

This item is the archived peer-reviewed author-version of:

Perspectives on multiperspectivity : self-efficacy of master's student teachers in Belgium towards multiperspectivity in the classroom

Reference:

Smits Tom, Tanghe Els.- Perspectives on multiperspectivity : self-efficacy of master's student teachers in Belgium towards multiperspectivity in the classroom
Intercultural education - ISSN 1469-8439 - 35:1(2024), p. 1-20
Full text (Publisher's DOI): <https://doi.org/10.1080/14675986.2023.2278923>
To cite this reference: <https://hdl.handle.net/10067/2010390151162165141>

Perspectives on Multiperspectivity: Self-efficacy of Master's Student Teachers in Belgium towards Multiperspectivity in the Classroom

This study investigates pre-service teachers' self-efficacy and attitudes towards multiperspectivity in education. The sample is representative of postgraduate teacher education students in Flanders, the northern and largest region of Belgium, which has evolved into a migratory society with city life characterised by superdiversity. The capital Brussels and two Flemish cities have already evolved into majority-minority cities. Based on a written survey conducted at four universities in Flanders and Brussels, and investigating the degree of familiarity with and views on ethnic diversity as well as the knowledge about and (readiness for) practical applications of multiperspectivity, this study demonstrates that growing up in an urban environment is a good predictor of pre-service teachers' familiarity with ethnic diversity in education. Moreover, students training in a humanities subject score significantly higher on theoretical knowledge of multiperspectivity. Familiarity with ethnic diversity is also a good predictor of the application of a multiperspectivist approach in teaching practice. Since the greater part of Flemish master's student teachers did not grow up in large cities and are not majoring in humanities subjects, teacher education should pay sufficient attention to multiperspectivity so that all can acquire sufficient theoretical and practical knowledge to thrive in 21st-century classrooms.

Keywords: teacher education; diversity competence; multiperspectivity; teacher beliefs

Introduction

This study into the readiness of pre-service teachers was carried out at the four major Flemish universities in Belgium. Since the second half of the 20th century, Belgium has evolved into an immigration society. Half a century later, its cities are increasingly characterised by superdiversity (Geldof 2019): in 2019, 89% of Belgium's population growth was due to immigration (Statbel 2021), mainly from neighbouring countries such as the Netherlands and France. In terms of nationality, in January 2021 67.3% of the population were of Belgian origin (still 81.8% in 2001), 20.1% were Belgians of foreign

origin and 12.6% were non-Belgians. Until 2020, 20.3 % of the immigrants came from a neighbouring country, 28.1 % from one of the other EU countries (mainly Romania, Italy and Bulgaria) and 51.7 % from a non-EU member state (mainly Morocco, India and Turkey) (Myria 2021).

Societies characterised by an immigrant population with a composition like this are described with the term ‘superdiversity’, a concept characterized by a qualitative and a quantitative dimension, and a societal process of normalisation (Geldof 2017; Vertovec 2007). Quantitatively speaking, the Flemish context of the present study is one of rapidly growing diversity (Geldof 2017, 2019a), especially in metropolitan areas where two of the universities involved are located. Brussels (capital), Antwerp (largest Flemish city) and Genk have evolved into majority-minority cities (Geldof 2019a) where the majority is of different ethnic and/or national descent. For instance in Brussels, more than seven out of ten inhabitants have a migration background (De Decker, Vandekerckhove, Volckaert, and Lebbe 2019; Geldof 2019b; AII 2022). Brussels and Antwerp lead the national rankings of cities with the most heterogeneous populations in terms of nationalities present (VSA 2022). The home languages of young Antwerp citizens are growing increasingly diverse: in 2018 almost half of children aged 2.5 to 12 spoke a home language other than Dutch (Stad Antwerpen 2022). Ghent and Louvain, home of the two remaining universities in our study, are expected to become majority-minority cities too (Geldof 2019a). Superdiversity obviously not only becomes apparent quantitatively. The minorities in Flemish society are themselves also becoming more diverse in terms of country of origin, religion, socio-economic status, etc., which accounts for the qualitative dimension of superdiversity (Geldof 2017) and which stresses the many ways diversity becomes apparent (i.e. not only equalling ethnicity or race). Whereas both in the past and at present, the demographic evolution in Flanders is strongly considered exceptional and

is often problematised, an ever-increasing yet not conflict-free process of normalisation is going on (Geldof 2017).

Ghent, Louvain, Brussels and Antwerp are also the four cities with an academic teacher training programme preparing for higher secondary education in Flanders. Teachers in Flanders are trained for teaching in Flemish and in Brussels Dutch-language education schools. To what extent are Flemish master's student teachers capable of dealing appropriately with current developments pertaining to superdiversity? Previous research (Burns and Shadoian-Gersing 2010; Anthonissen et al. 2015) showed that (Flemish) pre-service teachers' perceptions are often (super)diversity-blind. Smits and Janssenswillen (2020) indicated that student teachers do come into contact with dealing with diversity during their training, but struggle with the translation to educational practice. Teaching in multicultural classes requires the necessary practical experience which, logically, student teachers are lacking (Janssenswillen 2013).

Literature review

Multiperspectivity

Because of Western Europe's superdiversity, its citizens more easily come into contact with other cultures and experiences (Vertovec 2007). The key feature of superdiversity is an increased diversification of diversity in all its forms (biological, social, cultural, etc.) and with all [its](#) associated complexities and interactions (Geldof 2017). Such is the reality that teachers face today (Janssenswillen 2013). For this reason, it is opportune for teacher education, especially in Western societies, to develop the competence of 'multiperspectivity', as a basic attitude of the teacher and a skill for students. Generally speaking, multiperspectivity expresses the willingness to move into the perspective of another by looking at events or developments from different points of view or with

alternative narratives. Multiperspectivity is a strategy of understanding that allows students to detach from their personal perspective and the teacher is aware of the fact that the personal perspective is influenced by one's cultural context (Stradling 2003). As a result, one is able to look at facts, which one learns about through information resources, from different perspectives and empathise with others' perspectives (Hoffman 2009; Burman et al. 2020).

Information resources have three main features: source, content, and representational format (List & Alexander 2018). The source comprises all 'accessible information about a resource's origin or purpose for being created, including information about author and publisher' (List et al. 2020, p 3) and serves as a basis for determining the trustworthiness of a resource. The perspective of a resource is defined as follows:

the collection of attitudes, values, beliefs, knowledge propositions, and goals that guide the presentation of information, including decisions about what content to focus on and which to exclude and which representational format(s) to use in what ways. These attitudes, values, beliefs, knowledge propositions, and goals may be expected to proceed from the author of a given resource, as well as the author's social, cultural, and epistemic (i.e., domain) communities. (ibid.)

Everyone sharing information provides it from a particular perspective and differences in perspectives 'may result from differences in people's roles, social positions, experiences, education, and more' (Barzilai & Weinstock 2020, 125). Perspectives, therefore, are not the propositions or claims of the information (resource) itself, but rather overarching interpretative principles which organize one's thinking about the target subject (Camp 2017, 2020).

Including multiple perspectives in teaching facilitates multiple perspective learning (aka perspective learning), ‘the process of knowing with and about the stances, viewpoints, and positioning involved in inquiries into specific problems and questions that are relevant and meaningful to learners and the communities of which they are part. Through that learning, multiple perspectives are elaborated and enhanced over time by the students taking on the roles and responsibilities of active knowers’ (Cho, Kucan, & Rainey 2020, 277). The teacher is called on to scaffold the activation of and engagement with various perspectives coexisting in the classroom as resources for co-constructive learning. In doing so, ‘perspective learning can empower students to develop new ways of viewing and examining specific topics, problems, and questions’ (ibid.)

In concrete terms, this means, for example, that the teacher does not neglect to adapt the learning content to the (cultural) background(s) of the students by including or tapping into their perspective(s) (D’haveloose and Heylen 2006; Siwatu 2007). This approach is also in line with recent conceptualisations of multiperspectivity in the Western world, linking it to the call of ethnic and cultural minorities to free education from an ethno- and/or eurocentric focus (Janssenswillen 2013). As emanations of diversity, culture (traditions, customs and language) and ethnicity (ethnic descent) are not to be understood as synonyms. Yet when used synonymously in sociological discourse, as common in the Dutch language the questionnaire used for this study was presented in, ethnic and cultural diversity refer to differences in language, codes and traditions – with ethnicity referring to ‘the common cultural features that a group of people share including a common language, common customs and mores, a belief in a common genealogical descent and often (but not necessarily) ties with a specific territory’ (Triandafyllidou 2011, p 17).

Taking a multiperspectivist view is closely related to (super)diversity in the classroom. In education, it is crucial to pay attention to learner diversity so as to give all students the opportunity to develop to their full potential, but also to be aware of their view of the world. Its relevance is increased by literature showing that social teacher-student interaction at school has a positive influence on the identity formation and self-esteem of learners (Birch and Ladd 1997; Hamre and Pianta 2001; Agirdag, Van Houtte, and Van Avermaet 2012). Research into the school careers of 14-15 year olds shows that ethnic and socio-economic characteristics are predictors of educational career choices in Flanders (Clycq et al. 2014). Students in Flemish vocational secondary education, and in particular those from a different ethnic background, are more vulnerable to stigmatisation in education. Studies based on attachment theory (Bowlby 1982) show that close and supportive teacher-student relationships have a positive influence on (school) performance, motivation, involvement and well-being (Murray and Greenberg 2000; Buyse et al. 2009). Consequently, we hypothesise that a multiperspectivist attitude in the teacher-student relationship can influence students' vulnerability favourably.

Creating a supportive classroom climate that embraces diverse perspectives is one of the important aspects of socially just education (Dover 2013). A teacher handling diversity with a conscious attitude and in an adequate manner stimulates all students' learning and development opportunities (Sierens 2007). In practice, this means that a subject's dominant ethnocentric perspectives are deconstructed and that it also gives voice to (invisible) non-dominant groups. To achieve meaningful teaching (Grabe 1998) in today's multicultural classes, experience is required that novice teachers more often than not lack. For them the focus is primarily on classroom management and mastering the learning content (Levin, Hammer, and Coffey 2009). As a result, beginning teachers have difficulty making the transfer to a diversity-oriented attitude (Janssenswillen 2013;

Smits and Janssenswillen 2020). European research by Fine-Davis and Faas (2014) shows that when pupils themselves are positive about diversity in the classroom, teachers do not always follow suit. The authors attribute this difference to age and generation differences, claiming that younger generations embrace classroom diversity more strongly (EMCRX 2005). These facts illustrate the need for teacher education to teach about, and how to deal with, diversity (e.g., Anthonissen et al. 2015).

Multiperspectivity in teacher education

Teacher education should be where student teachers can experiment (Bergen and Vermunt 2008) but research shows they mainly learn the skill of multiperspectivity in actual in-school practice (Johnson 2009; Levin, Hammer, and Coffey 2009; Smits and Janssenswillen 2020). In Flanders, teacher education remains the place of choice for students to become aware of and learn about diversity, intercultural competences and differentiated instruction, as reflected in the online course descriptions collected from the educational master's programmes at the four largest universities in Flanders: diversity and multiperspectivity are addressed in various course modules. In addition to general educational courses, all pre-service teachers take various subject-specific teaching methodology courses that may also cover approaches to diversity or multiperspectivity. An analysis of the Flemish curricula for the subjects in the humanities reveals that diversity is often prescribed as a lesson focus, which leads to the conclusion that extra attention will be devoted to diversity in pedagogical content knowledge modules, or conversely, that future teachers of these subjects have a particular interest in and/or more knowledge of diversity. Additionally, large cities (including their schools) are more diverse than smaller municipalities (Geldof 2019a), which may have an effect on pre-service teachers' experience with and view of diversity as well.

Methodology

From the above rationale, the following research questions were derived:

- RQ 1. *What is the self-efficacy and attitude of student teachers towards multiperspectivity in the classroom?*
- RQ 2. *What factors play a role in the self-efficacy and attitude of student teachers towards multiperspectivity in the classroom?*

Questionnaire

An online Qualtrics survey was conducted with all educational master's students at the university of Brussels and at the Flemish universities of Antwerp, Louvain and Ghent. The questionnaire with six-point Likert scale answers inquired about respondents' awareness of and views on ethnic diversity and how they deal with it in the classroom (cf. infra). It was based on a preliminary draft presented in Janssenswillen (2013), Janssenswillen and Lisaité (2014), and Smits and Janssenswillen (2020) and was preceded with questions on personal data. Based on these, our analysis will look at whether these factors have an influence on student teachers' appreciation of multiperspectivity. Prior to distribution, the questionnaire was tested for clarity and errors with four University of Antwerp educational master's students.

Respondents

An invitation to participate (incl. link to the questionnaire) was emailed to each of the 2091 educational master's students at the four largest Flemish universities (only students who enrolled in the 2020-2021 academic year could participate). Besides reminder messages and Facebook posts, incentives (book vouchers) were used to maximise response. In spite of these efforts, only 203 respondents completed the study. However,

adding to the sample's relevance is the fact that the majority of the respondents are students in a majority-minority city, as will be detailed below.

After removing 18 participants who only answered the informed consent question, 185 (N=185) remained, of which 130 were female (70.3%), 53 male (28.6%) and 2 (1.1%) non-binary. This gender division reflects the teaching force (63% female – 37% male teachers) and student teachers in Flanders (70% female – 30% male students) (AHOVOKS 2021; VMOV 2022). 50.3% (n=93) of the respondents were studying at the University of Antwerp, 24.9% (n=46) at the University of Louvain, 16.2% (n=30) at the University of Brussels and 8.6% at the University of Ghent (n=16). This means that of our sample, 66.5% of pre-service teachers were studying in a majority-minority city. 115 respondents answered all questions, yet all 185 questionnaires have been retained to gauge the target group as accurately as possible. Because of the relatively small sample, the significance level chosen was 10% or 0.1 (Raudys and Jain 1991). The respondents' mean age was 29.67 (M=29.67; SD=9.17), the youngest being 21 and the oldest 60. The majority of the respondents did not grow up in a city as opposed to 23.3% that did grow up in a metropolitan environment and 14.6% that did so during part of their youth.

Variables

The analysis considered the personal data as independent variables. The dependent variables were self-efficacy and attitudes with respect to ethnic diversity. In order to examine the relationship between independent and dependent variables, new variables were first created on the basis of the survey: multiperspectivity, current subject, past field of study in secondary education, and the contexts of secondary and tertiary (teacher) education. To check the relationship between these five items, i.e. to check to what extent items are interrelated and whether they can be replaced by one or more scales, a factor analysis was carried out using a Cronbach's alpha.

Familiarity with ethnic diversity

It was ascertained whether the questions on familiarity with ethnic diversity could be combined into one ‘familiarity’ variable. There is only one eigenvalue that is higher than 1, so that only one scale can be made of the three different questions. It should be noted that the reliability of the scale is not very high. If the first question is removed, the Cronbach’s alpha only increases to 0.411, which is less than the required 0.7.

Based on the following statements, indicate to what extent you are familiar with ethnic diversity.						
	1 (Not/no)	2	3	4	5	6 (Very much)
1. I have friends from ethnic minority groups. How many friends do you mean by this? In what context? _____						
2. I have already taught my subject to pupils from ethnic minority groups. Can you give an explanation? What does this experience consist of? In which schools did you get this experience? What minority groups are involved? _____						
3. I have teaching experience with pupils from ethnic minority groups outside my subject. What is the nature of the experience? Which minorities does it concern? _____						

Student teacher beliefs of ethnic diversity

A factor analysis revealed that the 12 questions on pre-service teachers’ views and opinions need to be split into four scales. Questions 1, 2, 9 and 11 together form a new scale ‘minority groups’ ($\alpha= 0.769$). The analysis showed that questions 3, 6, 7 and 8 are strongly correlated. Therefore, ‘multicultural classes’ is to be a separate scale ($\alpha= 0.638$). For clarity’s sake, the two remaining scales (questions 10a and 10b are strongly correlated, as are 4 and 5) have not been retained.

Use the following statements to indicate your views on ethnic diversity.

	1 (Not/no)	2	3	4	5	6 (Very much)
1. I find teaching students from ethnic minority groups more difficult because of language problems.						
For what exact reason? _____						
2. I find teaching students from ethnic minority groups more difficult because of different values and standards.						
Can you explain? _____						
3. I find that teaching in multicultural classes makes me more aware of my own prejudices, values and beliefs.						
Can you explain? _____						
4. I feel insecure and am afraid of hurting or discriminating against pupils.						
Can you explain? _____						
5. I feel unqualified to teach pupils from ethnic minority groups.						
Can you explain? What do you need to be competent in these classes? What do you miss/is strongly present in you that makes you consider yourself competent or not? _____						
6. I think there is too much emphasis on ethnic diversity in education.						
Can you explain? _____						
7. I think ethnic diversity is not important in my subject because the approach should be the same for everyone.						
Can you explain? _____						
8. I think that by teaching in multicultural classes, I gain more insight myself, because I get more information about other cultures.						
Can you indicate what this insight consists of, preferably by means of concrete examples from your teaching practice? _____						
9. I find classroom management more difficult in a multicultural student group than in a monocultural group.						
Why did you say that you did not experience this as more difficult or what does this difficulty consist of? Does the difficulty lie in your lack of teaching experience or do you think that most experienced teachers also have problems with this? _____						

10. a) I teach with the same enthusiasm whether it is in a multicultural or monocultural classroom.						
Can you explain? _____						
10. b) If I can choose between teaching a multicultural or a monocultural class, it really doesn't matter to me.						
Can you explain? _____						
11. I find that pupils from ethnic minority groups have more learning difficulties.						
Can you explain? _____						

Willingness to cater to ethnic diversity (through multiperspectivity)

The respondents' openness to multiperspectivity and ethnic diversity was surveyed by means of seven questions. The factor analysis shows two eigenvalues greater than 1 but the Scree plot shows that one scale is sufficient. Since the reliability of the scale with all seven questions is very high ($\alpha = 0.868$), it was decided to combine them into one scale.

On the basis of the following statements, indicate your willingness to cater to ethnic diversity.						
	5 (Not/ no)	2	3	4	5	6 (Very much)
1. I consider it important to take into account pupils' prior knowledge, background and cultural values in my lessons.						
Can you explain? _____						
2. I consider it important that in my lessons I take into account the prior knowledge, background and cultural values of pupils from ethnic minority groups.						
Can you explain? _____						
3. I consider it important that in my lessons pupils learn to approach a subject from different angles or in a multiperspectivist way.						
Can you explain? _____						
4. I consider it important that in my lessons pupils learn that ethnic minority groups experience the present from a different perspective.						
Can you explain? _____						
5. I consider it important that in my lessons pupils learn to empathise with other people from the present or the past.						
Please explain your answer. Are there subjects for which you consider empathy with other people less important? _____						

6. I consider it important that I also introduce pupils to sensitive and controversial topics in my lessons.						
Can you explain? _____						
7. I consider it important that I can answer questions from pupils from ethnic minority groups related to their background.						
Can you explain? _____						

Knowledge of ethnic diversity and multiperspectivity

Seven items assessed the respondents' theoretical knowledge. The factor analysis showed a strong correlation, allowing for one scale. The Cronbach's alpha is 0.921, which shows that the reliability of this scale is very high.

Indicate your knowledge of multiperspectivity ¹ and ethnic diversity on the basis of the following statements.						
	1 (Not/no)	2	3	4	5	6 (Very much)
1. I know how to take into account students' prior knowledge, background and cultural values in my teaching.						
2. I know how to take into account the prior knowledge, background and cultural values of students from ethnic minority groups in my lessons.						
3. I know how to make students aware of the importance of approaching a subject from different angles or in a multiperspectivist way in my lessons.						
4. I know how to make students aware of the fact that ethnic minority groups experience society from a different perspective.						
5. I know how to teach students to empathise with other people from the present or the past in my lessons.						
6. I know how to introduce students to sensitive and controversial topics in my lessons.						
7. I know how to answer questions related to the background of students from ethnic minority groups in my lessons.						
Please explain your answers here. _____						

Application of diversity competences and multiperspectivity

The survey gauged the application of multiperspectivity in the classroom by means of six

statements. The factor analysis pointed out that they are strongly correlated and can be made into one variable. The Cronbach's alpha is 0.927.

Indicate your practical application of multiperspectivity <u>and</u> ethnic diversity on the basis of the following statements.	1 (Not/no)	2	3	4	5	6 (Very much)
1. I succeed in taking into account students' prior knowledge, background and cultural values in any learning content in my lessons.						
2. In my lessons, I succeed in making students aware of the importance of approaching learning content from different angles or with a multiperspectivist view.						
3. In my lessons, I succeed in making students aware of the fact that ethnic-cultural minority groups experience society from a different perspective.						
4. In my lessons, I succeed in teaching students to empathise with other people from the present or the past.						
5. In my lessons, I succeed in getting students to engage in dialogue about sensitive and controversial issues.						
6. In my lessons, I succeed in giving substantiated answers to questions related to the background of students from ethnic minority groups.						
Please explain your answers here. _____						

Operationalisation of personal data

To find out if personal characteristics – especially the independent variables – influence the different variables that make up the multiperspectivist view of student teachers, new variables were constructed.

A first distinction was made between the subjects the respondents are preparing themselves for. They were divided into ‘humanities’ and ‘exact sciences’. For the second new variable (‘secondary-school field of study’), a distinction was made between the disciplines the respondents majored in in secondary education. Clustering consisted of humanities, exact sciences, languages and disciplines that included both exact sciences and languages. Further, to investigate if student teachers who attended a secondary school

in a city have a more outspoken multiperspectivist attitude or higher self-efficacy, the respondents' secondary school postal codes were divided into a 'city' and a 'no city' group, providing the 'Secondary school in city' variable. Finally, the university context of teacher education can affect diversity and multiperspectivity beliefs too. To register this difference, three new variables were created: 'KUL', 'Ugent' and 'VUB' (for the universities of Louvain, Ghent and Brussels). They get a score of 1 if the student teacher is enrolled at this university. Antwerp University acts as the reference group because it represents the largest respondent group.

Results

Since linear regressions are involved, a number of assumptions were tested beforehand (Bijleveld and Commandeur 2012). The VIF test revealed that the scores for all independent variables are below 10: there is no multicollinearity in the data. The scatter plot showed a linear relationship between the dependent variable and the independent variables. The error term shows the same spread, as stated by the homoscedasticity assumption. Since the variables show a normal course, all assumptions are met.

Familiarity with ethnic diversity

On average, the Flemish master's student teachers score 2.73 out of 6 on this scale. Their awareness of ethnic diversity is actually (very) low. At the same time, we detect considerable differences. The first linear regression examined which independent variables have an influence on the respondents' familiarity with ethnic diversity: the Brussels students (VUB) score significantly better ($t(147) = 1.87; p < 0.1$) compared to the reference group (Table 1). Student teachers from the universities of Louvain (KUL) and Ghent (Ugent) score lower, but this effect is not significant ($t(147) = -0.14; p = 0.89$ and $t(147) = -0.64; p = 0.53$). Based on gender ($t(147) = 0.33; p = 0.74$) or age ($t(147) = -0.29;$

$p=0.77$), we detect no significant difference between the groups but a difference between the students' subjects does exist. With -0.43 , exact science subjects score significantly lower on the familiarity aspect of student teachers ($t(147) = -1.80$; $p<0.1$). Another difference exists between students who did and did not grow up in a city: respondents who did score higher on the familiarity scale ($t(147) = 1.92$; $p<0.1$). Visiting a secondary school in an urban environment does not have an effect ($t(147) = 0.17$; $p=0.86$), as does the discipline one majored in at secondary school.

[INSERT Table 1 HERE]

Student teacher beliefs of ethnic diversity

As to views on multicultural classrooms, the Flemish pre-service teachers score an average of 4.39: they are rather positive about multiculturalism in education. However, the second model in Table 1 shows that female and non-binary respondents are more positive about multiculturalism than men ($t(111)=3.73$; $p<0.001$). Their university (context) does not have an effect. The third model maps student teachers' attitudes towards minority groups. On average, they indicated to have (very) little fear of teaching them ($M=2.56$). Table 1 shows an effect for growing up in a metropolitan context: these trainee teachers are significantly more favourable towards minorities ($t(105)=-2.36$; $p<0.05$). Finally, we also see that secondary-school exact science and languages majors have a significantly more negative attitude towards ethnic diversity compared to teachers with a humanities school background ($t(105)=1.805$; $p<0.1$). The other independent variables displayed no effect on attitudes towards minorities.

Willingness to cater to ethnic diversity (through multiperspectivity)

In terms of fundamental willingness to constructively address diversity, the respondents scored 4.52 on average: they are rather to very much willing to engage with

multiperspectivity in their classes. However, model 4 (Table 2) shows that in terms of willingness to apply multiperspectivity, female and non-binary respondents are significantly more willing to do so than men ($t(99)=2.45$; $p<0.05$). In addition, the VUB, KUL and Ugent respondents score lower than their Antwerp University fellow students, but this effect is only significant for KUL students ($t(99)=-2.75$; $p<0.01$). Trainee teachers' (future) school subjects also bear significance: who trains to be a teacher in the field of the humanities scores significantly higher ($t(99)=-3.39$; $p=0.001$).

[INSERT Table 2 HERE]

Knowledge of ethnic diversity and multiperspectivity

In general, Flemish master's student teachers have medium knowledge about multiperspectivity in the classroom ($M= 3.63$). The linear regression showed a significant effect for the respondents' (future) school subject: students in the humanities score significantly better in terms of theoretical knowledge of the matter ($t(100)=-3.06$; $p<0.01$).

Application of diversity competences and multiperspectivity

It also appears that the application of multiperspectivity in the classroom is rather average ($M= 3.32$) and respondents preparing for a teacher career in the humanities score significantly higher ($t(95)=-1.71$; $p<0.1$). Regarding the aspects that influence the application of multiperspectivity, familiarity ($t(101)=2.47$; $p<0.05$) and theoretical knowledge ($t(101)=7.85$; $p<0.001$) prove to be good predictors (Table 3); beliefs on multiculturalism and minority groups, and the willingness to implement multiperspectivity do not.

[INSERT Table 3 HERE]

Discussion

The purpose of this study is to investigate the attitude of student teachers towards multiperspectivity in education by means of a written survey on the degree of familiarity with and views on ethnic diversity, and theoretical knowledge about, readiness for, and the practical application of multiperspectivity. On the first research question, “*What is the self-efficacy and attitude of student teachers towards multiperspectivity in the classroom?*”, Brussels respondents scored significantly better. Interestingly, student teachers in the two Belgian majority-minority cities differ from each other in terms of familiarity with ethnic diversity. A possible explanation is that Brussels has had its majority-minority status longer than Antwerp (Geldof 2019b). At the same time, Antwerp respondents score significantly better on willingness to adopt a multiperspectivist attitude compared to students in Louvain and Brussels. Respondents from Ghent University also scored lower but this effect was not significant due to a limited number of respondents.

Growing up in an metropolitan context appears to be a very good predictor of greater familiarity with ethnic diversity in education. This can be explained by the fact that, in general, more (ethnic) diversity exists in cities (Geldof 2017). Respondents from urban areas may take this familiarity into adulthood and probably bring it to their pedagogical training. It is possible that more respondents studying in Brussels grew up in this metropolitan context than the Antwerp students: it is a fact that the (French-dominated) capital is less attractive to Flemish suburban residents. Merely going to school in a city seems insufficient to ensure (a clear difference in) familiarity with ethnic diversity.

Student teachers specialising in a humanities subject score significantly higher on theoretical knowledge about multiperspectivity. An explanation lies in the attested presence of diversity-related subjects in their academic curriculum. No significant effects were found for age, in contrast to Fine-Davis and Faas (2014) and EMCRX (2005) that

found an intergenerational difference in attitudes towards diversity in the classroom among adolescents, altogether a different age group.

The second research question was: *“What factors play a role in the self-efficacy and attitude of student teachers towards multiperspectivity in the classroom?”* Familiarity with ethnic diversity is a good predictor for the application of a multiperspectivist view to teaching. The average score indicates that student teachers in general have (very) little familiarity with ethnic diversity. In the same vein, Anthonissen et al. (2015) called for a better understanding of multiperspectivity in teacher education programmes. Increasing familiarity with ethnic diversity can be achieved by giving the urban context a place within the curriculum.

However, when looking at factors influencing attitudes towards multiperspectivity, our analysis shows no significant effect of the theoretical knowledge offered in the respective programmes. A correlation was found between knowledge and practical application, but no causal relationship: student teachers very familiar with ethnic diversity and feeling that they have substantial knowledge of the matter report intensive application of multiperspectivity in their teaching practice. The reason could be that pre-service teachers develop a multiperspectivist view mainly in their educational practice (Smits and Janssenswillen 2020), linked to their theoretical knowledge. Possibly, this knowledge is further enhanced by gaining more experience. It may also be linked to the focus of student teachers during their first practical experiences, which is more on conveying learning content and classroom management (Levin, Hammer, and Coffey 2009).

Studying the pedagogy of a humanities subject appears to be positively related to familiarity with ethnic diversity, as well as a readiness to engage with and apply multiperspectivity in classroom practice. There appeared to be a correlation between both

the familiarity and practical application, and the knowledge and practical application scales. Again, we cannot determine the correlations' direction, but it does show that raising multiperspectivity knowledge in non-humanities student teachers can have a positive effect on their practice.

For gender, the significant effects are limited. Only on the willingness to work with multiperspectivity in classroom practice do female and non-binary students score significantly higher than men. This confirms the same trend of a more positive attitude towards diversity in the classroom that Fine-Davis and Faas (2014) found.

Conclusion

This study sought to answer the question *“To what extent are student teachers ready for multiperspectivity in education?”* We can conclude that there are marked differences between student teachers. Whoever grew up in a city is more familiar with ethnic diversity, which corresponds with literature as well as intuition, since there is much more diversity in urban communities. Furthermore, Belgian humanities students feature higher familiarity with ethnic diversity, as well as a higher willingness to and more theoretical knowledge about multiperspectivity, and they apply multiperspectivity more intensively compared to students specialising in non-humanities subjects. Both familiarity and knowledge are important predictors of the application of multiperspectivity in the classroom. Student teachers in this study are reserved when it comes to their practical application of multiperspectivity, possibly because not all are equally familiar with diversity and have the same amount of pedagogical knowledge on the topic. In teacher education curricula, more attention could be paid to this, so that all pre-service teachers can acquire enough competences to be successful in front of the 21st-century classroom with a multiperspectivist view and solutions for its practical application.

More in-depth follow-up research into the actual theoretical and practical content of teacher education programmes and into the provision of practical examples of pedagogical multiperspectivity by teacher educators is relevant in order to make thorough comparisons between the various academic programmes and to measure their effect. By means of a longitudinal study, instead of our cross-sectional approach, student teachers can be questioned at various points in time to measure the evolution in their (diversity) competences and to examine the correlation between significant factors such as theoretical knowledge and practical experience, and the prevailing attitudes among (student) teachers.

Acknowledgements

The authors thank their students Demelza Koster, Lies Rogiers, Toon Jansen, and Matias Van Daele, who aided them during the fieldwork phase of the study.

References

- AHOVOKS. 2021. *Hoger onderwijs in cijfers. Academiejaar 2021-2022* [Higher education in figures. Academic year 2021-2022]. Accessed August 2022. <https://publicaties.vlaanderen.be/view-file/47249>.
- Agirdag, O., M. Van Houtte, and P. Van Avermaet. 2012. Ethnic school segregation and self-esteem: The role of teacher-pupil relationships. *Urban Education* 47 (6): 1135–1159.
- AII – Agentschap Integratie en Inburgering. (2022). *Cijfers inburgering en Nederlands leren* [Figures for civic integration and learning Dutch]. Accessed June 2022. <https://www.integratie-inburgering.be/cijfers>.
- Anthonissen, L., K. Goosen, S. Lenaerts, P. J. Schittecat, T. F. H. Smits, and E. Tanghe. 2015. Binnenklasdifferentiatie in het curriculum van de lerarenopleiding

[Differentiation in the teacher education curriculum]. *Tijdschrift voor Lerarenopleiders* 36 (3): 17–27.

Barzilai, S., and M. Weinstock. 2020. “Beyond Trustworthiness: Comprehending Multiple Source Perspectives.” In *Handbook of Learning from Multiple Representations and Perspectives*, edited by P. Van Meter, A. List, D. Lombardi, and P. Kendeou, 123–140. New York, Abingdon: Routledge.

Bergen, T. C. M., and J. Vermunt. 2008. Het leren van leraren op de werkplek [Teacher learning in the workplace]. *Tijdschrift voor Lerarenopleiders* 29 (4): 45–53.
https://repository.uhn.ru.nl/bitstream/handle/2066/30148/30148_lerevaleo.pdf.

Bijleveld, C. C. J. H., and J. J. F. Commandeur. 2012. *Multivariate analyse: een inleiding voor criminologen en andere sociale wetenschappers* [Multivariate analysis: an introduction for criminologists and other social scientists]. Den Haag: Boom.

Birch, S. H., and G.W. Ladd. 1997. The teacher-child relationship and children's early school adjustment. *Journal of School Psychology* 35 (1): 61–79.

Bowlby, J. 1982. Attachment and loss: retrospect and prospect. *American journal of Orthopsychiatry* 52 (4): 664–678.

Burman, G., M. Burman, M. Mommaerts, and P. Janssenswillen. 2020. Urban education. In *Leraren opleiden in een superdiverse samenleving* edited by T.F.H. Smits, P. Janssenswillen, and W. Schelfhout, 38–76. Leuven: Acco.

Burns, T., and V. Shadoian-Gersing. 2010. The importance of effective teacher education for diversity. In *Educating Teachers for diversity. Meeting the challenge* edited by: T. Burns, and V. Shadoian-Gersing, 19–39. Paris: OECD.

Buyse, E., K. Verschueren, P. Verachtert, and J. V. Damme. 2009. Predicting school adjustment in early elementary school: Impact of teacher-child relationship

- quality and relational classroom climate. *The Elementary School Journal* 110 (2): 119–141.
- Camp, E. 2017. Perspectives in imaginative engagement with fiction. *Philosophical Perspectives* 31 (1): 73–102.
- Camp, E. 2020. “Imaginative frames for scientific inquiry: Metaphors, telling facts, and just-so stories.” In *The scientific imagination: Philosophical and psychological perspectives*, edited by P. Godfrey-Smith and A. Levy. Oxford: Oxford University Press.
- Cho, B.-Y., L. Kucan, and E. C. Rainey. 2020. “Students’ Perspective Learning in a Disciplinary Multisource Task Environment.” In *Handbook of Learning from Multiple Representations and Perspectives*, edited by P. Van Meter, A. List, D. Lombardi, and P. Kendeou, 276–293. New York, Abingdon: Routledge.
- Clycq, N., C. Timmerman, P. Van Avermaet, P., J. Wets, and P. Hermans. 2014. *Oprit 14: Naar een schooltraject zonder snelheidsbeperkingen* [Driveway 14: Towards a school route without speed limits]. Gent: Academia Press.
- Crevits, H. J. 2014. *Beleidsnota 2014–2019 onderwijs* [Policy document 2014-2019 education]. Accessed October 2014. <https://publicaties.vlaanderen.be/view-file/15682>.
- De Decker, P., B. Vandekerckhove, E. Volckaert, and M. F. Lebbe. 2019. *Uit Genk: gaan wonen bij de burens* [From Genk: living with the neighbours]. Antwerpen: Gompel&Svacina.
- D’haveloose, E., & L. Heylen. 2006. ‘Diverse’ lectoren... diverse studenten? *Sluitstuk van een jaar nadenken met lectoren en organisaties over diversiteit in de lerarenopleidingen* [‘Diverse’ lecturers... diverse students? The conclusion

- of a year of reflection with lecturers and organisations on diversity in teacher education]. Brussel: Vlaamse overheid Departement Onderwijs en Vorming.
- Dover, A. G. 2013. Teaching for social justice: From conceptual frameworks to classroom practices. *Multicultural perspectives* 15 (1): 3–11.
- EMCRX – European Monitoring Centre on Racism and Xenophobia. 2005. *Attitudes towards migrants and minorities in Europe*. Wien: Manz Crossmedia.
- 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.
- Geldof, D. 2017. *Vluchtelingen, onderwijs & superdiversiteit. De context in beeld. Bijdrage voor de Strategische Verkenning Vluchtelingen & Onderwijs* [Refugees, education & superdiversity. The context in the picture. Contribution to the Strategic Exploration: Refugees & Education]. Brussel: VLOR.
- Geldof, D. 2019a. *Superdiversiteit: Hoe migratie onze samenleving verandert* [Superdiversity: How migration changes our society]. Leuven: Acco.
- Geldof, D. 2019b. De transitie naar superdiversiteit en majority minority-cities. Over de nood aan interculturalisering van politie en justitie [The transition to superdiversity and majority-minority cities. On the need for interculturalisation of police and justice]. *Panopticon* 40 (5): 368–387.
- Grabe, W. 1998. *Annual Review of Applied Linguistics: Foundations of second language teaching, Volume 18*. Cambridge: Cambridge University Press.
- Hamre, B. K., and R. C. Pianta. 2001. Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child development* 72 (2): 625–638.

- Hoffman, E. 2009. *Interculturele gespreksvoering: Theorie en praktijk van het TOPOI-model* [Intercultural dialogue: Theory and practice of the TOPOI model]. Houten: Bohn Stafleu van Loghum.
- Janssenswillen, P. 2013. *Geschiedenisonderwijs en etnisch-culturele diversiteit: hoe begin je eraan?* [Teaching history and ethnic-cultural diversity: how to start?]. Leuven: P-reviews.
- Janssenswillen, P. and D. Lisaité. 2014. History education and ethnic-cultural diversity. *Journal of Didactics* 5: 18–63.
- Johnson, Karen E. 2009. *Second Language Teacher Education: A Sociocultural Perspective*. New York: Routledge.
- Levin, D. M., D. Hammer, and J. E. Coffey. 2009. Novice Teachers' Attention to Student Thinking. *Journal of Teacher Education* 60 (2): 142–154.
- List, A., and P. A. Alexander. 2018. Postscript: In pursuit of integration. *Learning and Instruction* 57: 82–85.
- List, A., P. Van Meter, D. Lombardi, and P. Kendeou. 2020. “Loggers and Conservationists: Navigating the Multiple Resource Forest through the Trees.” In *Handbook of Learning from Multiple Representations and Perspectives*, edited by P. Van Meter, A. List, D. Lombardi, and P. Kendeou, 1–13. New York, Abingdon: Routledge.
- Myria. 2021. *Migratie in cijfers en in rechten. Katern uit het jaarverslag 2021: Bevolking en migratiebeweging* [Migration in figures and in rights. Quire from the Annual Report 2021: Population and migration movement]. Accessed April 2021. https://www.myria.be/files/2021_Bevolking_en_migratiebewegingen.pdf.

- Murray, C., and M. T. Greenberg. 2000. Children's relationship with teachers and bonds with school an investigation of patterns and correlates in middle childhood. *Journal of School Psychology* 38 (5): 423–445.
- Raudys, S. J., and A. K. Jain. 1991. Small sample size effects in statistical pattern recognition: Recommendations for practitioners. *IEEE Transactions on pattern analysis and machine intelligence* 13 (3): 252–264.
- Sierens, S. 2007. *Leren voor diversiteit: leren in diversiteit: burgerschapsvorming en gelijke leerkansen in een pluriforme samenleving: een referentiekader* [Learning for diversity: learning in diversity: citizenship education and equal opportunities in a pluralistic society: a frame of reference]. Accessed May 2016. https://www.researchgate.net/publication/303541088_Leren_voor_diversiteit_-_leren_in_diversiteit_Burgerschapsvorming_en_gelijke_kansen_in_een_pluriforme_samenleving_Een_referentiekader.
- Siwatu, K. 2007. Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education* 23: 1086–1101.
- Smits, T. F. H., and P. Janssenswillen. 2020. Multicultural teacher education: a cross-case exploration of pre-service language teachers' approach to ethnic diversity. *International Journal of Qualitative Studies in Education* 33 (4): 421–445.
- Stad Antwerpen. 2022. *Waarom is Antwerpen een majority-minoritystad* [Why is Antwerp a majority-minority city]. Accessed June 2022. <https://www.diversiteitspraktijk.be/artikels/waarom-is-antwerpen-een-majority-minoritystad>.
- Statbel. 2022. *Diversiteit naar herkomst in België* [Diversity by origin in Belgium]. Accessed June 2022. <https://statbel.fgov.be/nl/themas/bevolking/herkomst#news>.

- Stradling, R. 2003. *Multiperspectivity in history teaching: A guide for teachers*: Strasbourg: Council of Europe.
- Triandafyllidou, A. 2011. *Addressing Cultural, Ethnic & Religious Diversity Challenges in Europe: A Comparative Overview of 15 European Countries*. <https://cadmus.eui.eu/>.
- Vertovec, S. 2007. Super-diversity and its implications. *Ethnic and Racial Studies* 30 (6): 1024–1054.
- VMOV – Vlaams ministerie van Onderwijs & Vorming. 2022. *Statistisch jaarboek van het Vlaams onderwijs 2020-2021* [Statistical yearbook of Flemish education 2020-2021]. Accessed August 2022. <https://onderwijs.vlaanderen.be/nl/onderwijsstatistieken/statistisch-jaarboek/statistisch-jaarboek-van-het-vlaams-onderwijs-2020-2021>.
- VSA – Vlaamse Statistische Autoriteit. 2022. *Bevolking naar nationaliteit* [Population by nationality]. Accessed June 2022. <https://www.vlaanderen.be/statistiek-vlaanderen/bevolking/bevolking-naar-nationaliteit>.

Table 1. Linear multiple regressions predicting student teachers' familiarity and perceptions (beliefs) of multicultural classes and minority groups based on the control variables. Values are non-standardised coefficients with the standard errors in brackets (*= $p \leq 0,1$ **= $p \leq 0,05$ ***= $p \leq 0,001$).

	Model 1 (Familiarity)			Model 2 (Beliefs multicultural classrooms)			Model 3 (Beliefs minority groups)		
Concept	3.03	(0.60)	***	4.34	(0.47)	***	2.29	(0.51)	***
Sex (Ref: male)									
- female + X (non-binary)	0.08	(0.25)		0.70	(0.19)	***	0.14	(0.20)	
University (Ref: UA)									
- KUL	-0.04	(0.26)		-0.24	(0.20)		0.33	(0.21)	
- VUB	0.57	(0.30)	*	0.03	(0.26)		0.33	(0.28)	
- UGent	-0.27	(0.42)		-0.07	(0.32)		-0.15	(0.34)	
Age	-0.00	(0.01)		-0.00	(0.01)		-0.01	(0.01)	
Exact science subject	-0.43	(0.24)	*	-0.25	(0.18)		-0.07	(0.19)	
Grown up in city	0.50	(0.26)	*	-0.02	(0.21)		-0.52	(0.22)	**
Secondary school in city	0.04	(0.23)		0.14	(0.18)		0.16	(0.19)	
Secondary-school field of study (Ref: humanities)									
- Exact sciences	0.07	(0.35)		-0.06	(0.28)		0.32	(0.31)	
- Languages	0.33	(0.38)		0.42	(0.32)		0.13	(0.36)	
- Exact sciences-Languages	0.34	(0.25)		0.13	(0.19)		0.37	(0.20)	*
F	1.604			3.141		***	1.668		**
Adjusted R²		0.040			0.162			0.06	
Std. Error of the Estimate		1.27094			0.87838			0.92646	
N		159			123			117	

Table 2. Linear multiple regressions predicting student teachers' willingness for, and theoretical knowledge and practical application of multiperspectivity based on the control variables. Values are non-standardised coefficients with the standard errors in brackets (*= $p \leq 0,1$ **= $p \leq 0,05$ ***= $p \leq 0,001$).

	Model 4 (Willingness)			Model 5 (Knowledge)			Model 6 (Application)		
Concept	5.40	(0.49)	***	4.46	(0.50)	***	3.86	(0.61)	***
Sex (Ref: male)									
- female + X (non-binary)	0.49	(0.20)	**	0.15	(0.20)		0.13	(0.25)	
University (Ref: UA)									
- KUL	-0.57	(0.21)	**	0.04	(0.22)		0.34	(0.27)	
- VUB	-0.33	(0.26)	*	0.18	(0.27)		0.46	(0.33)	
- UGent	-0.20	(0.32)		0.44	(0.34)		0.49	(0.41)	
Age	0.00	(0.01)		0.00	(0.01)		0.00	(0.01)	
Exact science subject	-0.63	(0.19)	***	-0.59	(0.19)	**	-0.41	(0.24)	*
Grown up in city	0.15	(0.21)		0.32	(0.22)		0.23	(0.27)	
Secondary school in city	0.01	(0.18)		-0.16	(0.19)		-0.20	(0.24)	
Secondary-school field of study (Ref: humanities)									
- Exact sciences	-0.30	(0.29)		-0.26	(0.30)		-0.37	(0.36)	
- Languages	0.20	(0.33)		-0.18	(0.34)		-0.29	(0.42)	
- Exact sciences-Languages	0.20	(0.20)		0.20	(0.20)		0.24	(0.26)	
F	4.233		***	1.797		*	1.006		
Adjusted R²		0.244			0.073			0.001	
Std. Error of the Estimate		0.86989			0.90317			1.09209	
N		111			111			117	

Table 3. Linear multiple regressions predicting student teachers' application of multiperspectivity based on the control variables. Values are non-standardised coefficients with the standard errors in brackets (* = $p \leq 0.1$ ** = $p \leq 0.05$ *** = $p \leq 0.001$)

Model 7 (Application)			
Constant	-0.16	0.51	
Familiarity	0.16	0.07	**
Beliefs multicultural classrooms	0.02	0.10	
Beliefs minority groups	0.12	0.09	
Willingness	-0.04	0.10	
Knowledge	0.75	0.10	***
F	22.471		***
Adjusted R²		0.513	
Std. Error of the Estimate		0.78227	
N		103	