

# The Teacher's Role During Cooperative Learning: Should I Leave the Classroom when Students are Independently Working in Teams?<sup>1</sup>

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## Abstract

*This research aims to discover which actions teachers adopt when pupils work cooperatively. 10 primary teachers' performance is analysed, through a qualitative design of observation of teaching practices in classrooms where cooperative learning is developed, complemented with the student teachers' perceptions. The results indicate a marked reduction in the interaction between the teacher and the whole class, with the focus changing from the traditional transmissive role of the teacher to one where, through alternative activities, the pupils become the protagonists. This change in approach to include active listening, scaffolding or immediate response to requests for help should be introduced in teacher training programmes to increase the willingness to use cooperative learning in classrooms.*

*Keywords:* Cooperative learning, teacher education, teacher role, peer tutoring, primary school.

## Introduction

Cooperative learning (CL) takes place when members of a small group work together to maximize not only their individual learning, but also the learning of the other members of the group (Johnson & Johnson, 2009). The different peer-learning scenarios characterized by Damon and Phelps (1989) place peer tutoring -student pairs with an asymmetric role, where one is the tutor and the other tutee respectively - and collaboration - a greater level of

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symmetry and reciprocity between the members of the group- at opposing ends of the spectrum. Cooperative learning is in the centre of this continuum and combines episodes from both scenarios. For this reason, within school education, CL is used as a concept which also includes peer tutoring practices, not only because they share Johnson and Johnson's principles but also, unlike collaboration, because the interaction between the members of the team is structured by the teacher (Topping, Buchs, Duran & Van Keer, 2017).

Educational reform, in which the student is the protagonist and actively participates, stresses the need to use CL as a teaching and learning strategy (Barr & Tagg, 1995). The transmissive model, which maintained that students could only learn what teachers taught them, has given way to more transformative models in which students can learn from each other under teacher organization (Sharan, 2010). Teachers now occupy a new role, which is yet to be fully defined.

There are many reasons on which to base the educational relevance of CL. First of all, cooperation is a key competence in a knowledge-based society (Rychen & Salganik, 2001). Second, it develops skills and attitudes congruent with a democratic society (Perrenoud, 2001; Sharan, 2015). A further reason is that it is a learning mechanism. We learn by interacting with people who have a relatively higher level of knowledge than our own and so are in a position to provide appropriate help (Wells, 1999). Finally, CL is a strategy for inclusive education, because it uses the differences between the students as a source of learning (Stainback & Stainback, 1999). Following the premises of Johnson and Johnson (2014), CL is essential if we are to meet the challenges of the 21st century.

However, despite widespread research into CL by educational psychologists (Johnson & Johnson, 2009), which have demonstrated its multiple educational benefits (see the recent meta-analysis by Kyndt, Raes, Lismont, Timmers, Cascallar & Dochy, 2013), putting it into practice in the classroom has proved difficult (due to individualism, lack of teacher preparation or the "Taylorist" school organization) and is still met with resistance, regardless of the geographical or cultural framework in which it is introduced (Kagan, 2005; Rué, 1998; Sharan & Sharan, 1994). Grisham and Molinelli (2001) identified the main, most recurrent mistakes teachers made when starting to use cooperative learning in their classrooms. These included oversized and over-homogeneous teams, insufficient explicit instructions, insufficient time for interaction, too much physical distance between team members; ill-structured activities, the fact teams are changed before problems are resolved, insufficient training of social skills, poor team self-assessment, infrequent use of teams and finally, complex cooperative work was often evaluated too soon. In a traditional school, based on individual and competitive learning, the requirements for the inclusion of peer learning range from recognising cooperation as a basic competence at all educational levels to making decisions on issues such as how classroom furniture is organized or how to create appropriate spaces (Guilmette, 2007). A further requirement is teacher training in the use and implications of peer learning (Boud, Cohen & Sampson, 2001).

Sharan (2010) suggests that the paradox between the pedagogical value of CL and the difficulty in implementing it should include the following elements to overcome any difficulties: teachers are trained in the conceptual bases of CL; different methods and techniques are distinguished; interaction within the teams is organized; and a new transformative (not transmissive) role of the teaching professionals is developed.

The first element we wish to consider is teacher training. Much of the research agrees that the lack, or absence, of understanding of this type of instruction makes implementing CL difficult (Gillies & Boyle, 2008). In this sense, teacher training projects have been studied (Ishler, Johnson & Johnson, 1998; Krol, Slegers, Veenman & Voeten, 2008). There are a growing number of university-based initiatives in the field of initial teacher training (Cohen, Brody & Sapon-Shevin, 2004, Baloché & Brody, 2017). Results from them demonstrate that two elements need to be considered: one is the use of experimental learning (Sharan, 2015) based on CL simulations, which allow students to go beyond learning about CL to learn through CL and so produce a conceptual shift (Koutselini, 2009); and the second “coordination between what the interns see and do at the university and what they see and do in actual classrooms” (Cohen et al., 2004, p. 10). Thus, future teachers must be offered initial training to ensure success in their new role in classrooms where CL is implemented. Expectations in the use of CL can be improved by looking at the continuity between theory and practice and by developing this role (Abrami, Poulsen & Chambers, 2004). However, it is not always possible to find schools willing to participate in quality CL. The research presented here shows that this element has been taken into consideration.

The results of this research show that training is necessary, but training alone is not enough (Abrami et al., 2004; Sharan, 2010). It seems that the real challenge lies with encouraging teachers to embrace this new role and discard the old transmissive one. In CL, the teacher is no longer simply a transmitter of knowledge. Instead the teacher someone capable of building scenarios which ensure correct interdependence and interaction between pupils and which also encourage constructive relationships, dialogue and communication; handing over control and protagonism to the students (Mayordomo & Onrubia, 2015). However, despite the theory outlining the role of the teacher (Gillies, 2007; Sharan, 2015), sufficient empirical research is still lacking to fully understand what this role in these classrooms should be.

One piece of research (Kaendler, Wiedmann, Rummel & Spada, 2015) has presented a preliminary framework on the teaching competencies required to implement CL, spread over three moments: before student interaction takes place (pre-active), during student interaction (inter-active) and on completion of the activity (post-active). As our interest focuses on the role of the teacher during the sessions, we will synthesise the skills required in the second point. During the inter-active stage, the teacher carries out three actions: 1) Monitoring. By observing the teams, the teacher evaluates the quality of their interaction in three aspects: collaborative (active participation and idea sharing, Johnson, Johnson & Holubec, 1998); cognitive (asking

key questions and providing explanations, Webb, 1989); and metacognitive (the processes that take place in the preparation, execution and evaluation of the activity, Zimmerman, 2002). 2) Support. Through observing, the teacher decides in which groups, when and how she will intervene. These interventions can be sequenced, it is more usual to intervene offering feedback on different levels: clues, suggestions or reminders (Ge & Land, 2004); advice, questions or explanations. 3) Consolidation. The teacher stimulates the students both cognitively and metacognitively to activate their knowledge and make them aware of what they are lacking, of different perspectives and of the complexity of concepts. While it might be true that the planning and reflection stages can and should be taught in the conceptual training of CL, the competences involved in the inter-active stage can only be acquired through experimenting, as has been defended previously, by placing teachers in CL-organized classrooms (Jolliffe, 2015).

In this sense, the research presented here will place third year Primary Education undergraduates in classrooms where a peer tutoring educational programme is being developed. Peer tutoring can be defined as a CL method based on creating pairs with an asymmetric relationship (one of them is the tutor and the other the tutee), who have a common objective which they share and understand (the acquisition of an academic competence) and which will be achieved within the framework of the relationship that the teacher has previously planned (Duran & Vidal, 2004).

The educational programme Reading in pairs (Leemos en Pareja, Duran et al, 2011) is a peer tutoring programme to develop reading skills, especially those of fluency and reading comprehension. Although it is a highly-organized proposal, the teaching staff involved in it have to take decisions according to the context in which it will be put into practice (year, type of tutoring, family involvement...). Peer tutoring sessions -two thirty-minute sessions per week during one term- start after pairs have been created and the pupils have received some initial training.

During each session, the pairs use “Activity sheets” which organize the joint activity between tutor and tutee. Each activity sheet contains an authentic and self-contained text from a range of different discursive genres, along with a set of pre and post reading tasks. Towards the end of the programme those pupils acting as tutors also create activity sheets for their tutees. At the beginning of each session the pairs carry out pre-reading activities to motivate interest and activate previous knowledge and hypotheses they may have. They then read out aloud. The tutor starts, acting as a model. After this the pair read the text together, but with the tutor taking the lead in order to indicate the rhythm and intonation. Finally, the tutee reads the text aloud and the tutor uses the PPP technique (Pause, Prompt, Praise) (Wheldall & Colmar, 1990) to help the tutee correct any errors. The second part of the session centres on comprehension by checking hypotheses and completing activities which focus especially on inference and thorough understanding of the text. Finally, the tutee attempts an expressive reading of the text.

Once a fortnight the pairs complete a self-assessment exercise to evaluate the learning process, the development of the respective roles and to set objectives for the following two-week period. Evaluation is through

self-assessment and also by the teachers, who perform individual reading comprehension tests before the programme starts and when it concludes. More importantly however is the ongoing assessment process in which the teacher observes the pairs while they are working together, revises the activities and evaluates the activity sheets the tutors prepare.

The evidence available has demonstrated that this programme is effective in developing and improving reading fluency (Valdebenito & Duran, 2013); reading comprehension skills (Valdebenito & Duran, 2015); reading self-concept (Flores & Duran, 2016); family involvement (Blanch, Duran, Valdebenito & Flores, 2013) and teacher training (Miquel & Duran, 2017).

## **Method**

### **Objectives**

The objective of this research was to understand the role of the teacher in a CL classroom (in this case, in peer tutoring), to be able to identify those actions which required greater attention during the initial stages of teacher training. To achieve this objective the following three research questions were asked:

1. What actions does the teacher take when the pupils are working in a CL session?
2. How are these actions distributed over time?
3. What perceptions do third year Primary Education undergraduates have in relation to the actions that shape the role of the teacher in a CL classroom?

### **Design**

A qualitative design approach was used, based on process analysis with data coming from the observation of the sample group of teachers and from analysis of the portfolio of documents generated. This qualitative approach is consistent with the so-called third generation of research on cooperative learning, focused on the process to better understand its effectivity (Dillenbourg, Baker, Blaye & O'Malley, 1996). As mentioned in the theoretical framework, this research stemmed from studies in which the pupil's learning had been clearly demonstrated and thus the effectiveness of the programme within which the research was being carried out was validated.

### **Sample**

The sample (Table 1) comprised 10 teachers in 5 primary schools, in Catalonia, where CL was used in the classrooms (1st to 6th grade) and 13 undergraduate students (third year Primary Education students) completing their practicums. Teachers participating in the programme had over three years teaching experience, had received a specific three-session face to face training course in the programme Reading in pairs and had virtual support at their disposal. The objective of the seven-week practicum was to put the training into practice by carrying out observation tasks and by intervening

Table 1

*Sample of Participants*

Center	Grade (X years old)	N Pupils	Teaching Staff	Practicum Students
1	1st (6.6)	23	2	2
	2nd (7.4)	26	2	2
2	1st (6.5)	22	1	2
3	3rd (8.6)	21	1	2
4	3rd (8.8)	25	2	2
	5th (10.7)	25	1	1
5	6th (11.8)	28	1	2
Total	(8.6)	170	10	13

twice in the classroom in instrumental areas of the syllabus. All of this occurred under the supervision of the university tutor and the tutor of the class the undergraduate was working in.

### Instruments and Data Analysis

Two instruments were used to collect data, the first instrument answered questions one and two and the second answered the third question.

**Video-tapes.** The teachers' actions during the 20 (2 per teacher) Reading in pairs sessions in CL classrooms were recorded on video and then analysed with the Atlas.ti v6.2, using an adhoc category system to provide answers to the first two questions in this study (Kaendler et al., 2015). The general categories followed the structure of the programme (warm up, development and rounding off) and the sub-categories were elaborated using grounded theory (Strauss & Corbin, 1998). To check the reliability of the categories, an agreement between judges test was carried out by three external observers, who were experts in the field. After a brief training session on the logic and content of the system of categories, along with some unassessed tests to check comprehension, each of the three judges individually analysed the same sample of videos (5 video-tapes, 25% of the total). Afterwards, coincidences and discrepancies between judges were calculated using the Spearman coefficient (Hauke & Kossowski, 2011).

**Written report.** A three-page individual report was compiled by each student completing their practicum. Students were asked to answer questions on the teacher's role in CL situations, their expectations related to the role observed and the role of the teacher in other situations (not in the classrooms where Reading in pairs was implemented). An interpretation of the underlying meaning of each student's written report (our unit of analysis) was elaborated by three researchers, and different themes and sub-

themes were abstracted by consensus (Graneheim, & Lundman, 2004). They discussed differences, particularly those related to the frequency of each sub-theme, until they reached an agreement.

## Results

The system of categories used to analyse the recorded material is structured in three segments, warming up, the development stage and rounding off and considers how the Reading in pairs sessions develop. These segments are broken down into dimensions, categories and sub categories (precise observed actions). Table 2 shows the distribution of the dimensions in each segment, accompanied by the frequencies and the length across all the sessions.

As we pointed out in the section on procedures, a process of category validation is carried out to refine the final proposal. Table 3 shows the reliability of the system of categories.

*Spearman* coefficient values ( $r$ ) close to 1 and statistical significance less than .01 demonstrate that there is a high rate of correlation among the judges, thus enabling us to assume that the designed system of categories is reliable.

- a. What actions does the teacher carry out while students are working in a CL environment? The actions in the Warm up segment, the period prior to working autonomously, which appear in Table 4 (pg. 32) show only 12.01% of the total. Actions referring to the structuring and functioning of the session stand out much more (5.41%, category 1.3).

Segment actions: The Development stage, as Table 5 (on page 33) shows, accumulates the highest frequencies (82.57%). This is to be expected because this is when the teachers' actions are concentrated on the autonomous work the pairs are doing. This proves one of the main objectives of CL: empowering students to work autonomously, in this case in pairs.

Those actions which have a higher frequency register correspond to the dimensions of offering specific support (either because the students have requested it, or on the teacher's own initiative). The highest frequencies are noted in questions related to the structure of the session (18.44%, category 2.6) and more concretely in relation to correcting the actions of each member in accordance with the role they have (11.00%, subcategory 2.6.2), instructing them on what each of them should or shouldn't do. Secondly, and in the same segment, many situations (17.26%, category 2.5) related to the level of support given when errors were identified or when help was requested, were registered. The subcategory which stands out is that of enlisting the pair's own resources (previous knowledge or support material), so they can answer the question by themselves (5.58%, subcategory 2.5.2). Having said that, the large number of set answers that are registered do not favour the pair's autonomous development (3.55%, subcategory 2.5.4).

Another distinctive action (15.57%, category 2.1) is active listening, whose function is to discover the resources and strategies used by the pupils to stimulate dialogue and build up knowledge together. The subcategory with most actions (13.03%, subcategory 2.1.3), is that of observation with the teacher listening and intervening, as she walks around the classroom. It is interesting to note the actions which refer to the immediate replies given by the teachers within a minute of a request for help (14.89%, category 2.2).

In this sense, the subcategory which is most evident is 2.2.1 (14.72%), where the teacher responds immediately to the requests from either member of the pair (irrespective of their role).

With regards to the final segment: Rounding off, although it only accounts for 4.40% of the actions (see Table 6 on pg. 34), it has the highest number of actions in the oral reflection section (3.38%, category 3.3) and more

Table 2

*System of categories to analyse teaching practices. Frequencies (f) and time (t)*

Segment of the session	Dimensions	Categories	f (%)	t (%)
WARM UP: Actions during the moments prior to autonomous pair work	Session management: promoting working autonomously. Revising the initial conditions of the pair's work to guarantee the session progresses correctly and the students can work autonomously.	1.1 Classroom spaces	12.01	19.74
		1.2 Pair regrouping		
		1.3 Structures and functioning of the session		
		1.4 Social skills		
		1.5 Materials		
DEVELOPMENT: period of autonomous pair work in the classroom	Active listening. Discover resources and strategies employed by students and stimulate dialogue to build knowledge together	2.1 Active listening	82.57	69.32
		2.2 Immediate reply when requested		
	Immediate attention and support	2.3 Help and support in the activities		
		2.4 Stimulate conversation		
		2.5 Scaffolding when there are errors or help is requested		
		2.6 Support to structure the session		
	Teaching social skills	2.7 Support to help develop social skills of cooperation		
		2.8 Collecting continuous assessment tasks		
	Systematic observation	2.9 Activities unrelated to the session		
		3.1 (Pair self-assessment)		
ROUNDING OFF: final minutes at the end of pair work	Rounding off: reflection, preparing the next session and self-assessment (if required)	3.2 Hand out activity sheets for next session	4.40	9.21
		3.3 Oral reflection		
		Incidences/others	1.02	1.73

Table 3

*Reliability of the category system according to the Spearman coefficient*

Agreement between judges	r	p
Judge 1* Judge 2	.862	.00
Judge 1 * Judge 3	.924	.00
Judge 2 * Judge 3	.903	.00



Table 4

*Session segment: Warm up: categories and subcategories. Frequencies (f) and time (t)*

Categories	Subcategories	f(%)	t(%)
1.1 Classroom spaces	1.1.1 Remind the pairs how they were seated and /or supervise how students decide to sit together.	2.20	1.49
1.2 Regrouping the pairs	1.2.1 Sort out any absences to guarantee pair work runs smoothly.	0.85	1.43
1.3 How the session is structured and functions	1.3.1 Remind pupils how the session is structured: sequence, work or activities related to the role of each member of the pair.	2.54	3.24
	1.3.2 Remind pupils of aspects of the structure of the session by offering a model.	0.17	1.10
	1.3.3 Ask students to remind their partners about the structure of the activity.	2.20	9.20
	1.3.4 Ask questions to ensure the activity sheet has been prepared by the tutor and/or refer to any agreements made previously.	0.51	0.09
1.4 Social skills	1.4.1 Remind pupils about the use of social skills and/or the importance of sitting close to each other to avoid needing to shout.	1.35	0.51
1.5 Materials	1.5.1 Hand out the activity sheets to be used during the session.	1.35	2.13
	1.5.2 Explain the information on the activity sheet.	0.34	0.26
	1.5.3 Refer explicitly to the support material that the pairs can use while they are working: personal material and classroom material.	0.00	0.00
	1.5.4 Manage the classroom material.	0.51	0.29
<b>Total</b>		<b>12.01</b>	<b>19.74</b>

specifically in the subcategory that evaluates the final joint reflection (2.03%, subcategory 3.3.1).

b. How are these actions distributed over time?

The time dedicated to the actions which feature in the final column of the tables show that the Warm up (Table 6) takes up almost 20% of the session's time (19.74%) The time dedicated specifically to structuring (9.20%, subcategory 1.3.3) but also to the functioning of the session, stand out in this segment (13.63%, category 1.3). The most significant amount of time, 69.32% of the total session time, occurs in the second segment and in it the largest amount of time is spent on answering and correcting error-related questions with different levels of scaffolding (18.32%, category 2.5). The subcategory which takes up most time is the one enlisting the pair's own resources (6.28%, subcategory 2.5.2).

The second most important action in terms of time is active listening (15.24%, category 2.1), specifically the time the teacher spends walking around the classroom, stopping to listen to the pairs and intervening whenever she considers necessary (11.77%, subcategory 2.1.3). Support to structure the session also stands out (12.41%, category 2.6), along with the subcategory which contemplates correcting the actions of each member of the pair depending on their role (7.96%, subcategory 2.6.2). Also, interesting, because of its significance in the new role of teachers, is the subcategory which features the use of observation templates for pairs and the whole class in aspects such as the level of autonomy, the quality of the work or the occasional needs for training, among others during the session. (8.59%, subcategory 2.8.1).

Regarding the final segment: Rounding off, which takes up 9.21% of the total session time (see table VI), most of the time is dedicated to oral

Table 5

*Session segment: Development: categories and subcategories. Frequencies (f) and time (t)*

Categories	Subcategories	f(%)	t(%)
2.1 Active listening	2.1.1 Walk around the classroom without stopping to listen.	0.17	0.41
	2.1.2 Walk around the classroom and stop to listen to the pairs.	2.37	3.06
	2.1.3 Walk around the classroom, listen to the pairs and intervene.	13.03	11.77
2.2 Immediate request response	2.2.1 Respond immediately to any requests for help from either member of the pair	14.72	4.85
	2.2.2 Respond immediately to requests for help from the tutors.	0.17	0.29
	2.2.3 Respond immediately to requests for help from the tutees.	0.00	0.00
2.3 Support during the activity	2.3.1 Offer support to those pairs who appear to be off task, distracted or inactive, or pairs with special needs.	0.17	0.25
2.4 Stimulating conversation	2.4.1 Encourage the pair to talk instead of simply answering the questions on the activity sheet mechanically.	3.73	3.47
	2.4.2 Encourage tutees to ask when there is something they do not understand.	1.18	0.31
	2.4.3 Encourage the pair to complete the activities together.	0.68	0.43
2.5 Scaffolding for errors or requests for help	2.5.1 Ensure the pair understands what they have to do or have done by asking them or getting them to repeat the exercise.	4.74	3.94
	2.5.2 Enable the pair to answer questions on their own by enlisting resources they have available.	5.58	6.28
	2.5.3 Guide the pair's thought processes by asking questions (clues) until they manage to clarify their doubts.	3.38	5.00
	2.5.4 Reply directly to the question.	3.55	3.10
2.6 Help to structure the session successfully	2.6.1 Refresh aspects of time management.	4.06	2.72
	2.6.2 Ensure each member of the pair acts in accordance with their role. Remind each of them what they should and shouldn't do.	11.00	7.96
	2.6.3 Offer help in pacing the activity: reminding them where they are in the activity or suggesting changing it.	3.21	1.67
	2.6.4 Transfer control on how to manage time and activities and allow and/or promote initiatives from the pair to adapt the structure.	0.17	0.04
2.7 Help in developing social skills of cooperation	2.7.1 Point out and discuss the importance of social skills to improve their working relationship and/or provide examples.	1.86	1.17
	2.7.2 Encourage them to reflect on how well their intervention satisfies the needs of the tutee. Encourage the tutor to adapt his/her interventions to the needs of the tutee.	1.52	0.73
2.8 Collecting evidence for continuous assessment	2.8.1 Use pair or group observation templates	3.72	8.59
	2.8.2 Collect the activity sheets or other work at the end of the session.	0.00	0.00
	2.8.3 Reinforce the improvements made by the pair.	0.00	0.00
	2.8.4 Reinforce the tutor's improvements.	0.34	0.18
	2.8.5 Reinforce the tutee's improvements.	0.34	0.14
2.9 Activities unrelated to the session	2.9.1 The teacher leaves the classroom or works on activities unrelated to the session.	1.18	1.72
	2.9.2 The teacher asks the group to speak more quietly or to be silent.	1.69	1.21
<b>Total</b>		<b>82.57</b>	<b>69.32</b>

reflection (5.54%, category 3.3), particularly the subcategory related to the final whole-class reflection (4.05%, subcategory 3.3.1).

Finally, to complete this analysis on frequencies and the time dedicated to different actions by the teacher based on the different categories, some attention should be drawn to those actions which take up less time and which

Table 6

*Session segment: Rounding up: categories and subcategories. Frequencies (f) and time (t)*

Categories	Subcategories	f(%)	t(%)
3.1 (Pair Self-assessment)	3.1.1 Checks if students have understood self-assessment sheet	0.00	0.00
	3.1.2 Explains how to complete the self-assessment sheet.	0.68	1.95
	3.1.3 Explains and provides examples on how to complete the self-assessment sheet.	0.00	0.00
	3.1.4 Encourages pairs to reflect on their work and to find ways to improve in the following sessions.	0.34	1.72
3.2 Handing out the next activity sheet	3.2.1 Gives the tutor the sheet and/or reminds them how they should prepare it.	0.00	0.00
3.3 Oral reflection	3.3.1 Together the teacher and pupils draw conclusions and/or teacher offers advice for the next session.	2.03	4.05
	3.3.2 Answers any questions the pairs may have.	1.02	1.43
	3.3.3 Rounds off the session with a celebration for a job well done	0.34	0.07
<b>Total</b>		<b>4.40</b>	<b>9.21</b>

may offer clear ideas for improvement. All of them appear in the category dealing with autonomous pair work and refer to the real need for appropriate teacher support especially the support aimed at stimulating conversation by either encouraging the tutee to ask questions (subcategory 2.4.2) or supporting the progressive transfer in the control of time. Also, there are very few actions specifically aimed at teaching social skills, such as cooperation, not only in explaining and arguing how important they are to improve pair work but also in forcing the tutor to think about how well s/he covers the tutee's needs. Finally, very little relevance is noted in those categories related to systematic observation, particularly those referring to effort and to demonstrating the specific improvements of the pair or individual in both reading skills and cooperation.

- c. What perceptions do third year Primary Education undergraduates have in the initial stages of their practicum in relation to the actions that shape the role of the teacher in a CL classroom?

The observations (collected in the written reports) made by the 13 undergraduate students doing their practicum in schools where *Reading in Pairs* was implemented, are analysed. Table 7 shows the three themes and sub-themes which emerged from the analysis Frequency of the sub-themes (the number of times this sub-theme was coded within the total data) was calculated (Atherton, Lummis, Day & Cross, 2018).

Referring to the perceptions the students held in relation to the teacher's role in the *Reading in Pairs* sessions, almost half of the comments referred to the actions connected with guiding the work process (14.29%), transferring protagonism to the students (16.07%) and offering tools to enable pupils to resolve doubts on their own (17.86%) (Sub-themes 1.2, 1.3, 1.4). Here are some of the comments made:

"The pupils become the protagonists of their own teaching-learning process and the teacher becomes a guide in the process, offering resources when they are needed so that the pupils can acquire new knowledge."(LV-I)<sup>1</sup>. "The teacher replies in such a way that follow up questions can be asked rather than simply giving set answers " (F-M).

Table 7 shows that the total frequencies of the remaining sub-themes, within the first theme analysed, is balanced. Here are some of the students' comments related to task motivation (sub-theme 1.7: 8.93%):

"The teacher maintains pupils' interest and motivation, she always praises their work and explains very clearly how they are building their knowledge as the sessions progress."(P-C).

Or highlighting the importance of observation in the work carried out in the classroom (sub-theme 1: 8.93%):

"She observes and walks around the room, listening to the pupils' reasoning and, if necessary, makes notes on an observation template to help her monitor the pupils and the project. She only intervenes if the students have doubts or get too distracted." (F-E).

In relation to continuous assessment (sub-theme 1.5: 7.14%), which we could partly consider a consequence of the process of observation:

"Whenever possible, she takes notes and fills in the different items on the observation templates, which allow her to assess the pupil's involvement, aspects related to the tutors and tutees etc." (S-L).

In the second theme, some students wished to state that the teacher's role during CL is what they had forecasted, based on what they had learned or been told at University (42.86%), although some of them did mention that there was a greater teacher implication than what they had expected (28.57%), especially when they took their experience from other practicums into consideration:

Table 7  
*Themes and sub-themes analysed from the reports*

Themes	Sub-Themes	f	%
1. Teacher's role in CL situations	1.1. Observe the work in the classroom	5	8.93
	1.2. Guide the process	8	14.29
	1.3. Transfer protagonism to the students	9	16.07
	1.4. Offer tools by talking to the pupils so they can resolve doubts on their own	10	17.86
	1.5. Assess pupils' progress while they are working	4	7.14
	1.6. Cover the needs of the whole group	4	7.14
	1.7. Motivate them to do the task	5	8.93
	1.8. Plan and organize before the sessions	5	8.93
	1.9. Be flexible and know how to improvise when required	2	3.57
	1.10. Design material	4	7.14
<b>Total</b>		<b>56</b>	<b>100</b>
2. Expectations related to the role observed	2.1. Role as planned according to bibliography / theory	3	42.86
	2.2. Greater teacher implication than expected	2	28.57
	2.3. A difference in role, based on previous experience	2	28.57
<b>Total</b>		<b>7</b>	<b>100</b>
3. Role of the teacher in other classroom situations	3.1. Similar to other peer learning situations	8	61.54
	3.2. Different in individual/ whole group work situations	5	38.46
<b>Total</b>		<b>13</b>	<b>100</b>

<sup>1</sup> School's and student's initials.

"When I learned about the programme, the idea I had of the teacher's role corresponded pretty much with reality; even so, I am still amazed at all the work that goes on behind the scenes." (25S-P).

Those students who were able to attend other lessons in the centre where peer learning was in practice (theme 3), coincided that there was no major difference in the teacher's role they had observed in the sessions of the programme. However, they do agree that there are clear differences when the lesson is structured in a more classical way (individual or whole group transmissive teacher's role):

"In the other lessons, you usually adopt a more traditional role in the way you explain new topics; the teacher explains and the pupils copy." (25S-M).

So, there is a major shift in the role of the teacher, when the lesson is organized in a cooperative way.

## Conclusions

As we have now seen, the organization of a CL lesson, where pairs work together in a peer tutoring set up, has a profound influence on the teacher's role in the classroom. Teachers who implement the Reading in Pairs programme in their classrooms develop a series of actions which are in accordance with this new role and in which they move away from the traditional transmissive role. Thus, we see how the actions and time spent on addressing the group are substantially reduced. In fact, the warm up and rounding off sections take up less than 30% of the lesson time.

Instead, teachers devote most of their time (69.32%) and most of their actions (82.57%) to autonomous pair work. It is not unusual therefore that some teachers may think -as the question in the title of this article asks-, that once the pupils are organized into teams and know what they have to do, the role of the teacher becomes redundant. Observing teachers trained in using peer tutoring in their classrooms has shown us that there are other actions which take place during the Development segment, when the pupils are working autonomously in pairs. The main actions in this segment include:

- Walking around the classroom and listening to the interaction in the pair, intervening whenever necessary. Observation tools help the teacher to discern the level of autonomy, the quality of the work and any training that is required.
- Offering help to structure the session, especially where role-related actions need to be corrected.
- Offering specific help with a different scaffolding level and very little direct or set answering, to encourage the pair to use their own resources.
- Immediate attention (within one minute) to requests for help from the pairs.

These teaching actions, which coincide with the observations the practicum students made, transport the teacher to a new role, according to these students, that more closely resembles that of a guide who makes the pupil the protagonist in the teaching and learning process and who, through dialogue, offers them tools to enable them to resolve doubts on their own. Having the opportunity to "see" how students think or being able to offer immediate help provides great teacher satisfaction and so reflects in the quality of the teaching. Teaching actions, which are outlined in the introduction, are in concordance with the

competencies required to implement CL, (Kaendler, Wiedmann, Rummel & Spada, 2015), referring to the interactive teacher role, when students are working in teams. Teachers analysed have had opportunities to develop competencies on monitoring (collaboration, cognition and metacognition), on offering different levels of adjusted support to the needs of the pairs and on helping students to consolidate their learning, through activating their own knowledge, reflecting on their shortcomings and recognising different perspectives.

This research has two main limitations: the small sample size of participants and the focus on only one type of CL, peer tutoring, which of course complicates generating those results and demands more research. But, tentatively the results are starting to define this new role of the teacher in a cooperative classroom. Understanding the activities which derive from this role entails considering four implications.

The first relates to the need to take into consideration the importance of the teacher's training in the new role in CL classrooms. If teachers do not move from their old transmissive role they may not only lose the advantages that CL offers, but also reduce the opportunities for students to learn from each other.

Secondly, it urges us to recognise the professional profile of the actions mentioned and ensure that teachers are explicitly trained to this end. For example, as we have done in this article, promoting placements in CL classrooms for Primary Education undergraduates provides them with the opportunity to observe, learn and execute these skills. This training should complement the teacher-centred lessons which place teachers in a transmissive role.

Thirdly, some actions of this new transformative role (offering adjusted and immediate pedagogical help to their students; and actively listening to them), which have positive repercussions on both students and teachers, are developed by teachers. But teachers need to improve some other actions attributed to CL (Topping, Buchs, Duran & Van Keer, 2017), such as helping students to enhance their social skills and engaging in continuous assessment of their teamwork.

Fourthly, it is obvious that in the role described teachers must transfer part of the protagonism to the pupils. The role of the teacher is as essential in cooperative frameworks as it is in traditional settings. But this role is different and is characterized by organizing the activities of the teams in the pre-active stage and being a facilitator in the interactive stage. While the students are working in teams in the way we have discussed in this article, the teacher shares with her pupils the capacity to teach- probably the last monopoly left to her, Duran (2016)-, so that the pupils learn- and teach each other. Without doubt, it is all about converting the classroom into a community of learners in which the pupils not only learn with the help of the teacher but also, and above all, learn from the pedagogic help they give each other, under the supervision and support of the teacher.

Future research must contrast the teacher's role in other forms of CL. It is necessary to know if in other CL methods (such as jigsaw, group investigation or reciprocal teaching, for instance) the teacher's actions are consistent with this transformative role. More attention has to be paid to pre and post-active actions: what teachers do before and after a CL session (Kaendler, Wiedmann, Rummel & Spada, 2015). And finally, the personalised and immediate pedagogical help that teachers can offer to their students should be studied in depth. ■

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