

## **Collaborative reflection and tutor's assistance in teacher education. Two case studies on case-based reflection settings**

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### **ABSTRACT**

*This paper studies the functioning of collaborative reflection in a case-based reflection setting integrated in the teacher education Practicum. We carried out two case studies in which reflection was conducted collaboratively by 15 student teachers and one tutor. In each reflection process, we investigate the phases and the sequence of collaborative reflection and the assistance offered by the tutor in the different phases of the process.*

*We identify consistent sequences and phases, with each phase being characterized by different types of tutor assistance. However, these sequences and phases differed clearly in the two cases studied, and the purposes that the tutors pursue through reflection were also different. Moreover, the sequences found did not conform to the patterns that some authors considered to be characteristic of good reflection.*

*Our findings provide support to the idea posited by previous authors that there is no single specific sequence that defines good reflection, and that good reflection can take many different forms and have many different purposes.*

### **REFLECTION IN TEACHER EDUCATION**

Reflection is considered central in teaching and in teacher education programs today. Its incorporation within teacher education and the development of reflective

skills are currently the focus of a great deal of research in this field, and many possibilities have been proposed (Buschor & Kamm, 2015; Kim et al., 2013). One setting that is becoming increasingly popular, especially when integrated in student teachers' practicums, is *case-based reflection*. Typically, this setting consists of presenting a real practice situation, on which a tutor and several student teachers conduct collaborative reflection (McCullagh, 2012; Tigelaar et al., 2008; Mauri et al., 2015). The general structure of this setting is well established, with several ways of presenting the situation for reflection (e.g., video recordings, written critical events, and direct observation), but it is far less clear how the process of collaborative reflection should be conducted in terms of the interaction of the participants and tutors' assistance (Gelfuso & Dennis, 2014). There are two main reasons for this lack of definition. First, the question of the exact nature and purpose of reflection remains controversial; and second, there is no consensus on how collaborative reflection should work, and how it should be assisted by the tutor.

Regarding the nature of reflection, for example, there is an ongoing discussion about whether successful reflection is defined by a unique sequence of phases (Korthagen, 2001; Gelfuso & Dennis, 2014) or, on the other hand, whether it can take many different forms without a pre-established sequence (Clarà, 2015; Tessema, 2008). Among those who defend the existence of a characteristic sequence, the most popular candidates are Korthagen's ALACT sequence (Action-Looking Back-Awareness-Creating-Trial) and a sequence strongly based on Dewey's (1933) writings termed Suggestion-Intellectualization-Idea-Elaboration-Testing (e.g. Gelfuso & Dennis, 2014). Nor is there a consensus on the intended purpose of reflection. Among the different positions are the Deliberative Approach, according to which reflection should contrast the situation of practice with academic knowledge (Theory with a big "T"); the Realistic Approach, which aims to generate personal theory (theory with a small "t") from reflection on practice; the Personal Approach, in which reflection is oriented to making hidden personal beliefs explicit and conscious; and the Critical Approach, oriented towards morally or ideologically eliciting and considering social, political and ethical issues through reflection. (Mansvelder-Longayroux, Beijaard, & Verloop, 2007; Korthagen, 2001). It has been argued that this disparity in the conceptions of the purpose of reflection is due to the pedagogical views underlying its orientation, which, fortunately and inevitably, are very plural (Korthagen, 2001).

The functioning of collaborative reflection has been approached from two main viewpoints. Most analyses have focused on ways of assisting individual reflection within a collaborative setting. For example, Korthagen (2001) studied the tutor's scaffolds which can assist each phase of the individual ALACT sequence, Harford & MacRuaric (2008) studied how to prompt and structure dialogue among peers in such a way that their collaboration fosters reflection, and Wopereis, Sloep, & Poortman (2010) studied how certain tools (in their case, blogs, but other researchers have studied portfolios, simulation tools, etc.) can be used to promote individual reflection within a collaborative setting. In parallel, a smaller body of

research has built up around the study of reflection as a collaborative process – that is, collaborative reflection as a reflection process in itself, and not only as a collaborative setting that supports individual reflection. This approach takes participants' interaction as a unit of analysis. From this perspective, for example, Tigelaar et al., (2008) studied and identified different *interaction types* in processes of collaborative reflection: e.g. Clarifying, Interpreting, Judging, Explaining, etc. Korthagen (2001) also explored this kind of approach, and proposed a sequence of collaborative phases in reflection: Experience – Structuring – Focusing – theory (note that theory is written with a small “t”).

In this paper we study collaborative reflection in case-based reflection settings, starting from three premises: 1) reflection is a collaborative process – that is, we aim to study collaborative reflection as a reflection process in itself, by adopting social units of analysis; 2) successful reflection may have many different purposes; 3) successful reflection may take many different forms and sequences.

The study pursues two research objectives: first, to understand how processes of collaborative reflection are structured and evolve, and second, to understand the tutor's role within these collaborative processes

## **METHOD**

### **Design, setting, participants and data**

In view of these premises and objectives, we adopted a multiple case study design. Since we were open to (and interested in) a diversity of forms and purposes of reflection, we studied eight cases in which the reflection was guided by eight different tutors, at three universities in culturally different areas in Spain (Andalusia, Basque Country, and Catalonia). In all instances a similar case-based reflection setting was used, but no indications were given to tutors regarding the guidance they should give (except that they should offer opportunities to students to participate and talk).

In all three settings, the case-based reflection project was carried out at the university during the students' practicum period. The situations to be reflected upon were real events experienced by the participants in their practicum. Each student selected one situation or event during her practicum that she wanted to discuss in the collaborative reflection; she wrote a description of it, and read it out loud in the case-based reflection setting. After this, the collaborative reflection process began. In the eight cases, between 10 and 15 student teachers and one or two tutors took part. There was a minimum of five consecutive sessions lasting approximately 90 minutes each. One, two, or sometimes three situations were reflected upon in each session.

We videotaped the first five sessions of all cases. These videotapes constitute the main data for analysis, but we also interviewed the tutors before and after the five

sessions in order to discuss the purpose they were pursuing when guiding collaborative reflection.

## **Analysis**

We applied two analytical techniques to the videotaped data: Interactivity Analysis and Content Analysis. Interactivity Analysis (Coll, Onrubia & Mauri, 2008) is a technique for the analysis of joint activity in educational settings, strongly based on the idea of participation structures (Erickson & Schulz, 1997), which uses social units of analysis. The aim of applying this analysis to our data was to characterize and understand the phases of collaborative reflection occurring in each process of collaborative reflection. In short, this analysis involved three steps. First, we identified *chunks* of interaction as units of data; second, we coded each of these units of interaction by means of inductively created categories which described “what the participants are doing together”; third, we described each of these units of interaction according to the structure of turn-taking among the participants.

Content Analysis is a technique which permits reliable coding of large amounts of qualitative data, so that the data are in some sense simplified and can be more easily processed and managed (Krippendorff, 1980; Clarà & Mauri, 2010). We applied this technique to identify the different forms of assistance offered by the tutor at the various phases of the reflection process. The unit we used to apply the codes was the turn. The system of categories was inductively created from previous data (Gerbic & Stacey, 2005), and inter-rater procedures were successfully conducted to establish the reliability of the system (for all the dimensions, in the last version of the system, we found a rate of agreement of 75% in independent coding of 30% of the data). The system of categories included three dimensions of assistance: 1) Assistance with the dialogic nature of conversation (seven categories); 2) Assistance with the interpretation of the situation (10 categories); 3) Assistance with linking theory and practice (six categories).

## **RESULTS**

In this paper we present the results of two cases, which we will call Case 1 and Case 2.

### **Case 1**

In Case 1, 15 student teachers and one tutor participated in the reflection. In the interview, the tutor described the aim while guiding the reflection process as to encourage the students to identify internal contradictions or dilemmas which may explain why the situation took place in the way it did. In the five sessions analysed, the participants reflected on eight different situations (two in the first session, two in the second, one in the third, one in the fourth, and two in the fifth).

In the global assessment of the five sessions, Interactivity Analysis makes it possible to identify a general pattern of collaborative reflection composed by four phases: Clarification-Exploration-Focalization-Interpretation (Table 1).

Table 1. General structure of collaborative reflection (Case 1).

Structure:	Clarification	Exploration	Focalization	Interpretation
Interaction:	Sr-S-Sr-S	T-S-S-S-S	T-S-T-S	T
Total time in the five sessions (eight situations):	27 m.	59 m.	125 m.	34 m.
% of total time (weight):	11%	24%	51%	14%

The *Clarification* phase is devoted to clarifying aspects of the situation presented for reflection. In this phase the interaction is typically centred on the student who has presented the situation, to whom the other students direct their questions one after the other; thus, the turn-taking structure can be represented as Ss-S-Ss-S (where Ss is the student who presented the situation, and S are other students). The *Exploration* phase is devoted to exploring different, independently considered, aspects or problems of the situation under reflection. Typically, these aspects are considered one after the other. For example, in a situation describing a conflict between teachers about how to situate students in a classroom (one teacher wanted to situate them in pairs, in her subject, while another wanted to situate them in groups of four), one aspect was “the problems that the continuous re-organization of the classroom may cause for children’s learning”, and another aspect was “the difficulty some teachers find in using collaborative methodology”, etc. The turn-taking structure in this phase was open, and typically no participant became the centre of the conversation. The turn-taking structure can be represented as T-S-S-S (where T is the tutor and S are different students). The *Focalization* phase focuses on internal tensions or dilemmas which may be underlying the situation, typically creating tension in aspects explored in the previous phase. For example, in the situation mentioned above, a tension exists “between methodological stability in the class and teachers’ autonomy”. In this phase, the turn-taking structure is typically centred on the tutor and can be represented as T-S-T-S... (where T is the tutor and S are different students). Finally, the *Interpretation* phase is devoted to establishing a plausible interpretation of the situation, based on the clarification of the main dilemma or internal tension which explains it. Typically this is done by

means of a monologue by the tutor, with little intervention from the students. Taking the five sessions together, the phase which was given most time was *Focalization*, with 125 minutes (51% of the total collaborative reflection time). Just under a quarter of the time was given to *Exploration* (59 minutes, 24%), 14% to *Interpretation* (34 minutes), and the 11% to *Clarification* (27 minutes).

If we look at the different collaborative reflection processes separately, we find that the general structure presented above is quite consistent over the five sessions and eight situations reflected upon in Case 1 (Table 2). The sequential order of the different phases was consistent in all the reflection processes. The full sequence was found in four instances; in two others one phase was missing (situation 5 lacked Clarification and situation 7 lacked Exploration); the remaining two instances lacked two phases (Clarification and Interpretation, in 1 and 2). In all instances, the phase with the most time was Focalization, although in 2 and 3, Exploration and Focalization were given the same amount of time.

Table 2. Phases of collaborative reflection in each situation (Case 1).

	Clarification	Exploration	Focalization	Interpretation
Situation (session)	% total time	% total time	% total time	% total time
1 (1)	--	31%	68%	--
2 (1)	--	50%	50%	--
3 (2)	11%	31%	31%	27%
4 (2)	33%	14%	33%	19%
5 (3)	--	14%	67%	19%
6 (4)	18%	21%	43%	18%
7 (5)	38%	--	48%	14%
8 (5)	16%	26%	31%	26%

Content Analysis identified certain types of assistance which were characteristic of some of the phases of collaborative reflection in Case 1 (Table 3). In the Clarification phase, the tutor offered no assistance at all; however, he offered assistance in the Exploration phase. The most frequent forms of assistance in this

phase were: Opening up the conversation to others, to encourage the participation of more students in the conversation; and Reminding students of the interpretative character of reflection, to avoid evaluative and judgemental attitudes. In the Focalization phase, the most frequent forms of assistance were: once again, Opening up the conversation to others; Considering students' contributions when the tutor contributes to the conversation – for example, highlighting what one student has said; and Fostering students' identification of dilemmas, usually by means of provocative questions or interventions. In the Interpretation phase, the most frequent forms of assistance were: Considering students' contributions and Identifying explanatory dilemmas in the situation, in which the tutor himself highlighted, identified or explained these dilemmas or internal tensions.

Table 3. Typical forms of tutor's assistance in each phase (Case 1).

	Clarification	Exploration	Focalization	Interpretation
Typical assistance on Dialogic Conversation		Opening the conversation to others	Opening the conversation to others  Considering students' contributions	Considering students' contributions
Typical assistance on Interpretation		Reminding participants of the interpretative character of reflection	Fostering students' identification of dilemmas	Identifying explanatory dilemmas in the situation
Typical assistance on linking Theory and Practice				

## Case 2

In Case 2, as in Case 1, 15 student teachers and one tutor participated in the reflection. In the interview, the tutor identified the purpose in guiding the reflection

process as to generate academic knowledge by approaching the practical situation being reflected upon from the perspective of Theory. In the five sessions, participants reflected upon five different situations.

In the global assessment of the five sessions analysed, as in Case 1, Interactivity Analysis identified a general pattern of collaborative reflection composed by four phases, although these phases were clearly different from the ones found in Case 1. The phases identified in Case 2 were: Clarification-Exploration-Theoretical Discussion-Synthesis (Table 3).

Table 4. General structure of collaborative reflection (Case 2)

Structure:	Clarification	Exploration	Theoretical Discussion	Synthesis
Interaction:	Ss-S-Ss-S	T-S-S-T	T-S-S-S-T	T
Total time in five sessions (five situations):	10 m.	237 m.	60 m.	8 m.
% of total time (weight):	3%	75%	19%	3%

As in Case 1, the sequence of collaborative reflection in Case 2 began with the phase of *Clarification*, followed by *Exploration*. However, in Case 2, the turn-taking structure of the Exploration phase was slightly different; in this case the conversation was more centred on the Tutor, though not excessively so. Typically, the tutor's intervention was followed by interventions from several (though not many) students; then the tutor summarized or considered what these few students had said and restarted the conversation. Thus, , the conversation was organized as a succession of short pieces of open conversation between students, which were marked and controlled by tutor's interventions at the beginning and end of each short piece. This can be represented as T-S-S-T... (where T is the tutor and S are different students). The *Theoretical Discussion* phase was devoted to generating theoretical knowledge, previously learnt by the students in other subjects, by using the situation to exemplify and examine Theory. The turn-taking structure was similar to that of the previous phase, that is, T-S-S-T... Finally, the *Synthesis* phase summarized what had been said and established in the previous phases. The turn-taking structure typically comprised a monologue by the tutor, with little intervention by the students.

Taking the five sessions together, the phase which was given the most time was, by a long way, *Exploration*, with 237 minutes, or 75% of the total collaborative reflection time. *Theoretical Discussion* was given 19% of the total time (60 minutes), and *Clarification* and *Synthesis* only 3% each (10 and 8 minutes respectively).

Table 5. Phases of collaborative reflection in each situation (Case 2).

	Clarification	Exploration	Theoretical Discussion	Synthesis
Situation (session)	% total time	% total time	% total time	% total time
1 (1)	----	58%	42%	----
2 (2)	5%	95%	-----	----
3 (3)	----	57%	33%	10%
4 (4)	----	100%	----	----
5 (5)	11%	69%	15%	5%

Looking at each reflection process separately, we find that the order in which the four phases appeared was quite consistent, but that they did not always appear (Table 4). In fact, the four phases only appeared all together in one instance (5); in one instance there was only one phase (Exploration in 4), and in two other instances there were only two (Exploration and Theoretical discussion in 1, and Clarification and Exploration in 2). However, in all instances the emphasis (in terms of time) was clearly placed on the phase of Exploration, which was the only phase that appeared in all the reflection processes in this case.

Regarding tutor's assistance, we identified some characteristic types in each of the four phases in Case 2. The most typical form of assistance in the *Clarification* phase was Considering students' contributions, in which the tutor made her contributions to the conversation. The most typical form of assistance in the *Exploration* phase were (once again) Considering students' contributions; Opening the conversation to others in order to foster the participation of more students; Reminding participants of the interpretative character of reflection; Identifying new aspects of the situation, in which the tutor highlighted or proposed a new aspect

and asked the students to consider it in their reflection; Fostering the students' identification of new aspects of the situation, in which, instead of proposing the new aspect directly, the tutor gave clues, suggestions, or questions so that the students themselves identified new aspects to be incorporated in the reflection; Identifying links with other situations, in which the tutor established similarities or comparisons between the situation under reflection and other situations; and Identifying links with academic knowledge, in which the tutor pointed to relationships between the situation and aspects of Theory. The most typical assistances offered in the *Theoretical Discussion* phase were: Considering students' contributions; Opening the conversation to others; Requesting clarification from a student about her opinions or views; Identifying new aspects of the situation; and Fostering the students' identification of links with academic knowledge, in which, instead of the tutor identifying these links (as she had done in the previous phase), the tutor now gave clues or questions to encourage the students themselves to identify new links with their academic knowledge. Finally, the most typical forms of assistance that the tutor offered in the *Synthesis* phase were: Considering students' contributions; Reminding participants of the interpretative character of reflection; Identifying new aspects of the situation; Reminding participants of the interpretative framework of reference, in which the tutor emphasized theoretical frameworks or ideas that the students had worked on in other subjects; and Identifying links with academic knowledge.

Table 6. Typical forms of tutor's assistance in each phase (Case 2).

	Clarification	Exploration	Theoretical Discussion	Synthesis
Typical assistance in Dialogic Conversation	Considering students' contributions	Considering students' contributions  Opening the conversation to others	Considering students' contributions  Opening the conversation to others  Requesting clarification from a student	Considering students' contributions

<p>Typical assistance on Interpretation</p>		<p>Reminding participants of the interpretative character of reflection</p> <p>Identifying new aspects of the situation</p> <p>Fostering the students' identification of new aspects of the situation</p>	<p>Identifying new aspects of the situation</p>	<p>Reminding participants of the interpretative character of reflection</p> <p>Identifying new aspects of the situation</p> <p>Reminding participants of the interpretative framework of reference (e.g. constructivism)</p>
<p>Typical assistance on linking Theory and Practice</p>		<p>Identifying links with other situations</p> <p>Identifying links with academic knowledge</p>	<p>Fostering the students' identification of links with academic knowledge</p>	<p>Identifying links with academic knowledge</p>

## DISCUSSION

In this paper we have presented two different case scenarios where collaborative reflection was conducted in a case-based reflection setting in teacher education. Our analysis has allowed a qualitative description of each case, in terms of: 1) the purpose of collaborative reflection; 2) the phases and sequences of reflection; and 3) the forms of assistance that each tutor typically offers at each phase of the collaborative reflection process. In Case 1, the purpose of reflection was to identify the internal contradictions or dilemmas which explain the situation under reflection. Collaborative reflection in this case consistently followed a sequence of Clarification, Exploration, Focalization and Interpretation. The Focalization phase was the one with the greatest weight in this sequence, at least in terms of time. No

assistance was offered by the tutor in the Clarification phase, and in the other phases the assistance was typically devoted to encouraging students' participation of and including them in the conversation, maintaining the interpretative (not evaluative) focus, and promoting the identification of dilemmas and internal contradictions in the situation. In Case 2, the purpose of reflection was to generate a better understanding of Theory by means of the reflection on practice. In this case, collaborative reflection followed a sequence of Clarification, Exploration, Theoretical Discussion, and Synthesis. However, although the order of these phases was followed consistently in Case 2, they rarely appeared all together in one and the same collaborative reflection process. Of these four phases, the one which appeared most and for longest was the Exploration phase. In Case 2, assistance focused mainly on including and considering students in the conversation, keeping an interpretative focus, promoting the identification of a multiplicity of important aspects in the situation under reflection, and promoting the identification of links between the situation under reflection and academic knowledge and other practice situations.

In the study of both cases, therefore, we found clear and consistent sequences of phases of collaborative reflection, characterized by specific and different types of assistance. The sequences of phases found in these two cases clearly differed from one another, and were also different from the ALACT sequence, the Suggestion-Intellectualization-Idea-Elaboration-Testing sequence, and the Experience-Structuring-Focusing-theory sequence (Korthagen, 2001; Gelfuso & Dennis, 2014). In our two cases, the tutors pursued clearly different purposes in their approach to the reflection. Thus, these findings support the idea that there is no single "normative" way to conduct collaborative reflection, and that it can take many forms in terms of both sequence and purpose. Moreover, these two cases also suggest that the specific sequence of collaborative reflection may be quite strongly influenced by the purposes of participants, especially in the case of those who have the responsibility and the authority to guide the process – in our cases, the tutors. Thus, although Clarification and Exploration were found to be the first two phases in both cases, the other two phases seemed to respond very closely to each tutor's declared purpose for reflection: in Case 1, Focalization was clearly defined by looking for internal tensions and dilemmas, and in Case 2, Theoretical Discussion was very strongly defined by the generation of theoretical knowledge. All this highlights the challenge of finding new ways of defining what good reflection is without relying on normative sequences and purposes, and underlines the need to find both new

ways of studying reflection processes and new criteria to assess their quality.

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