these fields. To our knowledge, EER has not often (Panayiotou et al. 2014) been focused on the intercultural aspect of teaching, even though ITC is essential for teachers in contemporary multicultural classrooms.

Using our survey data from 155 Dutch primary school teachers, we found that our classroom characteristics were able to explain substantially more variation in ITC dimensions than the school characteristics. This is in line with research of, among others, Azigwe et al. (2016), Hattie (2003), Kyriakides, Campbell, and Gagatsis (2000), and Scheerens and Bosker (1997), who also claim that the classroom level is more important than the school level in terms of explaining the variance, although their dependent variable was student achievement instead of ITC. In our study, the classroom characteristics especially explained variation for classroom management (29%), while this was only 2% for the school characteristics. Also, the influence of classroom characteristics on openness (17%), in which age and student-centred learning were significant variables, differed greatly with the school characteristics (8%). This is an important finding, as openness is a crucial aspect of teaching in multicultural settings and the largest category for intercultural school development in a broader sense (Kiel, Syring, and Weiss 2017). It thus seems that, even though a school organisation wants to become more intercultural, the starting point of improvement of openness is teacher's development, as teacher characteristics show a greater relationship with ITC. The low amount of explained variation for the school characteristics on the ITC dimensions could be that the teachers in our study experienced a sufficient level of professional freedom ($M = 4.36$; [Table 2](#)) to make their own teaching decisions, independently of the school's profile or policy.

Student-centred learning, as part of the classroom level, was one variable showing significant relationships with openness, enriched lesson design, and social initiative. This is thus an important aspect of teaching in our sample. Increased focus on pupil's needs rather than prescribed lesson plans allows for

more attention to the level of diversity in a classroom. This finding is in line with Herzog-Punzenberger et al. (2020), who claim that responding in different (assessment) ways to pupils is mostly affected by teacher characteristics, rather than school policies. Also, Baeten et al. (2010) show the importance of the teachers at classroom level for student-centred learning. They argued that, if teachers are oriented towards students and change their conceptions, students are inclined to use a deeper learning approach. Such students are more intrinsically motivated and show higher engagement in learning tasks.

Following research of the influence of teacher experience and career stage affecting educational effectiveness (Creemers 1994; Day et al. 2006; Huberman 1989; Scheerens 1992), we explored the relationships between educational background, work experience, and ITC. These factors showed a significant relationship with classroom management, yet, did not show a strong connection with any other ITC dimension. This could be explained by beginning teacher dilemmas, as teachers have different aims and dilemmas at various moments in their professional cycle (Huberman 1989). At the beginning of their career, teachers might be mostly focused on classroom management and do not yet feel the professional freedom to include elements of other ITC dimensions in their teaching.

However, Brouwer and Korthagen (2005) argue that the influence of the school context, rather than pre-service programmes, is more powerful in terms of classroom management. When teachers face large groups of pupils who need to be disciplined in ways discrepant with their personal preferences, the school characteristics overrule personal teacher characteristics. It might be, though, that the relationship between educational background and ITC becomes more apparent after some years of working experience (Brouwer and Korthagen 2005; Wubbels and Korthagen 1990), until teachers find the freedom to teach more authentic and 'have developed more of the instructional and educative competence they need to put their ideals into practice' (Brouwer and Korthagen 2005). This could explain why educational background was not showing a strong significant relationship with the other ITC dimensions, since most respondents (28%) were aged 20–29.

The ITC dimension storytelling showed significant relationships with an international profile of the school and professional freedom at the school level, and with age and work experience at the classroom level. Storytelling could be an aspect of multiculturalism (Celeste et al. 2019) and as a differentiation and communication strategy as part of ITC (Dimitrov and Haque 2016) as reaction to the level of classroom diversity. This might explain the connection between an international profile and professional freedom in a school and storytelling in the classroom. The combination of storytelling and student-centred learning approaches as significant variables on different ITC dimensions, could also be highlighted. A teacher might use storytelling as a way of student-centred teaching, as this could make pupils' learning more

personal, could reduce stigma in intercultural settings (Kimball et al. 2016), and might help pupils to understand human behaviour (Bledsoe and Setterlund 2020). Therefore, this outcome is an important finding for ITC in primary education.

To conclude, our research findings show a significant relationship between classroom characteristics and various ITC dimensions. This sheds light on EER in terms of intercultural aspects of teaching. However, intercultural teaching might concern a combination of teachers' work, lives, and experience (Day et al. 2006). There might thus be an interaction between school, classroom and even external factors and ITC dimensions. It is, however, beyond the scope of this paper to investigate the interaction between all characteristics.

Limitations

Several limitations of this study need to be considered. Firstly, survey data were collected at one time. Thus, teachers might not have scored high on some items of the survey because they had not experienced the described situations recently, because Stronger correlations exist when the questions are asked right after the specific performance or behaviour (Ackerman and Wolman 2007). Also, mood, availability of time, and realistic self-image may have had an effect. Secondly, the direction of the relationships between our variables stays unclear. Although we based our assumptions on EER that school and classroom characteristics lead to ITC dimensions, an international experience might lead a teacher to show more openness, or a greater openness increases the likelihood to engage in international experiences. Finally, the extent of homogeneity of classrooms and teachers may have reduced the range of outcomes of the use of ITC in primary education.

Implications for research and practice

We support Hattie's (2003, 3) claim that we should 'focus on the greatest source of variance that can make the difference – the teacher -' in order to be effective in teaching multicultural groups of pupils. We therefore need to optimise this influence by including more intercultural aspects into teacher education, as educational background also seems to have an impact on ITC (Table 4), although this may take time (Brouwer and Korthagen 2005; Wubbels and Korthagen 1990). Some initiatives have arisen in Europe to train teacher educators on this topic (Dumcius et al. 2017). Further research could investigate the interrelationship between various levels of influence on ITC and could explore the ITC dimensions in other educational contexts, since, for instance Kyriakides, Creemers, and Panayiotou (2018) describe that the teaching context should be considered when measuring the EER factors. This work has shown that consideration of the various levels, as recognised

by EER, require further investigation beyond the ultimate dependent variable of student outcomes, since these levels may assert diverse influences on one another.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

- Ackerman, P. L., and S. D. Wolman. 2007. "Determinants and Validity of Self-estimates of Abilities and Self-concept Measures." *Journal of Experimental Psychology Applied* 13: 53–78. doi:10.1037/1076-898X.13.2.57.
- Acquah, E. O., M. Tandon, and S. Lempinen. 2016. "Teacher Diversity Awareness in the Context of Changing Demographics." *European Educational Research Journal* 15 (2): 218–235. doi:10.1177/1474904115611676.

- Anderson, P. H., L. Lawton, R. J. Rexeisen, and A. C. Hubbard. 2006. "Short-term Study Abroad and Intercultural Sensitivity: A Pilot Study." *International Journal of Intercultural Relations* 30 (4): 457–469. doi:10.1016/j.ijintrel.2005.10.004.
- Ang, S., T. Rockstuhl, and M. L. Tan. 2015. "Cultural Intelligence and Competencies." *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* 5 (1): 433–439.
- Ang, S., and L. Van Dyne. 2008. "Conceptualization of Cultural Intelligence: Definition, Distinctiveness and Nomological Network." In *Handbook of Cultural Intelligence: Theory, Measurement, and Applications*, edited by S. Ang and L. Van Dyne, 3–15. Armonk, NY: M. E. Sharpe.
- Authors. 2019. "Beyond the 'Welcome-back Party': The Enriched Repertoire of Professional Teacher Behaviour as a Result of Study Abroad." *Teaching and Teacher Education* 86: 1–11.
- Azigwe, J. B., L. Kyriakides, A. Panayiotou, and B. P. M. Creemers. 2016. "The Impact of Effective Teaching Characteristics in Promoting Student Achievement in Ghana." *International Journal of Educational Development* 51: 51–61. doi:10.1016/j.ijedudev.2016.07.004.
- Baeten, M., E. Kyndt, K. Struyven, and F. Dochy. 2010. "Using Student-centred Learning Environments to Stimulate Deep Approached to Learning: Factors Encouraging or Discouraging Their Effectiveness." *Educational Research Review* 5: 243–260. doi:10.1016/j.edurev.2010.06.001.
- Banerjee, N. 2018. "Effects of Teacher-student Ethnoracial Matching and Overall Teacher Diversity in Elementary Schools on Educational Outcomes." *Journal of Research in Childhood Education* 32 (1): 94–118. doi:10.1080/02568543.2017.1393032.
- Billett, S. 2001. "Learning through Working Life: Interdependencies at Work." *Studies in Continuing Education* 23 (1): 19–35. doi:10.1080/01580370120043222.
- Biraimah, K. L., and A. L. Jotia. 2013. "The Longitudinal Effects of Study Abroad Pro- Grams on Teachers' Content Knowledge and Perspectives: Fulbright-Hays Group Projects Abroad in Botswana and Southeast Asia." *Journal of Studies in International Education* 17 (4): 433–454. doi:10.1177/1028315312464378.
- Bledsoe, T. S., and K. A. Setterlund. 2020. *Using Narratives and Storytelling to Promote Cultural Diversity on College Campuses*. Pennsylvania, USA: IGI Global.
- Borgmeier, C., S. L. Loman, and M. Hara. 2016. "Teacher Survey of Evidence-based Classroom Practices: Preliminary Findings across Primary, Intermediate and Secondary Level Teachers." *Teacher Development* 20 (1): 40–56. doi:10.1080/13664530.2015.1105863.
- Brouwer, N., and F. Korthagen. 2005. "Can Teacher Education Make a Difference?" *American Educational Research Journal* 42 (1): 153–224. doi:10.3102/00028312042001153.
- Celeste, L., G. Baysu, K. Phalet, L. Meeussen, and J. Kende. 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. doi:10.1177/0146167219838577.
- Creemers, B.P.M. 1994. "Effective Instruction: An Empirical Basis for a Theory of Educational Effectiveness." In *Advances in School Effectiveness Research and Practice*, edited by D. Reynolds, B.P.M. Creemers, P.S. Nesselrodt, E.C. Schaffer, S. Stringfield, and C. Teddlie, 189–205. Oxford: Pergamon Press.
- Cunningham, H. 2019. "Responding to What We Notice: International Student Teaching as a Pathway to Cultural Responsiveness." *Urban Education* 54 (9): 1262–1289. doi:10.1177/0042085919860569.
- Cushner, K., and J. Mahon. 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. doi:10.1177/1028315302006001004.

- Darling-Hammond, L., R. C. Wei, and A. Andree. 2010. *How High-achieving Countries Develop Great Teachers*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Day, C., G. Stobart, P. Sammons, A. Kington, Q. Gu, R. Smees, and T. Mujtaba. 2006. "Variations in Teachers' Work, Lives and Effectiveness (VITAE)." Research Report RR743.
- Deardorff, D. K. 2020. "Manual for Developing Intercultural Competences: Story Circle." UNESCO/Routledge. <https://unesdoc.unesco.org/ark:/48223/pf0000370336>
- Delk, T. D. 2019. "Are Teacher-credentialing Programs Providing Enough Training in Multiculturalism for Pre-service Teachers?" *Journal for Multicultural Education* 13 (3): 258–275. doi:10.1108/JME-01-2019-0003.
- Dimitrov, N., and A. Haque. 2016. "Intercultural Teaching Competence: A Multi-disciplinary Framework for Instructor Reflection." *Intercultural Education: Special Issue on Learning at Intercultural Intersections* 27 (5): 437–456. doi:10.1080/14675986.2016.1240502.
- Driessen, G. 2015. "Teacher Ethnicity, Student Ethnicity, and Student Outcomes." *Intercultural Education* 26 (3): 179–191. doi:10.1080/14675986.2015.1048049.
- Dumcius, R., B. van Driel, B. Herzog-Punzenberger, J. Kerzil, E. Wood, H. Siarova, D. Sternadel, L. Tsutskiridze, and D Buinauskas. 2017. "Preparing Teachers for Diversity." *The Role Of initial Teacher Education*. <http://www.readyproject.eu/uploads/files/1502579119PreparingTeachersforDiversity.pdf>
- Fine-Davis, M., and D. Faas. 2014. "Equality and Diversity in the Classroom: A Comparison of Students' and Teachers' Attitudes in Six European Countries." *Social Indicators Research* 119 (3): 1319–1334. doi:10.1007/s11205-013-0547-9.
- Fukkink, R., and R. Oostdam. 2016. *Van startbekwaam naar stadsbekwaam* [From Newly Qualified to City Qualified]. Bussum: Uitgeverij Coutinho.
- Fuller, A., and L. Unwin. 2003. "Learning as Apprentices in the Contemporary UK Workplace: Creating and Managing Expansive and Restrictive Participation." *Journal of Education and Work* 16 (4): 407–426. doi:10.1080/1363908032000093012.
- Guofang, L., L. Marom, J. Anderson, J. Hare, and M. McTavish. 2021. "Superdiversity, Emergent Priorities, and Teacher Learning." In *Superdiversity and Teacher Education: Supporting Teachers in Working with Culturally, Linguistically, and Racially Diverse Students, Families, and Communities*, edited by L. Guofang, 1–16. New York, NY: Routledge Taylor & Francis.
- Hammer, M. R., M. J. Bennett, and R. Wiseman. 2003. "Measuring Intercultural Sensitivity: The Intercultural Development Inventory." *International Journal of Intercultural Relations* 27: 421–443. doi:10.1016/S0147-1767(03)00032-4.
- Harris, V.W., M. Kumaran, H.J. Harris, D. Moen, and B. Visconti. 2018. "Assessing Multicultural Competence (Knowledge and Awareness) in Study Abroad Experiences." *Compare: A Journal of Comparative and International Education* 1 (1): 1–23.
- Hattie, J. 2003. "Teachers Make a Difference: What Is the Research Evidence? Australian Council for Educational Research." Annual Conference on Building Teacher Quality, Melbourne
- HBO Bachelors. forthcoming. PABO. <https://hbo.bachelors.nl/zoeken/?orgUnitId=&programForm=full-time&profile=&studyCluster=&programType=&searchWord=PABO>
- Herzog, C., D. C. Park, R. W. Morrell, and M. Martin. 2000. "Ask and Ye Shall Receive: Behavioral Specificity in the Accuracy of Subjective Memory Complaints." *Applied Cognitive Psychology* 14: 257–275. doi:10.1002/(SICI)1099-0720(200005/06)14:3<257::AID-ACP651>3.0.CO;2-O.
- Herzog-Punzenberger, B., H. Altrichter, M. Brown, D. Burns, G. A. Nortvedt, G. Skedsmo, et al. 2020. "Teachers Responding to Cultural Diversity: Case Studies on Assessment Practices, Challenges and Experiences in Secondary Schools in Austria, Ireland, Norway and Turkey." *Educational Assessment, Evaluation and Accountability* 32: 395–424. doi:10.1007/s11092-020-09330-y.

- Hodkinson, H., and P. Hodkinson. 2005. "Improving Schoolteachers' Workplace Learning." *Research Papers in Education* 20 (2): 109–131. doi:10.1080/02671520500077921.
- Huberman, M. A. 1989. "The Professional Life Cycle of Teachers." *Teachers College Record* 91 (1): 3–57.
- Kiel, E., M. Syring, and S. Weiss. 2017. "How Can Intercultural School Development Succeed? The Perspective of Teachers and Teacher Educators." *Pedagogy, Culture & Society* 25 (2): 243–261. doi:10.1080/14681366.2016.1252421.
- Kimball, E. W., A. Moore, A. Vaccaro, P. F. Troiano, and B. M. Newman. 2016. "College Students with Disabilities Redefine Activism: Self-advocacy, Storytelling, and Collective Action." *Journal of Diversity in Higher Education* 9 (3): 245–260. doi:10.1037/dhe0000031.
- Klein, J., and G. Wikan. 2019. "Teacher Education and International Practice Programmes: Reflections on Transformative Learning and Global Citizenship." *Teaching and Teacher Education* 79: 93–100. doi:10.1016/j.tate.2018.12.003.
- Kuh, G. D., K. O'Donnell, and S. Reed. 2013. *Ensuring Quality & Taking High-impact Practices to Scale*. Washington, DC: American Association of Colleges & Universities.
- Kyriakides, L., R. J. Campbell, and A. Gagatsis. 2000. "The Significance of the Classroom Effect in Primary Schools: An Application of Creemers' Comprehensive Model of Educational Effectiveness." *School Effectiveness and School Improvement* 11 (4): 501–529. doi:10.1076/sesi.11.4.501.3560.
- Kyriakides, L., and B. P. M. Creemers. 2009. "The Effects of Teacher Factors on Different Outcomes: Two Studies Testing the Validity of the Dynamic Model." *Effective Education* 1 (1): 61–86. doi:10.1080/19415530903043680.
- Kyriakides, L., and B. P. M. Creemers. 2018. "Investigating the Quality and Equity Dimensions of Educational Effectiveness." *Studies in Educational Evaluation* 57: 1–5.
- Kyriakides, L., B. P. M. Creemers, and A. Panayiotou. 2018. "Using Educational Effectiveness Research to Promote Quality of Teaching: The Contribution of the Dynamic Model." *ZDM Mathematics Education* 50 (3): 381–393. doi:10.1007/s11858-018-0919-3.
- Lee, J. 2011. "International Field Experience- What Do Student Teachers Learn?" *Australian Journal of Teacher Education* 36 (10): 1–22. doi:10.14221/ajte.2011v36n10.4.
- Mayer, D., M. Dixon, J. Kline, A. Kostogriz, J. Moss, L. Rowan, and S. White. 2017. *Studying the Effectiveness of Teacher Education: Early Career Teachers in Diverse Settings*. Singapore: Springer.
- Mezirow, J. 1997. "Transformative Learning: Theory to Practice." *New Directions for Adult and Continuing Education* 197 (74): 5–12. doi:10.1002/ace.7401.
- Mincu, M. E. 2015. "Teacher Quality and School Improvement: What Is the Role of Research?" *Oxford Review of Education* 41: 253–269. doi:10.1080/03054985.2015.1023013.
- Ministerie van Onderwijs, Cultuur en Wetenschap. 2017. "Besluit van 16 Maart 2017 Tot Wijziging van het Besluit Bekwaamheidseisen Onderwijspersoneel En het Besluit Bekwaamheidseisen Onderwijspersoneel BES in Verband Met de Herijking van de Bekwaamheidseisen voor Leraren En Docenten [Conclusion on March 16, 2017 to Change the Competency Profile for Educators and the Competency Profile for Educators BES in Terms of the Recalibration of the Competencies for Teachers and Lecturers]." *Overheid*, April 10 . <https://zoek.officielebekendmakingen.nl/stb-2017-148.html>
- Muijs, D., L. Kyriakides, G. van der Werf, B. Creemers, H. Timperley, and L. Earl. 2014. "State of the Art-teacher Effectiveness and Professional Learning." *School Effectiveness and School Improvement* 25 (2): 231–256. doi:10.1080/09243453.2014.885451.
- OECD. 2019. *TALIS 2018 Results (Vol. I): Teachers and School Leaders as Lifelong Learners*. Paris: OECD.

- Panayiotou, A., L. Kyriakides, B. P. M. Creemers, L. McMahon, G. Vanlaar, M. Pfeifer, and M. Bren. 2014. "Teacher Behavior and Student Outcomes: Results of a European Study." *Educational Assessment Evaluation and Accountability* 26 (1): 73–93. <https://doi.org/10.1007/s11092-013-9182-x>.
- Quezada, R. L. 2004. "Beyond Educational Tourism: Lessons Learned while Student Teaching Abroad." *International Education Journal* 5 (4): 458–465.
- Scheerens, J. 1992. *Effective Schooling: Research, Theory and Practice*. London: Cassell.
- Scheerens, J. 2007. *Conceptual Framework for the PISA 2009 Context Questionnaires and Thematic Reports*. Oslo: PISA Governing Board.
- Scheerens, J. 2015. "Theories on Educational Effectiveness and Ineffectiveness." *School Effectiveness and School Improvement* 26 (1): 10–31. doi:10.1080/09243453.2013.858754.
- Scheerens, J. 2018. "The Perspective of 'Limited Malleability' in Educational Effectiveness: Treatment Effects in Schooling." *Educational Research and Evaluation* 23: 247–266. doi:10.1080/13803611.2017.1455286.
- Scheerens, J., and S. Blömeke. 2016. "Integrating Teacher Education Effectiveness Research into Educational Effectiveness Models." *Educational Research Review* 18: 70–87. doi:10.1016/j.edurev.2016.03.002.
- Scheerens, J., and R. J. Bosker. 1997. *The Foundations of Educational Effectiveness*. Oxford: Pergamon.
- Sloutjes, B., H. De Valk, and J. Ooijevaar. 2018. "The Measurement of Ethnic Segregation in the Netherlands: Differences between Administrative and Individualized Neighbourhoods." *European Journal of Population* 34 (2): 195–224. doi:10.1007/s10680-018-9479-z.
- Steffy, B. E., and M. P. Wolfe. 2001. "A Life-cycle Model for Career Teachers." *Kappa Delta Pi Record* 38 (1): 16–19. doi:10.1080/00228958.2001.10518508.
- Swann, W. B., Jr., C. Chang-Schneider, and L. McClarty. 2007. "Do People's Self-views Matter? Self-concept and Self-esteem in Everyday Life." *American Psychologist* 62: 84–94. doi:10.1037/0003-066X.62.2.84.
- Torrance, H. 2017. "Blaming the Victim: Assessment, Examinations, and the Responsibilisation of Students and Teachers in Neo-liberal Governance." *Discourse: Studies in the Cultural Politics of Education* 38 (1): 83–96.
- UN. 2016. *Sustainable Development Goal 4: Targets and Indicators [Webpage]*. New York: UN. <https://sustainabledevelopment.un.org/sdg4#targets>.
- Van der Zee, K., J. P. Van Oudenhoven, J. G. Ponterotto, and A. W. Fietzer. 2013. "Multicultural Personality Questionnaire: Development of a Short Form." *Journal of Personality Assessment* 95 (1): 118–124. doi:10.1080/00223891.2012.718302.
- Wubbels, T., and F. A. J. Korthagen. 1990. "The Effects of a Pre-service Teacher Education Program for the Preparation of Reflective Teachers." *Journal of Education for Teaching* 16: 29–43. doi:10.1080/0260747900160102.