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## **Collaborative learning in multicultural classrooms: a case study of Dutch senior secondary vocational education**

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This research presents a descriptive study regarding collaborative learning in a multicultural classroom at a vocational education school in The Netherlands. The study bridges two domains of research: research on culturally diverse learning environments – which has mostly concerned primary and general secondary education – and studies on collaborative learning. It analyzes current practices and perceptions of both teachers and students applying collaborative learning in a culturally diverse, competence-based learning environment. The results suggest that in a multicultural classroom, students, on the one hand, are mostly focused on their individual performance, resulting in poor collaboration among classmates. On the other hand, teachers seem unaware of their own role in affecting students' behavior and the influence of the cultural backgrounds of students on collaborative learning processes.

**Keywords:** collaborative learning; multicultural classrooms; senior secondary vocational education

### **Introduction**

In Western Europe as well as in the rest of the world, societies are becoming increasingly culturally diverse. Consequently, school classrooms are becoming increasingly multicultural and characterized by diversity in ethnicity, religion, language, and cultural traditions (Ben-Peretz, Eilam, and Yankelevitch 2006; Ladson-Billings 2003). The role of culture and ethnicity in classroom learning and teaching processes and the resulting learning outcomes is very complex: Different, interacting factors are involved that play out differently in each context, as classes may be composed differently in terms of gender, ethnicity and socio-economic status (den Brok et al. 2003). Following Nieto (1996) we understand culture as 'the ever-changing values, traditions, social and political relationships, and worldview created and shared by a group of people bound together by a combination of factors (which include a common history, geographic location, language, social class, and/or religion), and how these are transformed' (390). Ethnicity then refers to 'foreign or native population groups' (Pinto 2000, 9). Ethnicity is one of the many elements that compose culture, and it is a factor binding people together.

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This growing cultural diversity in the classroom demands from teachers that they adapt their knowledge, skills and attitudes to the challenges that emerge in these diverse contexts, so that the learning of all students in their classes is stimulated (Ladson-Billings 1995). Teachers in culturally diverse classrooms must have an awareness that students with different cultural and language backgrounds have different needs as well as a self-consciousness of the teacher's own cultural frame of reference (den Brok, Hajer, and van Eerde 2010). Teachers also need to be aware of the special needs of students from different cultures and know how to apply specific teaching strategies and inter-personal cues to create a positive classroom atmosphere and to cater to the needs of diverse students (Wubbels et al. 2006). In multicultural classrooms, teachers also regularly have to deal with tension concerning students with different backgrounds. Teachers' professionalism in dealing with those critical situations is often insufficiently developed, and in order to better handle those problems, teachers would benefit from greater sensitivity to intercultural aspects (Ladson-Billings 1995; Radstake 2009).

Most research in the area of learning in multicultural school environments in the Dutch context targets the language and academic performance of students from different cultural backgrounds at primary and secondary education levels (Hajer 2003; de Haan and Elbers 2005; Hajer, Leeman and van Nijnatten 2002; Pels 2002). Very few studies explore the influence of cultural diversity on teaching and learning processes and the interaction between these at the vocational education level. Other studies have focused on either students' perspectives (Hajer 2003; Radstake 2009) or on teachers' perspectives (den Brok, Hajer, and van Eerde 2010) but not on both. Based on the assumption that collaborative learning is a promising strategy in multicultural classrooms, but it may also require specific organization and involve different challenges in such a context, this research begins with an overview of what is known about collaborative learning in multicultural classrooms, empirically exploring the practices and experiences of both teachers and students. It aims to provide insight into the actual practice and experiences of collaborative learning in culturally diverse classrooms. It adds an innovative approach to the literature by considering the perspective of both students and teachers on collaborative learning and by analyzing current practices and perceptions of teachers and students regarding collaborative learning in a culturally diverse, competence-based learning environment.

### **Collaborative learning in multicultural classrooms**

Collaborative learning is a learning methodology based on students working together as a group to accomplish shared learning goals rather than an individual student achieving learning goals alone (Johnson and Johnson 1994; Kreijns 2004). Its relevance is two-fold. First, it improves students' learning by enabling them to interact and learn from other students' abilities and skills. Second, it promotes students' ability to collaborate in a working group (Veugelers et al. 2007).

Collaborative learning promotes the ability to develop, maintain and appropriately modify interdependent relationships with others to succeed in achieving goals (Kreijns 2004). It promotes the development of positive attitudes towards other group members and learning material and builds social relationships and group cohesion. Table 1 summarizes five fundamental characteristics that improve learning and collaboration. These five characteristics are the departing base for this research and are further explored and complemented according to the results emerging from our data.

Table 1. Main collaborative learning characteristics.

|   |   |
|---|---|
| <b>Positive interdependence</b>             | Positive interdependence is the perception that one is linked with the others in a way so that one cannot succeed unless they do (and vice versa) and/or that their work benefits oneself and one's work benefits them (Johnson and Johnson 1989).  |
| <b>Individual accountability</b>            | Individual accountability exists when each student's performance is assessed and the results are given back to both the group and the individual (Johnson, Johnson, and Smith 1991). Individual accountability ensures that the group members are doing their share of the work.  |
| <b>Promotive interaction</b>                | Promotive interaction may be defined as individuals encouraging and facilitating each other's efforts to achieve, complete tasks, and produce in order to reach the group's goal (Johnson and Johnson 1989).  |
| <b>Interpersonal and small-group skills</b> | These skills are needed when learners are learning within a group. "Placing socially unskilled individuals in a group and telling them to cooperate does not guarantee their ability to effectively do so. Persons must be taught the social skills for high quality collaborations and be motivated to use them" (Johnson, Johnson, and Smith 1991). |
| <b>Group processing</b>                     | The group determines which behavior a group should continue or change for maximizing their success based upon their reflection of how the group has performed up to this point (Johnson, Johnson, and Holubec 1990).  |

Source: Elaborated by the authors based on Kreijns (2004) and Johnson and Johnson (1989); Johnson, Johnson, and Holubec (1990); Johnson, Johnson, and Smith (1991).

In this study, collaborative learning is studied in the context of multicultural classrooms. For the purposes of this research, we consider a classroom to be multicultural when it is composed of at least five individuals from a minority group (i.e. those individuals who were born in a country different from the country of residence or whose parents are from other countries) or at least two different cultural groups are represented (den Brok and Levy 2005).

Coelho (1994) argues that collaborative learning is especially appropriate for multicultural classrooms. In her study she shows that students from different cultural backgrounds learn better with this methodology. Collaborative learning promotes students' cooperation skills, which implicitly requires language competence. Hijzen (2006) indicates that to be able to listen and debate efficiently, students have to be proficient in the class language.

In multicultural classes, there is a possibility that language difficulties limit the effectiveness of promotive interaction in a working group and affect the use of relevant interpersonal and small group skills (Baker and Clark 2010; Coelho 1994). Apart from diversity in cooperation skills and language proficiency, different students bring with them different ways of reasoning, rules governing conversation, parameters for effective leadership styles, emphasis on conformity, and concern for social relationships between group members (Baker and Clark 2010). These differences influence group characteristics such as cohesiveness, decision quality, and group member satisfaction.

Cultural background influences students' perceptions and their interpretation of the learning environment (den Brok et al. 2003; Nguyen 2008). The different perceptions that students with different cultural backgrounds have of this learning methodology (e.g., the perception of the relevance of collaboration in the group) is a relevant problem in its implementation. Conflicts among students might emerge due

to a lack of understanding of each other's cultures (Hofstede 1986) and to the stereotyped perceptions of 'the other' (Coelho 1998). In addition, students tend to form working groups with those with whom they share similar backgrounds and interests (Coelho 1998). Allport (1954) recommends forming working groups with students from different cultures to help to equalize the different cultural groups within the classroom. By sharing common learning goals, the group gradually develops a sense of identity and purpose, which contributes positively to the group's interaction and to reducing the stereotypical visions about other group members (Coelho 1998).

The role of the teacher in collaborative learning is also fundamental, especially in multicultural classes. According to Rist (2000), teachers' expectations of students' performance influence students' success. Sleeter (1993) describes color blindness as a common belief among teachers who actively disregard students' ethnicity as a fair and desirable practice in childhood education. However, although ignoring the existence of different ethnic groups in the class is a common practice among teachers, it negatively affects students' learning (Gay 2000; Moon et al. 2009). Collaborative learning offers a way to this problem. By integrating collaborative learning methods and simultaneously learning about their students' varied cultural traditions, linguistic and learning styles, teachers not only improve their teaching techniques, but also build a bridge between collaborative learning and cultural diversity, helping to create a culturally sensitive collaborative learning classroom (Gay 2000; Ladson-Billings 1995; Sharan 2010).

### Study context

This study was conducted in a large senior secondary vocational education school in The Netherlands. The school was chosen due to its diverse student population, in which over 70% of students have non-Western European backgrounds, and due to its collaborative learning pedagogy. The classroom was selected by the principal of the school due to its culturally diverse composition and to the willingness of the teachers to take part in this study. The group selected belongs to the business and marketing department, which has adopted a competence-based approach based on collaborative learning since 2005. Under this approach, students use a personal computer to access diverse digital sources of information instead of the traditional book-based approach. This teaching methodology promotes students' practical skills development through a series of short projects in which students – organized into small working groups – work on collaborative learning tasks designed to enhance learning and responsibility in the workplace.

Table 2. Student composition of working groups.

| Group | Group Composition                                       |
|-------|---|
| 1     | Morocco, The Netherlands (2)                            |
| 2     | Somalia, Colombia, Congo                                |
| 3     | Turkey (3)  |
| 4     | Turkey, Iraq, Morocco                                   |
| 5     | Sierra Leone, The Netherlands, Curacao (Neth. Antilles) |
| 6     | Turkey (3)  |
| 7     | Turkey (3)  |
| 8     | Spain, The Netherlands, Morocco                         |
| 9     | Uganda, Turkey, Iran                                    |

The study focused on first-year students because it is during this year that students start learning the necessary skills for the collaborative learning approach promoted by the school. The average age of the students was 18 years old.

In this research we consider the term ethnicity as a proxy for culture, and we define it by using country of birth and home language as variables to represent it (see Table 2). We also use the terms multicultural and culturally diverse as equivalents and multiculturalism as the integration of culture and ethnicity.

### **Methodology**

The empirical part of the research was structured as follows: First, small groups of students and their teachers were carefully observed while working on the same collaborative learning tasks. No observation schemes were adopted, but lessons were videotaped and notes were taken by the researchers on their impression of the atmosphere, learning and working processes of students and teachers' supervision of collaborative groups. These notes formed the starting point for questions posed to the teachers in the interviews that followed. Second, semi-structured, in-depth interviews were conducted with both teachers involved in the study. In these interviews, questions were posed based on notes taken during observation. Third, based on the videotapes, semi-structured interviews were conducted with nine of the student working groups (each composed of three students), asking them about their impressions of collaborative learning and the specific problems and benefits they experienced during the particular lesson videotaped.

Following Yinger's (1986) stimulated recall procedure, both teachers were interviewed after watching the videotape of their lessons and identifying critical moments.<sup>1</sup> The teachers were asked not only to describe their thoughts during the lessons, but also to elaborate on their coaching strategies, their reactions and approaches, and their students' behavior (van Tartwijk et al. 2009).

Coaching sessions involving both teachers and the nine working groups were also videotaped. Those sessions targeted specific collaboration topics within the group and their progress on collaborative learning tasks. An exercise similar to the one described above was conducted for these coaching sessions, with the only difference being that now both teachers were interviewed at the same time – allowing them to complement each others' answers.

All interviews were transcribed literally from audiotapes and analyzed both deductively and inductively using the software tool Atlas Ti (version 5.2). The first step of the qualitative data analysis included segmentation and open coding of the data files. Utterances were marked as separate segments using the principle of turn topic or occurrence. A segment was defined as one or a sequence of sentences relating to one specific occurrence or topic. Table 3 reflects the main aspects of collaborative learning studied in our analysis. It is based on Johnson and Johnson's (1994) collaborative learning concepts, and it was elaborated based on interview statements, which were classified into themes and codified.

Although our main interest in the study is in the themes emerging from the data, we are also interested in the relative importance attached by respondents to these themes. Hence, statements were not only interpreted qualitatively, but their frequency of occurrence was also determined. Thus, we established Cohen's kappa in order to check the reliability of the coding used. The inter-rater reliability (Cohen's kappa) for both interviews was 0.87 with a percentage of agreement between both

Table 3. Code definitions used in this research.

| Code   | Code Description  |
|--|---|
| <b>Collaborative learning categories from Johnson and Johnson (1994)</b> |   |
| <b>Mutual interdependence</b>  | The manner and degree of interdependency between students during collaborative learning.  |
| <b>Individual responsibility</b>   | Responsibility, degree of commitment, accountability, and students' roles during collaborative learning.  |
| <b>Interpersonal and small-group skills</b>                              | The degree in which students use interpersonal and small-group skills during collaborative learning. Students handling problems within the group and finding solutions for conflicts.   |
| <b>Group processing</b>  | The atmosphere and degree of confidence of the group during collaborative learning. Students feeling comfortable in the group and willing to ask questions or undertake risks of making mistakes.   |
| <b>Promotive interaction</b>   | The manner and degree of interaction of the students during collaborative learning.   |
| <b>Specific categories that emerged from the data for this analysis</b>  |   |
| <b>Multicultural aspects</b>   | [Multi]culture, ethnicity, and/or the influence of those concepts on collaborative learning.  |
| <b>Collaborative learning results</b>                                    | Collaborative learning results.   |
| <b>Conditions</b>  | Positive and negative factors that influence collaborative learning and its aspects. For this research, this characteristic is divided into: (i) teacher's role; (ii) time used/needed for the tasks; and (iii) the use of the laptop as a technique. |

Source: Elaborated by the authors. Note: The collaborative learning concepts of positive interdependence and individual accountability mentioned by Johnson and Johnson (1994) were adopted and recoded as mutual interdependence and individual responsibility, respectively.

Table 4. Sample composition.

| Number               | Country of birth                  | Parents' country of birth | Home language              |
|----------------------|-----------------------------------|---------------------------|----------------------------|
| <b>Teachers (2)</b>  |                                   |                           |                            |
| 1                    | The Netherlands                   | The Netherlands           | Dutch                      |
| 1                    | Belgium                           | Belgium                   | Dutch                      |
| <b>Students (27)</b> |                                   |                           |                            |
| 4                    | The Netherlands                   | The Netherlands           | Dutch                      |
| 1                    | The Netherlands                   | Spain                     | Spanish and Dutch          |
| 1                    | Curacao (Neth. Antilles)          | Curacao (Neth. Antilles)  | Papiamentu and Dutch       |
| 11                   | The Netherlands (9)<br>Turkey (2) | Turkey                    | Turkish, Kurdish and Dutch |
| 3                    | The Netherlands                   | Morocco                   | Arabic and Dutch           |
| 1                    | Congo                             | Congo                     | Swahili and French         |
| 1                    | Sierra Leone                      | Sierra Leone              | Krio                       |
| 1                    | The Netherlands                   | Somalia                   | Somali and Dutch           |
| 1                    | Uganda                            | Uganda                    | Swahili and English        |
| 1                    | Iran                              | Iran                      | Farsi                      |
| 1                    | Iraq                              | Iraq                      | Arabic, Kurdish and Dutch  |
| 1                    | Colombia                          | Colombia                  | Spanish                    |

researchers of 81.5 on 54 valid fragments. The Cohen's kappa of the interview with the students' working group was 0.89 with a percentage of agreement of 88% on 36 valid fragments. For the teacher's interview, the two researchers had a percentage of agreement of 76% on 22 valid fragments with a Cohen's kappa of 0.72.

### *The sample*

The sample consisted of two mentor-teachers and 27 students from a classroom in which only four of the students are native Dutch. Neither teacher was educated as a teacher prior to working at the school, and both of them got their teaching diplomas after in-service training. Table 4 presents the sample composition, including our variables for culture represented by the country of birth of the student and his/her parents, as well as the language used at home.

## Results

### *Relevance of themes*

Table 5 shows an overview of absolute frequencies and percentages of the codes obtained from both working groups and teachers' interviews.

The codes more frequently cited by both students and teachers are: conditions, with a frequency of 33% of the total of statements made during the interviews; individual responsibility, with a frequency of 19.6%; and mutual interdependence, with 14.1%. Group processing was the code mentioned least during the interviews, with a frequency of only 5.1%. The codes that presented major differences between teachers and students' working groups were mutual interdependence and multicultural aspects. While teachers mention the last one about 17.2% of the time, students

Table 5. Overview of teachers' and students' scores on the different codes.

| Codes                                       | Teachers  |      | Students' working groups |      | Total (teachers and students' working groups) |      |
|---|-----------|------|--------------------------|------|---|------|
|   | Frequency | %    | Frequency                | %    | Frequency                                     | %    |
| <b>Mutual interdependence</b>               | 8         | 6.9  | 36                       | 18.4 | 44  | 14.1 |
| <b>Individual responsibility</b>            | 24        | 20.7 | 37                       | 18.9 | 61  | 19.6 |
| <b>Interpersonal and small-group skills</b> | 8         | 6.9  | 20                       | 10.2 | 28  | 9    |
| <b>Group processing</b>                     | 5         | 4.3  | 11                       | 5.6  | 16  | 5.1  |
| <b>Promotive interaction</b>                | 1         | 0.9  | 4                        | 2    | 5   | 1.6  |
| <b>Multicultural aspects</b>                | 20        | 17.2 | 13                       | 6.6  | 33  | 10.6 |
| <b>Collaborative learning results</b>       | 8         | 6.9  | 14                       | 7.1  | 22  | 7.1  |
| <b>Conditions:</b>                          |           |      |                          |      |   |      |
| <b>a. Teacher's role</b>                    | 24        | 20.6 | 21                       | 10.9 | 45  | 14.4 |
| <b>b. Technique</b>                         | 4         | 3.6  | 31                       | 15.9 | 35  | 11.2 |
| <b>c. Time</b>                              | 14        | 12   | 9                        | 4.3  | 23  | 7.4  |
| <b>Total</b>                                | 116       | 100  | 196                      | 100  | 312   | 100  |

Source: Elaborated by the authors from 312 statements from interviews with both teachers and students' working groups.

refer to multicultural aspects in only about 6.63% of their total statements. Mutual interdependence is mentioned in 18.4% of the students' statements, while teachers refer to it in only about 7% of their statements.

The teacher's role is a factor within conditions commonly mentioned by teachers and students. While teachers refer to it in about 57% of their statements, students do so only in 35%. The frequency for technique is 10% for the teachers and 51% for the students. The rest of the comments are about the use of time during collaborative learning.

### *Illustration of major themes*

The following three main themes were identified from the analysis.

*Theme 1. Collaboration during collaborative learning.* Working groups are more focused on individual work and on the individual aspects of collaborative learning – what the authors call a 'me, myself and I' type of collaboration.

In the teachers' perception, students communicate poorly (i.e. they do not discuss in the group and they do not listen to each other). The teachers also mention that there is no support to build students' communication skills. They consider poor promotive interaction between students to be due to a lack of communication among themselves. However, there is considerable non-task-related communication among students, mainly through the use of the Internet on their laptops and regularly with students outside their working group.

The perception of the laptop differs between teachers and students. On the one hand, teachers consider it an essential teaching tool, while students see it as a strong distracting factor (i.e. they tend to chat or surf the net instead of focusing on their work). Figure 1 illustrates this case.

In addition, tables in the classroom are arranged in a way that prevents promotive interaction. They are basically long tables in which the members of one working group, or occasionally two, sit together. Ebbens and Ettehoven' (2009) rule of thumb, 'nose to nose, toe to toe' would be a useful tool to promote interaction within and between working groups.

According to the teachers, working group dynamism varies according to the group's cultural diversity composition. Teachers talk to the students about group processing. However, they cannot assure that students cover this topic on their own. The students' perception of teachers' performance as coaches is not positive; for the students, it is the working group environment and not the teacher that influences their dynamism and motivation to work (See Figure 2).

The topic of mutual interdependence is viewed differently by teachers and students. Teachers consider interdependence among the students a difficult aspect to control; however, they believe the students are aware of their interdependence.

The division of roles and tasks within the working group is agreed upon by the students. Students mention the use of different strategies for dividing tasks based on the expertise or practicability of the group members. The results indicate that students enjoy working together and learn from each others' experiences. There is strong awareness among the students of the relevance of mutual interdependence in the achievement of tasks and commitments. Students indicate that when there is a disagreement, it is solved by consultation and discussion with the group. The teachers' perception is different from the students in this aspect as well as regarding mutual interdependence.

|                        |  |
|------------------------|--|
| <b>Interviewer:</b>    | How important do you think it is that students learn to use their laptop as a teaching tool?   |
| <b>Teacher:</b>        | They need to learn, otherwise they can't progress. But it's very tiring and difficult to make them see that. Sometimes I feel like I'm fighting a losing battle. For them it's very important to chat by MSN and listen to music, and I can understand that. |
| <b>Interviewer:</b>    | Do you think you always take part during collaboration?  |
| <b>Students A+B+C:</b> | No (laughing).   |
| <b>Student C:</b>      | No, a very good question!  |
| <b>Student A:</b>      | ...because it is very hard, those laptops. There's always the temptation of the Internet; you'll always have something you want to look up. You will have work delay because of that laptop in front of you.   |
| <b>Interviewer:</b>    | What do you all do with that laptop?   |
| <b>Student A:</b>      | (laughing)   |
| <b>Student C:</b>      | It depends, it's really different from one person to another.  |
| <b>Student B:</b>      | The one in football.   |
| <b>Student C:</b>      | We are usually on MSN. That's just tempting, it is just automatic.   |
| <b>Student A:</b>      | You start it right away when you put on the Internet.  |

Figure 1. Use of laptops in working groups.

Free-rider behavior and collaboration among the working group participants was monitored by the teachers during coaching sessions. It was observed that the type of task and the group's cultural diversity composition are important factors favoring effective group collaboration (see Figure 3).

The efficiency of time allocation is a controversial point between students and teachers. On the one hand, the students feel that the time given is excessive, and consequently they allocate their time in a way not entirely approved of by the teachers. On the other hand, the teachers feel that the distribution of tasks is not done properly by the students and that the students are not really working together within the working groups (see Figure 4).

*Theme II. The teacher's role in collaborative learning.* Teachers' role is mentioned in about 44% of the statements of both teachers and students. Although the teachers state that they would like to assess and coach the working groups on the processing of the tasks as well as on the final output, in practice students are mainly evaluated on the final output. Consequently students have developed an output-oriented perspective in which they mostly work for a good mark and only start working together a week before the deadline. According to the students' statements, they would work in a more consistent way if the time allocated for the tasks was reduced. Students seem to work better when teachers are supervising them. According to the teachers, students' collaboration in group tasks is also a factor considered in the final evaluation. When there is a problem, teachers frequently consider it a students' problem and do not often reflect on their own role in creating it (see Figure 5).

|                     |   |
|---------------------|---|
| <b>Student D:</b>   | I am honest and maybe I'll do something serious for one hour and the rest....   |
| <b>Student E:</b>   | Yes, the rest of the day you are doing nothing.   |
| <b>Student D:</b>   | You do nothing, the teacher's on their laptop, I think it's unnecessary and then you have a class who are all fooling around, to ruin for others. You understand?   |
| <b>Interviewer:</b> | Yes, yes.   |
| <b>Student D:</b>   | And then the mood changes and...the mood of the group also changes.... I think it's unnecessary. I thought that everyone would be working seriously but they are all behind their laptops and then I just join the party.     |
| <b>Interviewer:</b> | What do you think of your own work?   |
| <b>Student M:</b>   | I just wait for tasks.  |
| <b>Interviewer:</b> | You wait?   |
| <b>Student M:</b>   | Yes, till someone gives me a task.  |
| <b>Interviewer:</b> | How does that happen?   |
| <b>Student N:</b>   | Because if you give a member of your group the task and you tell him when it needs to be finished and you keep on going chatting on the computer while he is working, when he is finished you are also ready and on schedule. |

Figure 2. Do you put your maximum effort into the working group?

Working groups for collaborative learning are frequently compiled by the teachers without specific formalized criteria, based on teachers' perception of students' attitudes and personalities. During coaching sessions, teachers get to know the students really well – including their home environments. Such coaching sessions are very highly regarded by the students, who consider them as extremely motivating.

Both teachers and students agree that classroom discipline and deadline achievement are not taken seriously. Teachers are aware that they do not provide enough clarity and structure to the students regarding the collaborative learning tasks. In addition, teachers recognize that they make too many allowances for the personal circumstances of the students, allowing frequent changes in deadlines that result in students' responsibilities being reduced. The students admitted that they exploit teachers' deadline flexibilities and that, although it would be more difficult for them, they would prefer to have more discipline in the classroom. Students also state that if they were allowed to compose their own working groups, they would take into consideration interest and collaboration among their members. Students consider that equal interests are a key element for a working group to perform efficiently. Figure 6 illustrates these points.

*Theme III. Multicultural aspects.* Four of the most frequently mentioned problems are: (a) hesitance to approach students with different cultural backgrounds; (b) behavior differences between female and male students from different cultural backgrounds; (c) attitude towards female teacher authority by male students from different cultural backgrounds (i.e. the teachers perceive this as macho behavior); and (d) use of mother tongue (i.e. non-Dutch) in working groups.

**Interviewer:** If you need to work on tasks, which of the three of you takes the initiative?

**Student F:** Actually all of us.

**Student H:** Yes, all of us!

**Student G:** If we agree on what we do, we just do it. We don't let each other down.

**Students:** (laughing)

**Student G:** You understand what I mean?

**Interviewer:** Yes, I know what you mean.

**Student G:** If student F relies on me, he can count on me!

**Student I:** Suppose you have your own idea about this project, for example, and suppose that he has a different idea about it, and student F too. That can be very nicely mixed up to a very good idea. I think that everyone has his own idea.

Figure 3. Examples of mutual interdependence among students.

**Teacher:** ...all those responsibilities, that it is very difficult for them.  
And what happens then? They often do nothing for one month, they start very motivated and then [they stop]. Till they remember that there must be a final output. The last week or last few days they get in action. It would be very good if they would work constantly and structurally step by step, but I don't know if they will ever be able to learn this.

Figure 4. Teachers' statement on students' responsibility.

**Interviewer:** ...To what extent do you feel that they can manage the freedom during collaborative learning?

**Teacher:** They have difficulties with using long-term thinking.... A project lasts four weeks, [and] in the beginning they start very enthusiastically and then they think, 'Oh yeah, this and this and this' and then [they stop], because then they think, 'We have still four weeks to go.'  
So in the meantime they are very reluctant to do other things, and then at the end, or at the time that the deadline approaches, then they get in action, because, 'Oh yes, tomorrow is the deadline,' and then they realize it again. I guess they do not understand it. They have no idea, I guess. I think it's the age!

Note: The use of the word 'they' referring to the students has been underlined for illustrative purposes.

Figure 5. Teachers' perception of allocation of time in collaborative learning tasks.

According to the teachers, students from different cultural backgrounds feel vulnerable and fragile in the classroom. Communication skills, written and oral, are poorer for these students compared to native students. The teachers find that although

|                     |   |
|---------------------|---|
| <b>Interviewer:</b> | What do you do as a coach with them [the students] if they fail to meet deadlines and agreements made?  |
| <b>Teacher 2:</b>   | I think we are quite flexible in that.  |
| <b>Interviewer:</b> | What else would you like to do then?  |
| <b>Teacher 2:</b>   | Being more consistent.  |
| <b>Teacher 1:</b>   | Yes.  |
| <b>Teacher 2:</b>   | Deadline not met, means project not achieved! But I fear that the whole class will have an insufficient mark.                                   |
| <b>Interviewer:</b> | Okay, I hear you saying that such a group's interests must be equal?  |
| <b>Student F:</b>   | Yes!  |
| <b>Student G:</b>   | That's why it would be nice if we could compose our own group.  |
| <b>Interviewer:</b> | So, that is the condition for it to work?   |
| <b>Student F:</b>   | Yes!  |
| <b>Student H:</b>   | I really think so, the interest. But what's really important is the goal! If you have the same goal – to achieve the project, it's always easy. |

Figure 6. Disciplinary perceptions in the classrooms (by teachers and students).

these students tend to make groups with other students from different cultural backgrounds, they frequently use aggressive terms to refer to each other (See Figure 7).

Teachers also report that this group of students develops the feeling of being attacked all the time and has a very low tolerance for criticism; therefore they constantly act defensive and justify their acts all the time (e.g., assuming the role of victims). Female students from a different cultural background often lie to cover for their mistakes. This behavior is described by the teachers as 'lying not to lose face.'

Teachers report constant tension between students with different cultural backgrounds and native students. The students state that students from different cultural backgrounds tend to create working groups and informal groups within the classroom. They also frequently state that these students speak their own language with each other during classes or group discussions, which in some students' opinion is a source of problems (See Figure 7).

### Discussion of findings

Although the literature suggests that: (i) mutual interdependence results in promotive interaction; and that (ii) promotive interaction requires small group skills among the group members (Kreijns 2004), the results from this study do not support this statement. The research indicates that classroom dynamics are geared more towards individual collaboration than the joint (togetherness) aspects of collaboration. The analysis shows that only mutual interdependence and individual responsibility are properly performed in the classroom. Relatively little attention is paid to interpersonal and small-group skills, group processing and promotive interaction. These aspects are not directly stimulated by the teachers.

|                     |  |
|---------------------|--|
| <b>Interviewer:</b> | ...when do you notice that pride?  |
| <b>Teacher:</b>     | Among the boys you notice a macho behavior and not admitting that they did something. What I have noticed with the girls, without generalizing, is that they do not like to admit mistakes. I don't know where this comes from but it leads [them to] lie or give another explanation than the truth because they don't want to admit it. Maybe it's not accepted in their culture and they therefore invent a story.  |
| <b>Interviewer:</b> | Can you give an example? How do you see that?  |
| <b>Teacher:</b>     | For example, those Moroccan and Turkish students form a group. Just like that! They meet each other here, and that is understandable. I suppose that they feel good together and sometimes you hear them shouting to each other 'Stupid Turkish or "Dirty Moroccan."' What strikes me is that many Dutch girls, especially shy Dutch girls, try to avoid them, saying, "Don't put me together with A or B in the group' because they are a little bit afraid. Probably a little bit afraid of other cultures, or not knowing how to handle it. |
| <b>Interviewer:</b> | [Regarding the] many cultures in the classroom....what's your experience [been like]? [Please illustrate in either] a positive or negative way.  |
| <b>Student J:</b>   | Yes, that's a good question! I think if it were possible, that this school ...should teach a Turkish course. There are many Turkish students who only speak Turkish among themselves.  |
| <b>Interviewer:</b> | You have the rule of '[speak] Dutch in the class?'   |
| <b>Student K:</b>   | But they don't do that, and as a Dutchman, I'm in between them not knowing what they are saying.   |
| <b>Interviewer:</b> | OK, while she says 'With the Antilleans you do not need to adjust.'  |
| <b>Student L:</b>   | No, but that is different, you're in school and you must communicate with each other.  |
| <b>Student L:</b>   | When you go to someone else's home, this means that you'll get into that culture.  |
| <b>Interviewer:</b> | Yes, yes.  |
| <b>Student L:</b>   | Suppose I go to the house of student A and they speak Moroccan, then I should adapt to them ... because I come into their house!   |
| <b>Interviewer:</b> | Yes, yes.  |
| <b>Student L:</b>   | Look, if they come into my house, they just need to speak Dutch!   |

Figure 7. Commonly identified problems in multicultural classrooms.

Although the school promotes students' evaluation based on the five elements of collaborative learning, in practice, the students are assessed mainly based on final output. This promotes an output-oriented behavior among the students, who focus on finishing the tasks without paying attention to the processes involved (which is in fact the objective of the collaborative learning methodology).

Division of tasks within the working group is made by the students based on the expertise and interests of the students. It is unclear if this practice allows stu-

dents in the working group to acquire new skills or just to free-ride on the skills of other group members. Coaching from teachers would be recommended in this aspect; however, no clear approach from the teachers on this issue or on the support of students' skills development was found in this study.

The research finds that both teachers and students blame each other for the deficiencies of the classroom adoption of collaborative learning. On the one hand, the teachers identify more problems than the students in the implementation of collaborative learning. On the other hand, the students frequently mention that the teachers' role is fairly limited and that they receive poor guidance from the teachers. This problem suggests that teachers are not trained sufficiently in the implementation and guidance of collaborative learning.

The study analyzed three additional categories to those of Johnson and Johnson (1994) regarding on collaborative learning, namely multicultural aspects, collaborative learning and teachers' role. Although students only mentioned a few problems regarding multicultural aspects (basically language problems), the teachers identified several problems, including the attitude and behavior of students with different cultural backgrounds (e.g., playing the role of victims by male students and lying not to lose face by female students). Teachers' statements on culturally diverse students are often presented in an over-simplified way that is influenced by stereotypes. These statements are mostly oriented towards a specific culture and not towards the group's cultural diversity. In none of these statements did the teachers acknowledge any influence that their own behavior could have on this group of students. No mention of the implications of the classroom's multiculturalism on the class's education was made by the teachers. Poor acknowledgement of cultural differences in learning and knowledge frameworks between students of different cultural backgrounds suggests that teachers adopt a 'color-blind' position in which they assume that all students should be treated equally (regardless of their cultural differences). This supports the research conclusion that teachers' lack of experience in culturally diverse classrooms (and the backgrounds involved) limits their performance in the efficient implementation of the collaborative learning strategy.

This calls attention to teachers' pedagogical training, which should include a focus on how to manage increasingly multicultural classrooms. Explicit instructions for collaborative learning tasks, clarity of rules, and structured guidance in achieving the learning goals are required if the benefits of collaborative learning are to be achieved in multicultural classrooms.

### ***Limitations of the study***

The analysis presented herein provides an interesting insight into the underlying processes regarding collaborative learning in multicultural classrooms and the importance attached to these processes by the respondents involved. However, there are several limitations to the study. First, it is conducted on a small scale (27 students and 2 teachers). Thus, both the qualitative interpretation of the themes that emerged as well as their relative importance (in terms of frequency) provides no more than a first indication or trend, requiring confirmation in other, perhaps larger-scale studies. Second, the sample was purposively selected and the two teachers involved were both willing to cooperate and had experience with collaborative learning. Obviously, processes might be quite different in classes of teachers with less experience in teaching multicultural classes, in initiating cooperative learning and in dealing with the

combination of both. These limitations open the window for further research in which the results could be tested on a larger scale and with a teacher sample that is more diverse as well, both in terms of experience as well as other background characteristics (such as teacher gender, subject taught or teacher ethnicity).

## Note

1. The research defines critical moments as those which feature at least one of the following characteristics: (a) The working group is having a conflict or discussion; (b) The working group asks the teacher for explanation or the teacher gives feedback to the group; (c) A specific part (or moment) of the class in which the teacher calls for reflection; (d) A cultural difference-related incident.

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