



# Improving culturally responsive teaching through professional learning communities: A qualitative study in Dutch pre-vocational schools

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## ABSTRACT

In this study, teachers participated in professional learning communities (PLCs) focusing on culturally responsive teaching. Twelve teachers were interviewed to gain more insight into how teachers participated in these PLCs and the extent to which participation impacted culturally responsive competences. The results showed that participating in a PLC seems to result in *joint work* or *shared practices*. Moreover, it seems to change the attitude and beliefs of all teachers and the knowledge and skills of some teachers. To apply these competences in the classroom, teachers need more time and detailed information on how to improve teaching materials.

## 1. Introduction

The Netherlands is a culturally diverse society where 23 % of the population has a migrant background (CBS [Statistics Netherlands], 2019). About 12 % of the people with a migrant background are from non-Western countries such as Turkey, Morocco, Surinam or the former Dutch Antilles and Aruba (CBS, 2016). Substantial numbers of people coming from other non-Western countries such as Yugoslavia, Iran, Iraq, Somalia, Afghanistan and Syria also live in the Netherlands. These different ethnic groups consist of many subcultures, which makes the Netherlands a superdiverse society (Severiens, 2014; Vertovec, 2007), resulting in culturally diverse classrooms, especially in the metropolitan cities.

Students in Dutch secondary follow either the academic track (HAVO/VWO) or the pre-vocational track (VMBO). Cultural diversity is especially manifest in pre-vocational education. In school year 2015/2016, 52 % of native Dutch third-year students in secondary education were enrolled in the VMBO track whereas 75 % were of those with a Turkish or Moroccan background, 65 % of those with a Surinamese background, and 69 % of those from the former Dutch Antilles and Aruba (CBS, 2016). The over-representation of students from migrant backgrounds in pre-vocational education indicates an achievement gap (see also OCW, 2018).

One possible explanation for the achievement gap relates to the quality of teaching in schools serving diverse student populations (Hargreaves & Fullan, 2012). Research shows that many teachers feel they lack competence in considering cultural diversity in the classroom (Spanierman et al., 2011; Vervaet, Van Houtte, & Stevens, 2018). From a social justice perspective, in a culturally diverse society competence in working with diverse classrooms is important for improving academic performance and student well-being and, ultimately, reducing the achievement gap.

The current research investigated how to support teachers in developing their competence in diverse classrooms. Insights from

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research on effective professional development (Admiraal, Lockhorst, & van der Pol, 2012; Little, 1990; Lomos, Hofman, & Bosker, 2011) were used to design a programme, including establishing professional learning communities (PLCs) that would meet six times during one school year. The goal of these PLCs was to redesign and implement lesson plans according to the theory of culturally responsive teaching (CRT) (e.g., Banks, 2004; Gay, 2002, 2010; Ladson-Billings, 1995a, 1995b). Below, we firstly review the theory and research on CRT and secondly describe the rationale of our programme using PLCs.

### 1.1. Culturally responsive teaching

Teaching in a culturally diverse classroom can pose specific dilemmas. For instance, how should teachers respond when students feel discriminated against because, they only experience room for Western issues such as the Charlie Hebdo attack in Paris in 2015, and not for the Palestinian conflict (SCP [Dutch Social and Cultural Planning Office], 2015)? Gay (2002) argues that in a culturally diverse society, teachers should be aware of the challenges of culturally diverse classrooms and develop competences in order to deal with these challenges. According to CRT theory, the competences teachers need consist of a positive attitude towards cultural diversity, knowledge about different cultural backgrounds, and skills to use their attitude and knowledge to stimulate learning in all children (Spanierman et al., 2011). A positive attitude towards cultural diversity includes being open to other views (Santamaria, 2009), seeking learning opportunities about different cultures and communities (Gay, 2002; Ladson-Billings, 1995a; Santamaria, 2009), and being conscious of one's own as well as others' background (Shadid, 2000). Knowledge about different cultural backgrounds means knowing about norms and values of other cultures and about the contribution of different ethnic groups in society (Gay, 2002), for instance knowing what Arabs and Chinese contributed to the development of mathematics. Skills to stimulate learning in all children means having the didactic and pedagogical skills to teach in culturally diverse classrooms (Gay, 2002). Additionally, Ladson-Billings (1995b) emphasises the importance of critical consciousness and student empowerment. This requires critical consciousness on the part of teachers as well, meaning the skills one should develop to "identify, analyse, and solve real world problems" (Ladson-Billings, 2014, p.75). Critical consciousness can help teachers to change their beliefs and broaden their perspectives on cultural diversity, which subsequently enables them to provide students with the skills to be conscious and critical of socio-political factors.

As CRT states that teachers need to be not just culturally competent, but also able to implement these attributes, in our study we structured the CRT concept as consisting of two elements: competence and implementation. The second characteristic of CRT in this study, implementation, refers to teachers applying these competences in the classroom, meaning that they adapt instruction, curriculum and/or teaching content to the cultural backgrounds of students by taking their differences in prior knowledge, experiences, readiness, language, culture and interests into account. This is expected to result in better learning performance and more interested learners (Santamaria, 2009).

### 1.2. The rationale for our programme

Research shows that many teachers feel they lack competence in taking cultural diversity in the classroom into account (Spanierman et al., 2011; Vervaet et al., 2018). Professional development is therefore crucial in order to increase competence in addressing the educational needs of diverse student groups (Banks et al., 2001). One reason for the lack of implementation of CRT in the classroom may be that previous professional development programmes aiming to improve teachers' cultural responsiveness in teachers have taken the form either of add-on courses for pre-service teachers or individually oriented short training workshops for practising teachers; many of them are situated outside the school and do not concern daily teaching practices (Van Veen, Zwart, Meirink, & Verloop, 2010), or are organised within teacher networks where dialogue is the focus instead of improving the status quo (e.g. Blachet-Cohen, & Reilly, 2013; Leeman & Ledoux, 2003; Maasum, Maarof, & Ali, 2014; Rissanen, Kuusisto, & Kuusisto, 2016; Vass, 2017). Some courses show effects on attitudes and beliefs, but remain unclear on actual classroom practices. The reason for this may be that these programmes seem to focus more on intercultural interaction with students and the acceptance of cultural diversity among students, than on classroom practices such as adapting the teaching practice and lesson content. Therefore, in the design of our programme, we specifically invited teachers to change classroom practices, for example by adapting the content of an existing lesson. Additionally, we used insights from the literature on effective professional development concerning PLCs. PLCs are known to improve teaching practices and positively affect student achievement by encouraging their members to collaborate on a specific goal, share daily teaching practices and experiences, provide social support and co-design lessons (Admiraal et al., 2012; Little, 1990; Lomos et al., 2011). Reflection, analysis and inquiry into teaching are important PLC activities. These ways of discussing daily teaching practices contribute to teacher development and improvement of student learning (Lomos et al., 2011). Given these insights, our programme established PLCs in an attempt to have a larger impact on teaching practice compared to former programmes.

### 1.3. The present study

As teachers seem to experience difficulties when teaching in a culturally diverse classroom and often lack profound knowledge about cultural backgrounds and teaching skills in these classrooms (Chouari, 2016), working together in within-school PLCs might help to improve their competence (i.e., attitude towards cultural diversity, knowledge about cultural diversity and teaching skills (e.g., Mushi, 2004; Spanierman et al., 2011)) and the implementation of these competences in the classroom. By collaborating, teachers could learn from each other how to teach in a culturally responsive manner. In the present study, we investigated whether CRT competence is improved by participating in a within-school PLC. The research questions were:

- 1) How do teachers work on CRT in a PLC (RQ1)?
- 2) To what extent does participating in a PLC impact competence in CRT and implementation of CRT (RQ2)?

To answer the research questions, we observed participating teachers during the PLC meetings and interviewed them afterwards.

By combining knowledge from research on CRT and from effective professional development programmes, we hope to provide more insight into ways to support teachers in learning to address cultural diversity in their classrooms. These insights could help improve students' motivation and well-being and reduce the achievement gap.

## 2. Method

### 2.1. Participants

VMBO schools located in metropolitan cities and from our own network were invited to participate in this study. Two VMBO schools agreed to participate, one located in an urban area (school 1) and one in a rural area (school 2). Approximately 40 % of school 1's student population is from migration background against approximately 8% of the students in school 2.

A total of 20 teachers started in our programme. Participation was voluntary and participants could withdraw from the study anytime. Five teachers did so, mostly because of health problems or other educational duties. Fifteen teachers ( $n_{\text{male}} = 9$ ,  $n_{\text{female}} = 6$ ; all from a native Dutch background) participated in the programme from September 2016 until June 2017. Teachers' mean age was 35.67 ( $SD = 9.95$ ) and the average teaching experience was 8.60 years ( $SD = 9.09$ ).

### 2.2. The PLC programme

The teachers were grouped into PLCs consisting of three to five teachers. We asked schools to form groups of teachers teaching similar subjects. Four PLCs were formed, and six meetings were planned at the participating schools, as well as a collective starting session and a closing session. Most meetings took place at intervals of five to six weeks. The members of two PLCs (PLC A Schools 1 & 2) met at least four times as a group. The members of the two other groups (PLC B Schools 1 & 2) met up to three times as a group, meaning that, for instance, some teachers only participated twice but were informed by their colleagues afterwards. Hence, these teachers were still involved in the PLC although they were not present during the meeting. Table 1 presents an overview of the teams.

#### 2.2.1. Procedure

At the first PLC meeting, teachers received an instruction manual to guide them through the meetings. In this study, we aimed to achieve the highest level of interaction, which is *joint work* (cf. Little, 1990). To stimulate teachers to achieve joint work, the instruction manual was based on the concept of Lesson Study (Chokshi & Fernandez, 2004) which is a form of professional development that focuses on teacher learning through collaboration and reflection on teaching practice (Chassels & Melville, 2009; Schipper, Goei, De Vries, & Van Veen, 2017). As Lesson Study is a cyclical process, we invited teachers to work on CRT in five phases of Lesson Study formalised by Van der Vugt (2015) as follows: 1) formulating a learning goal, 2) developing a research lesson, 3) putting the lesson into practice, observing and evaluating, 4) reflecting and revising and 5) sharing knowledge. In the first meeting, all teams were instructed for the following meetings to collaborate, share knowledge and teaching practices, and to reflect on individual teaching practices about cultural diversity during these five phases. Furthermore, they were instructed to collaborate on designing a culturally responsive lesson, to try out this lesson in the classroom and to evaluate it afterwards. The final stage of the PLC programme comprised a closing

**Table 1**  
Participant characteristics.

PLC	Subject	Teacher code	Number of PLC meetings attended
School 1			
A	History & religion	A1	6
	Economics	A2	6
	Economics	A3	5
	Geography	A4	6
	History & social sciences	A5	4
B	Sports	B1	1
	Sports <sup>a</sup>	B2	2
	Art	B3	3
School 2			
A	Geography	A6	6
	Geography	A7	4
	History	A8	6
	History	A9	5
B	Sports	B4	3
	Visual art <sup>a</sup>	B5	2
	Drama <sup>a</sup>	B6	2

Note. <sup>a</sup> Participants were not interviewed.

session at each school where teachers presented their work.

2.2.2. Facilities

In the first meeting, all teachers received a document created by the authors with existing examples of culturally responsive lessons and dilemmas that teachers can face in culturally diverse classrooms. Moreover, one of the researchers was present to explain what CRT entails and answered questions. To facilitate the meetings, the teams designated (randomly) a moderator for each meeting. The moderator’s tasks were to lead the discussions, to keep the teachers on topic, to keep track of time, and to write short notes about the meeting. To facilitate contact between the team and the researchers, one of the teachers was designated as the contact person. Researchers were present during two or three PLC meetings to provide input (e.g., providing practical examples of CRT) when necessary. The aim of providing input was to inspire teachers and give them ideas on how to adapt an existing lesson or develop a new culturally responsive lesson. The presence of the researcher was on fixed moments and sometimes on request of the participants. Moreover, the researchers were always available for questions via e-mail and telephone. A website with background information on CRT was also available. With a view to sustainability, we decided not to be present at all meetings, but only every two or three meetings, in the hope that the PLCs would become a routine practice for the participating teachers and not dependent on external support.

2.3. Design and instrument

Semi-structured interviews with teachers took place after the closing session (June and July 2017). Teachers were asked for informed consent to it being audio-recorded. Twelve teachers were willing to be interviewed. The interview took place at the teacher’s school and lasted 20–25 min. The aim of the interview was to get a clear view of the teacher’s experience of the PLC and the perceived learning outcomes.

In the first part of the interview, teachers were asked to describe as specifically as possible what they had worked on during the PLC meetings and in what way, with the aim of answering RQ1 on how teachers worked in the PLC. In addition to the interview data, we also used field notes and observations of the PLC meetings to answer RQ1.

In the second part, teachers were asked to describe what they saw as the learning outcomes, with the aim of answering RQ2 on the extent to which participating in a PLC impacts culturally responsive competences and implementation of CRT. Teachers answered a general question and we invited them to specify any changes in attitude and beliefs, knowledge and teaching practice (skills and implementation). Skills and implementation were distinguished in terms of what teachers said they *could do* (skills) and what teachers said they *actually did* in the classroom (implementation). Additionally, we asked teachers during the interview what else they would need to improve their practice.

2.4. Analysis

The interviews were transcribed *verbatim* and then coded, organised and analysed deductively and inductively in Atlas.ti version 8 (Friese, 2018). Firstly, existing theories helped us to frame our codebook deductively. Theoretical concepts in the literature about cultural diversity in education (e.g., Gay, 2002, 2010; Ladson-Billings, 1995a; Banks, 2004) and PLCs were used to construct general categories (e.g., Hargreaves & Fullan, 2012; Slegers, den Brok, Verbiest, Moolenaar, & Daly, 2013). Three categories (i.e., Collaboration, CRT and Organisational capacity), five codes (i.e., Shared practices, Joint work, Competence, Implementation and Supportive resources) and seven subcodes (i.e., No end product, Up to 3 PLC meetings, End product, At least 4–6 PLC meetings, Attitude and beliefs, Knowledge, and Skills) were defined after this step. Within the category Collaboration, when teachers met up to three times and there was no end product such as a developed lesson or adaptation of a lesson, the PLC was characterised as Shared practices. When teachers met at least four to six times and developed an end product such as a new lesson or adaptation of a lesson, the PLC was characterised as Joint work. The categories and codes are shown in Table 2. To check for inter-coder reliability and to refine the codebook, five interview transcripts were independently coded by two researchers. There was substantial agreement between the two coders (see Landis & Koch, 1977). Cohen’s  $\kappa$  was .67 with a 95 % confidence interval ranging between .57 and .77,  $p < .005$ . The statements for which full agreement was not reached were discussed and recoded, to reach full agreement. Secondly, the interview transcripts were analysed inductively to further specify the theoretical concepts as well as uncover possible new insights.

**Table 2**  
Overview of the coding system.

Category	Code	Subcode
Collaboration	Shared practices	No end product Up to 3 PLC meetings
	Joint work	End product At least 4–6 PLC meetings
CRT	Competence	Attitude and beliefs
		Knowledge Skills
Organisational capacity	Implementation	
	Supportive resources	

### 3. Results

We will first describe how teachers collaborated in the four PLCs (RQ1). Secondly, we will present to what extent the PLC meetings improved CRT according to the teachers themselves (RQ2). In addition, we will give an overview of teachers' needs as they pertain to further developing their CRT competence.

#### 3.1. How teachers worked on CRT in the PLC

PLC A School 1 reflected in the first two meetings on its students and student behaviour. Teachers exchanged experiences and discussed shared concerns in their culturally diverse classrooms. The teachers in PLC A School 1 mentioned that their students had difficulties in arguing their points of view when talking about politics, for example. Consequently, this group decided from the third meeting on to design a lesson on current affairs to develop critical consciousness in students. One participant gave the following example:

“The students say that [American politician] is a jerk, but they cannot explain why they think this.” (A5, PLC A School 1)

As current affairs is a subject that concerns all cultures, the teachers decided to have their students participate in discussions during the first 15 min of the lesson, in order to teach them to argue their opinion and to listen to and respect the opinions of others. One of the teachers filmed a lesson and brought the video to the PLC meeting. The teachers discussed the lesson and gave each other feedback. All teachers tried out the lesson and discussed it during the following PLC meeting. This PLC seemed to have achieved the highest level of interaction, which is *joint work* (cf. Little, 1990): they managed to develop an end product, and met at least four times as a group.

PLC A School 2 used the first few meetings to discuss the definition of CRT and how to implement it in their subjects, history and geography. The teachers then decided to take a look at the chapters they were teaching and tried to adapt the content by making it culturally responsive. When asked what teachers worked on during the PLC meetings, one of the geography teachers said:

“We worked on CRT by looking at the content of our own lessons and how to translate this to our students, to provide students who might have another background with something of their own background. Or to give students more choices which could make them more interested [...]. We developed some exercises that we implemented in the classroom. The students could make a choice. For example, choosing between Europe and Asia in terms of catchment areas. On sustainable energy, they were asked to check the situation in their own home [...] and what it was like in the past at their parents' home. Parents might come from here or from somewhere else, so they had to think about differences or similarities between different cultures, and different times too of course.” (A6, PLC A School 2)

The history teachers and the geography teachers worked separately on the development of a lesson. Afterwards, the two groups of teachers exchanged information. In each meeting they decided who would teach the lesson. In the following PLC meeting, they evaluated the lesson together (the history and geography teachers jointly) and gave each other feedback. The way of collaborating in this PLC is also called *joint work* (cf. Little, 1990).

Unlike the two PLC teams described above, who met regularly and developed a lesson or adapted the content of a lesson, PLC B School 1 and PLC B School 2 did not meet regularly and did not develop a CRT lesson during the PLC meetings. The group composition of these teams (PLC B Schools 1 & 2) was not stable, meaning that some teachers were absent from meetings due to illness or other educational duties. Teachers in these teams had more fundamental discussions on CRT and how to implement it in sport lessons, art lessons and drama lessons. Hence it seems that collective learning in these teams consisted especially of *shared practices*, i.e., storytelling, sharing ideas, practices and experiences (cf. Little, 1990). They did not develop an end product such as a culturally responsive lesson. Here is what two teachers said, for instance:

“Well, you can discuss and hear how things are going in each other's classrooms. I found it really refreshing to hear teacher B2; he sees everyone as being equal [...].” (B3, PLC B School 1)

“Well, what I liked is that you talk to each other, from different disciplines [...] to see what the similarities and differences are. Yes, and talking about that with each other.” (B1, PLC B School 1)

#### 3.2. The extent to which the PLC contributes to CRT

During the interviews, we asked the teachers to what extent participating in a PLC contributed to their professional development in terms of CRT. In this section we will first describe changes in attitude and beliefs, then we will present changes in knowledge, and, finally, we will point out changes in teachers' skills and the implementation of CRT in the classroom.

##### 3.2.1. Change in attitude and beliefs

All teachers mentioned that participating in the PLC contributed to a change in their attitude and beliefs regarding diversity. Teachers in this study seemed to become more conscious of the cultural differences in their classrooms. As a geography teacher said:

“[...] I am more conscious of the students' background and of the fact that this background can extend several generations back and that these students bring some things from home that they... that you might run into in the classroom if you are not aware of it.” (A6, PLC A School 2)

The following comments by a teacher who teaches history and religion (PLC A School 1) also illustrated a change in attitude and

beliefs:

A1: "I do not know if things changed a lot for me, but when I have to make choices I now pay attention to the fact that the message should not be a 'white' message from 'the Dutch' who have lived here for several generations: does it also reach students who have lived here for one generation, for example? [...]."

Interviewer: "But can I also say that you changed your beliefs? That you are more aware?"

A1: "Yes, a little bit. Well I always have asked myself what is important. What is my own frame of reference? Previously, I used to work in a 'black school' and I always took into account the students' points of view, and their backgrounds. But I think that I am even more aware now. So, there wasn't a radical change, but more like; it is so crucial that you take into account their frame of reference."

It seems that participating in the PLC motivated teachers to reflect on teaching in a culturally diverse classroom and helped them to revise their attitude and beliefs. Teachers not only became more conscious of the various ethnic groups in education but also in society. For example, one teacher stated:

"The multicultural society includes different cultures and everyone has his own culture. Norms and values and taking into account each other's shortcomings or peculiarities [...]. That would be my approach, maybe, and that you take into account these peculiarities and shortcomings when you teach, and deal with them by using certain norms and values." (A6, PLC A School 2)

The majority of participants were aware of current cultural diversity in society and that being culturally responsive is necessary. Teachers mentioned that the Netherlands is becoming more and more multicultural and that CRT is therefore crucial for Dutch society.

Although all teachers mentioned a positive change in attitude and beliefs towards cultural diversity in the classroom, three teachers also commented that taking into account the cultural background of students should not be overemphasised. Some teachers also said they were opposed to using ethnic background in their lessons. Instead, they preferred to take students' interests into account. When asked if they would like the school to pay more attention to CRT and if they had changed their view on CRT since the beginning of the programme, two teachers answered:

"Yes, but only to a certain extent. I mean, the final exam stays the final exam. And I keep in mind that the integration of students is the aim, so that they can become successful in the Netherlands, in Dutch society. This is something, I think, we should not lose sight of. I am easy-going in everything, we can be different from each other, I do not have any problems with that, but the basic Dutch knowledge, the final exam should stay." (A5, PLC A School 1)

B3: "I do not think so, no. I think it is good to be aware of it [CRT], but we should not go too far." Interviewer: "Ok, and what do you mean by that?"

B3: "We should not emphasise differences: we should emphasise commonalities." (PLC B School 1)

Summing up, participating in the PLC seemed to change the attitude and beliefs of all teachers, but some teachers did not see CRT as a priority and mentioned that it is more important to emphasise commonalities.

In addition to a positive attitude and beliefs about diverse cultural backgrounds, Gay (2002) mentions that knowledge about different ethnic groups, such as knowing about their cultural norms and values, is required in CRT as well.

### 3.2.2. Change in knowledge

Ten out of the twelve teachers who were interviewed reported becoming more knowledgeable about different cultures in the classroom and in society. For instance, three teachers searched for information about the various ethnic groups in their classroom (i.e., Surinamese, Vietnamese, and Turkish) and shared this with each other in the PLC. A geography teacher mentioned the following, when explaining what he had learned about norms and values in Vietnamese culture:

"Yes, that we should not point, for example, or cross our arms and that kind of thing. Also that you should pay attention when communicating with parents; knowing what to say and what not to say because it can be very annoying for these students when you tell parents abruptly what their son or daughter did at school. You have to be much more careful with that." (A6, PLC A School 2)

It seems that participating in the PLC motivated some teachers to learn about other cultures. Although ten teachers mentioned becoming more knowledgeable, only three teachers actually delved into cultural norms, values and historical facts relevant to students with a migrant background. The other teachers gained knowledge through knowledge sharing by colleagues in the PLC, but did not take the initiative to search for information about other cultures themselves. Knowledge about cultural practices and history may have helped the teachers that actually took the initiative to gain knowledge about different cultures to adapt the content of their lesson. The details about adapting the content of the lesson will be described below.

While all participants in our study explicitly reported a change in their attitude and beliefs towards cultural diversity, and a fairly high proportion reported changes in knowledge about cultural diversity while participating in the PLC, only a few teachers referred to a change in skills.

### 3.2.3. Change in skills

Teachers' change in skills emerged especially when they explained what they could do now when preparing or thinking about a lesson. Five out of twelve teachers mentioned that they felt able to adapt their lessons and that the PLC had stimulated them to develop their teaching skills. For example, a geography teacher reported:



“Some chapters are easier to make culturally responsive [...] the chapter about cultures is easy. [...] There is a chapter about China which is about development and globalisation, so it also comes up in this chapter. [...] In chapters about mountains, earthquakes etc. it would be more difficult... but... even on these topics you can be culturally responsive, especially when it comes to environmental disasters, because there are differences in poor and rich countries and their way of approaching environmental disasters.” (A6, PLC A School 2)

As mentioned before, being a culturally responsive teacher requires specific competences, i.e., attitude and beliefs, knowledge, and skills (Gay, 2002; Ladson-Billings, 1995a). Although some teachers reported changes in attitude, beliefs, knowledge, and skills (“I can”), they also said that actually applying CRT in their classrooms (“I do”) was still difficult.

#### 3.2.4. Implementation

The majority of teachers seemed to experience difficulties in putting their self-reported gain in skills (“I can”) into practice (“I do”). While most of them explicitly mentioned not having changed their daily teaching practices, yet eleven teachers described implementing CRT in the classroom in general. There were, however, differences in the way in which and the extent to which teachers implemented what they had learned in the PLC. Teachers in PLCs A developed or adapted the content of a lesson and some teachers in PLCs B made small changes to teaching materials, such as pictures.

PLCs A of School 1 and 2 (4–6 meetings) seemed to have less difficulty in implementing CRT than PLCs B. In the first meetings, they needed time to understand what CRT was, and read the examples we gave them. After this phase, they knew better what to do. PLC A School 1, a multidisciplinary PLC (see Table 1), developed a completely new lesson on critical consciousness, taking the interests and cultural background of students into account. Contrary to the methods of the teachers of PLC A School 2, they invented a lesson that could be implemented in any discipline. They paid attention to what students were interested in at a given moment and changed their teaching practice accordingly:

“Yes, [...], I changed my teaching practice. Before, I only taught economic subjects, so now the social scope of my teaching has broadened out to what happens in the world [...]. [...] it depends on what particular students are interested in... you know which students find a particular topic more appealing than others, and you need the students that relate to this topic. They are the engine that needs to run, they are the spark, because they really have an opinion on the topic, they have some thoughts about it and the others can join in, and this results in a great discussion with pro and cons [...]. So, for each topic I take a look at which students find it interesting or not. For instance, if we’re talking about [Turkish politician], in general the Turkish students have an opinion on the matter. It’s also relevant at home, they talk about it at home and you can notice that in everything. And the others listen, but they do not really have an opinion. So, you need these Turkish students to be able to go further.” (A3, PLC A School 1)

Thus, teachers took account of students’ interests and used contemporary subjects that could be discussed with them, providing them with the skills they need to reflect on real-world issues like the Dutch elections, the attempted coup in Turkey, the Israeli-Palestinian conflict, the United States elections, etc.

Two geography teachers and two history teachers from PLC A School 2 adapted the content of a chapter that they were working on during the PLC and implemented the lesson in the classroom. As described earlier in this paper, the geography teachers added a component to the chapter on sustainability. They used their knowledge on cultural diversity and asked their students not only to check whether sustainable energy was used at home but also to involve their parents. The history teachers did likewise, but with the chapter on the Middle Ages. They tried to make this chapter somewhat less Eurocentric. Usually, students would learn how a Christian city was built up using different historical city maps. Now they added some non-European and Islamic cities. Students were encouraged to learn how an Islamic city was built up, for example. However, the teachers faced some difficulties during this process. They reported that they could not always find good historical city maps of non-European cities and Islamic cities. For instance, they tried without success to find a clear map of a Surinamese city.

Unlike the teachers in PLCs A, an arts teacher in PLC B started small and made some changes in her presentation slides:

“[...] These are not earth shaking changes, but, let me see. I always use examples in my PowerPoints and assessments. Then I realised that they were very feminine and also very ‘White’, so I became aware of that: ‘Oh yes, I should pay attention to that’. So, then I started immediately... taking that into account and I adapted some things in the PowerPoints. I added an Asian girl and I took care to add more football and the kind of things boys are interested in also, instead of using pictures I like.” (B3, PLC B School 1)

Even though the teachers explicitly reported that their teaching practice had not changed, the reported examples show that they actually did implement CRT, albeit in different ways and to different extents. The fact that they did not mention any change in their daily practice may have been due to a low sense of self-efficacy in CRT, and this may also be an explanation for the needs teachers expressed.

#### 3.3. Teachers’ needs

Because most teachers reported having difficulties implementing their CRT competences, we asked them to explain what they would need in order to improve those competences. As described earlier in this article, some teachers referred to their underlying views on diversity: they considered it more important to emphasise commonalities than differences, and preferred to focus on differences in interest more than background. Other teachers indicated a wish to implement CRT, but a lack of supportive and informational resources. During the interviews, they said that they needed various supportive resources to be able to work on and implement CRT,

which is a component of the Organisational capacity category (see Slegers et al., 2013). Within that category, needing more time was coded as Supportive resources, for instance. We defined these codes inductively. Three types of needed resources were mentioned by the teachers: more prior knowledge of CRT, more time to spend on the PLCs, and a need for more support from the management to prioritise multidisciplinary collaboration on lesson content. This finding confirms that supportive resources are an important feature of PLCs, as described in a recent review by Doğan and Adams (2018).

### 3.3.1. Prior knowledge about CRT

When the teachers were asked for their views on what was needed to further improve culturally responsive competences, the implementation of CRT or what could have been done differently in the PLC programme, they indicated that during the first few PLC meetings, the concept of CRT was not completely clear. Teachers were both unfamiliar with CRT and unaware of its importance in teaching. Several teachers in both schools did not know how to implement CRT in the classroom. As the unfamiliarity with and the non-priority of CRT became clear shortly after the start of the programme, one of the researchers involved attended the meetings and provided input to address this need.

Even though we provided the teachers with examples, all respondents mentioned needing “more practical examples beforehand” of how to implement CRT, for instance in the form of lesson plans and specific steps they could follow:

“[...] yes, the steps could have been better described [...], or you could have made a video with examples, or maybe you could have filmed a teacher who was teaching in a culturally responsive way. This would have given us a better picture of CRT.” (A7, PLC A School 2)

According to the teachers, practical examples would have helped them to start immediately in the classroom without “wasting any time” on trying to find out what CRT was and how to implement it.

Other supportive resources that teachers said they needed in order to develop their competences in the PLCs and to implement CRT in the classroom were more time, and encouragement for collaboration. We will explain these supportive resources in more detail.

### 3.3.2. Time to prioritise CRT

Regarding time as a supportive resource, teachers acknowledged that they faced many demands at work and, among these demands, CRT was not seen as a priority. This may also have been the reason that not all the teachers read the example document we gave them, resulting in their not knowing that CRT should not be seen as an add-on course, but as part of the curriculum. They wanted to focus on the core learning objectives that were cited in the school curriculum, and CRT did not fit these objectives. Additionally, being nudged (by the principal/section head) to participate in this study depleted their motivation. Nevertheless, while developing culturally responsive competences and implementing CRT was not their first concern, most teachers admitted that they were glad to have been nudged to participate in this study, in particular because it had made them conscious of different cultural backgrounds and the importance of CRT. Hence, spending time on CRT seems to be necessary to make teachers aware of its priority.

### 3.3.3. Encouragement of (multidisciplinary) collaboration

Although teachers mentioned lack of time and the need for more examples of good practice, they indicated that the PLC helped them to work on and talk about the content of their lessons instead of just informally sharing information about students. In this regard, several teachers mentioned that a gentle push or nudge from the principal to plan the PLC meetings also helped them to attend the meetings and, as a result, to reflect on their culturally responsive competences. Additionally, teachers valued working in a multidisciplinary PLC (i.e., a group of teachers teaching different disciplines) as it enabled them to realise that their colleagues shared the same concerns with regard to students with a migrant background. They indicated that they needed support from the management for more multidisciplinary collaboration in the school.

## 4. Discussion

Research on CRT shows that teaching in a culturally diverse classroom can be challenging and that teachers need a different set of competences from those needed to teach more homogenous classrooms (Gay, 2002; Pels, 2012). Lacking the appropriate competences can affect student learning outcomes such as well-being and study effort (Santamaria, 2009; Severiens, 2010). As teaching in a culturally diverse setting seems to be a challenge for teachers, professional development is necessary. PLCs as a form of professional development are known for improving teaching practice and student outcomes; the aim of this qualitative study, therefore, was to explore how teachers worked in PLCs and to what extent teachers thought that participating in a PLC impacted their competences and their implementation of CRT.

A first result of the present study is that participating in the PLCs fostered collaboration between teachers, especially in stable teams that met regularly (four to six times). Teachers in these stable PLCs not only shared experiences and reflected on cultural diversity, but also designed culturally responsive lessons or adapted existing lessons to the student population in their classroom. According to Little (1990), this type of PLC can be categorised as *joint work*. Specifically, the teachers in the stable PLCs mentioned a change in their attitude, beliefs and knowledge. However, we noticed that most teachers had difficulties in putting their change in attitude, beliefs and knowledge into practice (implementation). This supports Parkhouse, Lu, and Massaro's (2019) findings concerning the lack of competency that teachers seem to feel to teach in a culturally diverse classroom. The concept of CRT in the classroom was not always clear in the beginning but did become clearer from the second meeting onwards for the stable PLCs. For instance, the stable PLC A School 1 knew what the interests and challenges of their students were and they found a solution to face these challenges themselves. Hence,



participating in the PLC seemed to provide them with awareness and knowledge, and with the opportunity to expand skills. Additionally, these improved competences resulted in the implementation of CRT for a number of teachers in the stable PLCs.

A second result is that, for the PLCs that met up to three times, teachers' attitudes and beliefs changed, but the term CRT was still ambiguous at the end of the programme. These teachers seemed not having used the opportunity to improve knowledge and skills, apparently because they had difficulty translating their competences into practice. The interaction of teachers in these PLCs could be characterised as *shared practices* (cf. Little, 1990). They reflected on CRT and exchanged experiences and ideas, but they did not implement CRT in the classroom. One explanation for these results could be that the group composition of the unstable PLCs (i.e., PLCs that met up to three times) changed over time, or supporting Abacioglu, Volman, and Fischer' (2019) results, that they had a low sense of self-efficacy. While PLCs were designed to improve teaching practice through collaborative inquiry and reflective dialogue (Lomos et al., 2011), for some teachers deepening their knowledge of CRT felt like a "waste of time". In these unstable PLCs, teachers seemed to expect more hands-on information from the researchers.

A third result of this study is that all teachers mentioned a change in their attitude and beliefs regarding cultural diversity. Some teachers also took the initiative to find out about their students' different cultural backgrounds, and a few teachers described a development in skills. Although Gay (2002) and Ladson-Billings (1995a) mentioned that cultural competences are important for CRT, in practice we noticed that implementing these competences in the classroom (e.g., changing/adapting the lesson content to students' cultural background) seemed to be difficult. Underlying this experience of difficulty may be the belief that taking account the cultural backgrounds of students in education is in fact not possible (Gay, 2002). In our study, such a belief could have resulted from not meeting regularly, little prior knowledge, a low sense of self-efficacy in CRT, and the group composition not being stable in the PLCs that met up to three times.

During the PLC process, we noticed that some teachers did not see CRT as a priority. However, some of these teachers became aware of the importance of CRT through self-reflection, reflective dialogue, and experience exchange with colleagues in the PLC. Moreover, some teachers started to question their current competence and managed to revise their attitude and beliefs. This supports Rissanen et al.' (2016) findings that self-reflection motivates pre-service teachers to "critically evaluate their own ways of thinking and question the neutrality of their own positions" (p.451) towards diversity and sensitivity to religious identities. In our study, self-reflection and reflective dialogue seemed to motivate some teachers to look at the migration background of students and/or some teachers tried to adapt their lessons or develop a new culturally responsive lesson.

To sum up, stable PLCs where the whole group (three to four teachers) came together regularly seemed to have fostered *joint work* (cf. Little, 1990). It was striking that in these stable groups (PLC A Schools 1 & 2), teachers not only shared experiences but also reflected on their lessons and tried to develop or developed a culturally responsive lesson. This result suggests that teachers who participate in PLCs that are primed to work on CRT, and have met at least four to six times, develop culturally responsive competences. Participating in the PLC seemed, first of all, to make the teachers conscious of cultural diversity in the classroom and the importance of implementing CRT. It not only changed their attitude and beliefs towards diversity, but also stimulated some of them to seek knowledge about the different cultural backgrounds of students. Participating in a stable PLC and meeting routinely every few weeks also seems to enable teachers to implement CRT. Although it seems that a relationship exists between participating in a PLC in one's own school and implementing CRT by collaborating, exchanging teaching practices and engaging in reflective dialogue during the PLC meetings for example, teachers also mentioned needing more supportive resources. This result is in line with Dogan and Adams' (2018) findings about the role of leader support in teaching practice. To translate their change in attitude, beliefs and knowledge towards cultural diversity into implementation of CRT, most teachers mentioned needing more time and specific examples in the form of lesson plans, for instance.

#### 4.1. Limitations

This study has some limitations that could be addressed in future research. Firstly, a small number of teachers participated in this study, and the results cannot be generalised. We conducted interviews to develop an in-depth view of teachers' professional growth. Future studies with more participants could combine qualitative and quantitative data from teachers in order to generalise the results. However, the qualitative study design and a small number of interviewees enabled us to ask in-depth questions during the interviews and obtain detailed information about how teachers worked in the PLCs.

Secondly, during the process, some participants in the PLCs withdrew because of a lack of priority for CRT. However, one can ask oneself whether a lack of priority was the reason, or, as Gloria Wekker (2016) stated: "the fear and aggression that is called up in many white people when they (have to) deal with racial or ethnic issues" (p.44). In her book *White innocence* (Wekker, 2016), she describes how white Dutch people try to avoid such topics and how they unconsciously discriminate against black people, for example. In the present study, one teacher mentioned that she would prefer to emphasise commonalities across cultures than differences between cultures. This may be a sign of the fear some teachers experience when asked to engage in CRT. This fear may also be the reason that some participants withdrew during the process. As CRT seemed to be a sensitive topic, future studies focusing on the current topic combined with the awareness of the fear of such topics are needed.

Thirdly, this study is limited by the lack of information on school-level characteristics such as the principal's beliefs on CRT and information about the school-climate. For instance, a review on culturally responsive school leadership shows that the school principal might have an impact by promoting cultural responsiveness through supporting staff in professional development on CRT and creating a culturally responsive school-climate (Khalifa, Gooden, & Davis, 2016). As teachers expressed a need for supportive resources for professional development in CRT, further studies which take school-level characteristics into account (e.g., school structure, school culture, school leadership) are recommended.

Fourthly, in this study we focused on teachers' perceptions and did not involve students. As the purpose of CRT is to improve students' well-being and school performance, further study with more focus on the implementation of CRT from the students' viewpoint and the possible impact on achievement and well-being is needed.

#### 4.2. Implications

Participating in a within-school PLC seems to improve CRT when a number of conditions are met, i.e., 1) there is a stable team that meets regularly, 2) there is space for exchange of experience, talking about lesson content, self-reflection and collaboration, 3) ideally, various examples of practical culturally responsive lessons are given, 4) ample time is provided for teachers to reflect on the concept of CRT, to gain knowledge (including familiarising themselves with given examples of CRT), and to develop and implement their competences. And the most important first step, before being able to put culturally responsive competences into practice (e.g. develop a CR lesson), is for teachers to be aware of the importance of CRT and their own vision and knowledge regarding cultural diversity. Future research on programmes for professional development of CRT with more focus on these conditions is therefore suggested. The results of this study provide input for further development of PLC programmes aiming the increase of teachers' competences in CRT, so that they can teach effectively in a culturally diverse classroom and, ultimately, reduce the achievement gap.

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