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Scaffolding the Learning-to-Teach Process: A Study in an EFL Teacher Education Programme in Argentina[1]

El andamiaje del proceso de aprender a enseñar: un estudio en un programa de formación de profesores de inglés como lengua extranjera en Argentina

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This study seeks to examine how a supervisor scaffolds the student-teachers' learning-to-teach process in the context of one-to-one tutoring sessions in an English as a foreign language teacher education programme in Argentina. The findings indicate that scaffolding implies two main phases: a diagnostic and an intervention phase. Moreover, the supervisor was found to provide contingent help, which suited the student-teachers' perceived needs and/or difficulties. In conclusion, scaffolded help should be understood in relation to the function it serves and how it accommodates the students' level of understanding.

Key words: Learning-to-teach, scaffolding, student-teachers, supervisor, teacher education.

Este estudio tiene el propósito de examinar como una supervisora orienta a los profesores en formación durante su proceso de aprender a enseñar en el contexto de tutorías uno-a-uno de un profesorado de lengua extranjera–inglés en Argentina. Los resultados muestran que el andamiaje consiste en dos fases principales: una de diagnóstico y otra de intervención. Además, se determinó que la supervisora proveía ayuda contingente, la cual se adaptaba a las necesidades y/o dificultades de los futuros profesores. En conclusión, el andamiaje debe ser entendido en relación con la función que cumple y cómo se adapta al nivel de comprensión de los profesores en formación.

Palabras clave: andamiaje, aprender a enseñar, formación de profesores, profesores en formación, supervisora.

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Introduction

Second language teacher education (SLTE) can be described as an evolving field. Wright (2010) contends that in the 1980's SLTE mainly focused on teaching methods and techniques whereas towards the end of the century, it became more concerned with learning to teach. Freeman and Johnson (1998) argue in favour of a reconceptualised knowledge base of SLTE, which encompasses three domains: "(a) the nature of the teacher-learner, (b) the nature of schools and schooling, and (c) the nature of language teaching" (p. 406). In a similar vein, sociocultural theory (SCT) (Vygotsky, 1978) has influenced SLTE as teacher education programmes have come to conceive of student-teachers as "a community of learners engaged in social practices and the collaborative construction of meanings" and have advocated teaching modes which involve "dialogue and collaborative inquiry" (Richards, 2008, pp. 164-165). Activities that foster this form of joint participation help the student-teachers engage in conversation with teacher educators, school-based tutors, peers, and school authorities and learn from these formative meetings.

Teaching practice offers a multiplicity of opportunities to work with others; however, most of the research carried out has tended to focus on post-observation conferences and the feedback that the student-teachers are given after teaching a lesson (Brandt, 2008; Copland, 2010; Tang & Chow, 2007). Much less is known about other instructional practices such as tutoring sessions which involve dialogue and collaborative inquiry. From the perspective of SCT, teacher educators play a crucial part since they need to effectively address each student-teacher's individual zones of proximal development in order to enhance their potential for learning and focus not only on what they can already do on their own but also on what they can attain with the help of others. Therefore, one of the key skills that they need to develop is to scaffold the student-teachers' learning-to-teach process. How and to what extent scaffolding unfolds in these tutoring sessions is the main concern of the present investigation.

Literature Review

The last decades have witnessed a steady growth in research on teacher education and development from the perspective of SCT. Adequate guidance or scaffolding is an essential process to assist and guide the prospective teachers to complete a task successfully or achieve a goal (Wood, Bruner, & Ross, 1976). In a case study involving a university supervisor (US), a cooperating teacher (CT), and a pre-service teacher (PT) in physical education during the field placement, Cartaut and Bertone (2009) explored the specific and complementary scaffolding modalities used by the two teacher educators as well as their effects on the PT's professional activity development. The researchers reported that the US supported the PT by suggesting directions for finding solutions and by raising new concerns about the requirements of the teaching profession in general and of the training institute in particular. It was further found that the CT's scaffolding activity comprised the provision of alternative actions both in terms of goals and concrete operations. In addition, the PT revealed that his views and actions in the classroom changed as a result of the US's and CT's joint and complementary scaffolding processes in the advisory visit and the CT's follow-up in the field training interactions. These results provided evidence of the scaffolds the two teacher educators deployed and the role that the support or scaffolding modalities played to help the PT develop professionally. Scaffolding can also be used as a strategy to prompt student-teachers to self-analyse and question their past experiences and current beliefs. Van Zoest and Stockero (2008) conducted research to examine the role of synergistic scaffolds (Tabak, 2004) in supporting knowledge of self-as-teacher. The researchers designed and implemented six scaffolds in a secondary school mathematics teacher preparation program. They concluded that the student-teachers had developed a sense of self-as-teacher and that the scaffolds had served the purpose of prompting changes. To

a lesser extent, some changes not prompted by the instructor were introduced; an action which points at influences other than the specific six scaffolds. They also explored the pre-service teachers' perceptions of the usefulness of the six scaffolds in supporting their thinking. All participants reported that the scaffolds had encouraged them to think more thoroughly than they would have otherwise, and alluded to their synergistic use. The researchers claim to have addressed the student-teachers' learning needs when designing and implementing the scaffolds; nevertheless, when stating the limitations of the study, Van Zoest and Stockero call for the systematic diagnosis of pre-service teachers' learning needs, which represent another dimension of scaffolding that was not analysed in this study.

In order to research trainer talk from a linguistic point of view in the context of an MA class of Turkish pre-service English teachers, Engin (2013) analysed the trainer's intervention strategies deployed in the post observation conferences as a means to scaffold the trainees' reflections and classify them according to different levels of intervention. Afterward, the author found five different levels of trainer scaffolding in the interactions studied, ranging from least to direct intervention.

Cartaut and Bertone's (2009), Engin's (2013), and Van Zoest and Stockero's (2008) research studies examine scaffolding provided to either pre-service or in-service teachers as an aid to support different activities. Nevertheless, these studies only analyse the scaffolding process from the perspective of support, thus focusing solely on scaffolded help in terms of intervention strategies. Van de Pol (2012) points out that not all forms of support can be equated with scaffolding since the assistance provided needs to be contingent upon the learners' current level of understanding and faded over time.

Some studies have analysed scaffolding from the perspective of contingent support. For example, Chin (2007) carried out research to explore how teachers use questions to scaffold student thinking and knowledge construction. Lessons taught by six secondary school science teachers were audiotaped and videotaped. The different questioning techniques used by the teachers were identified. It was also found that the teachers' questions built on a preceding student contribution and served as "rungs of a 'cognitive ladder' enabling students to gradually ascend to higher levels of knowledge and understanding" (p. 837). Therefore, the teachers' questions were contingent in that they adjusted to the knowledge base of the students.

Researchers van de Pol, Volman, and Beishuizen (2011) conducted research to investigate the one-to-one and small-group teacher-student interactions in order to describe the process of scaffolding. The study involved three social studies teachers working at secondary education innovative schools of lower prevocational education in the Netherlands. These innovative schools, contrary to more traditional schools, were expected to show more instances of contingent teaching and autonomous student learning, which are key features of scaffolding. The researchers observed that in two thirds of the non-contingent interactions, the teachers did not use diagnostic strategies. Lack of diagnostic strategies was found to occur along with miscommunication in many cases.

That teachers resort to different strategies and skills to support and scaffold student learning is generally accepted notion. The studies that examine scaffolding and equate it with teacher help or support have identified numerous ways in which this scaffolded help can be realized. In addition, since these studies are mainly descriptive, the number of skills and strategies identified is quite comprehensive depending on their context of study. The review of the literature also emphasizes the fact that teachers need to diagnose and identify their learners' needs before actually giving support. Therefore, they scaffold their students' learning by making use of diagnostic strategies and providing contingent support.

Theoretical Framework

This research study is theoretically anchored on SCT (Vygotsky, 1978), which provides a detailed account of the interrelationship between learning and development. Vygotsky (1978) contended that psychometric tests only reflected the learners' current developmental level and disregarded their potential abilities. SCT distinguishes two developmental levels. The *actual developmental level* refers to the individual's mental functions that are already completed or matured, which enable the individuals to perform activities on their own without any help. However, an individual's mental development is also indicated by those abilities that are under the process of maturation and that enable individuals to achieve different learning goals with the assistance of others. This stage is called the *potential developmental level*. The child is conceived of as an integrated whole of relationships that comprise developed and developing higher mental functions acquired through collaboration (Chaiklin, 2003). Vygotsky introduced the core concept of the *zone of proximal development* (ZPD) and defined it as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). This key construct helps explain how learning can foster qualitative developmental changes (Lantolf & Thorne, 2006). Therefore, from a Vygotskian perspective learning is in advance of development as the former triggers different developmental processes when the individuals interact with experts or more capable peers in their environment. Co-constructed knowledge and abilities become internalized and new ZPDs emerge. Chaiklin (2003) states that the ZPD is not a fixed feature as it evolves across age periods and constitutes a potential for learning (Wells, 1999).

The ZPD has significant implications for teaching and learning. Vygotsky (1978) calls for diagnostic procedures to ground the teachers' pedagogical interventions and assess the learners' ZPD by determining maturing functions. In classroom settings, teachers can play a key role in guiding the learners' course of learning and, thus, development by drawing on their existing capabilities and creating the appropriate conditions for learning (Lantolf & Thorne, 2006). Therefore, scaffolding (Wood et al., 1976) can be a useful strategy to help learners move across different ZPDs since it involves the support a teacher gives to a learner when carrying out a task which he/she would not be able to accomplish on his/her own (van de Pol, Volman, & Beishuizen, 2010).

Method

Bearing in mind the numerous characteristics of qualitative research identified by different scholars (Creswell, 2003; Dörnyei, 2007; Hatch, 2002; Mackey & Gass, 2005) one can see the present study is mainly framed within a qualitative methodology. To start with, the transcriptions of the on-going interactions between the participants enabled me as a researcher to have access to rich and complex details which, in turn, catered for a rich description of the scaffolding process in the setting investigated. Secondly, the research setting itself involved a naturalistic kind of inquiry (Lincoln & Guba as cited in Hatch, 2002) since scaffolding was studied in its naturally-occurring situation without manipulating any variables. Thirdly, studying the phenomenon in its natural context also contributed to understanding scaffolding from an "insider perspective" (Dörnyei, 2007, p. 38). Finally, although the study comprised a thick description of the scaffolding process, I sought to go further into an interpretative stage by making personal meanings while taking into account my role as researcher and my own personal biases and value stance as a practicum supervisor.

The research also involves a case study design. The interactions in which a student-teacher's learning is scaffolded by a practicum supervisor during tutoring

sessions in the context of an English as a foreign language (EFL) teacher education programme is, therefore, the case or unit of analysis of the present work.

Context

This study took place in the context of the last practicum student-teachers had to undertake in an EFL teacher education programme at a tertiary level teacher education college in Córdoba, Argentina. The practicum comprises both observing lessons taught by a graduate teacher and taking a total of about ten practica. The practicum supervisor and the student-teachers met regularly during one-to-one tutoring sessions and post-observation conferences. This study was particularly concerned with the one-to-one tutoring-sessions that the practicum supervisor held with student-teachers weekly as a course requirement. They met in order to discuss lesson plans, require assistance, comment on previously taught lessons, and exchange views on changes made to the lesson plans after being suggested by the supervisor by email, among other issues.

Participants

One practicum supervisor and ten student-teachers participated in the study. The supervisor was an EFL teacher who had 23 years of teaching experience and 20 years of in-service supervisory experience. Furthermore, she had worked as a practicum supervisor and a methods teacher for nine years. At the time of data collection, the practicum supervisor had already supervised and assessed all of the ten student-teachers during the first and second practicums. The student-teachers were all 4th year students, who were undertaking the last practicum before majoring in the teaching of EFL. Their ages ranged from 21 to 55. While three of the pre-service teachers had considerable previous teaching experience, most of them lacked experience teaching English.

Data collection

All the one-to-one tutoring sessions between the supervisor and each student-teacher were audiorecorded. The supervisor was asked to hold them as usual and record the full interactions no matter what subject matter was being discussed. The use of the audio-recordings allowed me to capture the scaffolding process in a naturally occurring situation, in which I was interested as a practicum supervisor and researcher. Furthermore, since the focus of the study was on the on-going interactions between the participants, especially the ways in which they discussed different aspects of teaching practice and responded to each other's words and/or comments, the audio recordings provided me with accurate and detailed data about the complexities and subtleties of the phenomena studied. They also enabled me to get a verbatim account of everything that was said, listen to the conversations countless times, and carry out macro- and micro-level analyses.

A word must also be said about the limitations of using audio recordings. In this particular case, although it was agreed with the supervisor that the full interactions would be recorded, some parts might have been omitted since it was the supervisor who decided when to turn on the recorder and when to turn it off; therefore, the recordings might not provide a fully accurate picture of the interactions. Moreover, the impact that recording the conversations might have had on the participants' behaviour should not be overlooked and, therefore, claims should be carefully made.

Data Analysis

Data analysis comprised different steps. Firstly, the data from the audio recordings were transcribed without deleting any parts in order not to make any judgments in advance and to get to know about all of the information collected thoroughly (Dörnyei, 2007). Following Dörnyei (2007), a "pick and mix procedure" (p. 248) was adopted to transcribe the data in order to fit my own research concerns (Mackey & Gass, 2005).

The rationale for choosing certain conventions was: a focus on content and function as well as accessibility to readers. Next, the data were read several times and then several criteria were established for selecting fragments for analysis.

Since the results of some of the research carried out earlier in the field of scaffolding and measuring instruments are already available, I opted for a tighter or deductive design (Miles & Huberman, 1994) with a pre-established set of analytic categories to describe and measure scaffolding. The teacher-students' on-going interactions in the one-to-one tutoring sessions were analysed by resorting to the data-analysis instruments devised by van de Pol (2012). In particular, the model of contingent teaching (MCT) was deployed to carry out the analysis. Nevertheless, I followed an open-ended data-led procedure and allowed newly conceived categories to emerge and be included in the analysis.

The MCT (see Table 1) devised by van de Pol (2012) serves as an instrument to describe the process of scaffolding in qualitative terms. The MCT consists of four steps:

1. Diagnostic strategies
2. Checking the diagnosis
3. Intervention strategies
4. Checking student's learning

These steps uphold the interactive nature of scaffolding since each teacher's turn is followed and thus determined by a student's turn.

The analysis focused on a qualitative examination of the scaffolding process. Drawing on the MCT, for each fragment, all teacher turns were coded as Step 1, 2, 3, or 4, bearing in mind the function they served in relation to the student-teachers' turns. The following step consisted of identifying the combinations of steps in each interaction fragment, that is to say, cycles of contingent teaching. To round off the analysis, all interaction fragments were coded for contingency. A fragment was considered *contingent*, and consequently, a scaffolding example if the supervisor first made use of a diagnostic strategy and then provided assistance which was tailored to meet the student-teacher's needs or level of understanding. A fragment was coded as *non-contingent*, and consequently, a non-scaffolding example if no diagnostic strategy was employed and immediate support was provided by the supervisor.

Results

The data analysed consisted of 24 tutoring sessions which were recorded by the practicum supervisor. The sessions varied in length, ranging from six to nineteen minutes. Most of the sessions, however, lasted about 11 minutes. The sessions were further divided into 102 interaction fragments. All the student-teachers' turns were analysed as a unit, so I did not distinguish among the different student-teachers.

The results section examines how the scaffolding process unfolded in the one-to-one interactions between the practicum supervisor and the student-teachers.

Table 1. Steps of the Model of Contingent Teaching (Adapted From van de Pol, 2012, p. 85)

	STEP 1 Diagnostic strategies	STEP 2 Checking the diagnosis	STEP 3 Intervention strategies	STEP 4 Checking student's learning
Aim	Gain insights into the student's level of understanding	Check whether the teacher understood the student in the correct way	Give actual support or help to the student	Find out the student's new understandings after offering support

I provide a descriptive account of the steps taken by the supervisor by drawing on the analytic categories provided by van de Pol (2012). It must be noted that the steps identified in the supervisor's speech reflect the function they served in relation to the student-teachers' reactions and/or responses, thus depicting the interactive nature of scaffolding.

Steps Followed by the Supervisor

The practicum supervisor was observed to start the one-to-one tutoring sessions in three different ways after greeting the student-teachers and engaging in small talk. In two of these ways, the supervisor initiated the interaction herself. She either started to read the student-teachers' lesson plan and made follow-up questions and/or comments or encouraged the student-teachers to explain how they had planned their lessons, describe the activities, materials or procedures chosen, comment on and evaluate a previously-taught lesson, among others. The latter technique involved an explicit prompt on the part of the supervisor as the following examples illustrate:

T: (Asking the student-teacher to start explaining her lesson plan at the beginning of the tutoring session) What about you M——-? (Session 2)

T: (Prompting the student-teacher to start explaining her lesson plan at the beginning of the tutoring session) Tell me about your latest lesson.[2] (Session 4)

The third way of starting a tutoring session was characterized by the student-teachers themselves initiating the interaction. In these interaction fragments, the student-teachers began to talk about any aspect of the teaching practice of their choice. They were found to start describing their lesson plan right away or raise an issue or difficulty they had had regarding, for example, lesson planning or class management during the previous lesson. The following examples illustrate this:

S1: (Before explaining a lesson plan) This would be my third Tuesday for the 6th class. (Session 14)

S2: (Contextualizing the lesson planned) The thing is I have 120 minutes next Thursday, so it's a lot. Some of the kids actually got the meaning of *can*, *can't* and the question, but some of them, they didn't, so I think…and A——- [the cooperating teacher] told they need to cover *can* and then food. (Session 8)

The patterns of initiating interaction found in the data suggest an implicit agreement between the participants, in which each of them is equally entitled to put forth a topic for discussion. Regarding the ways in which a tutoring session ended, the supervisor mainly provided feedback and/or told the student-teacher what to do next. The following excerpt illustrates how the supervisor ended a session.

S2: (After discussing the activities and their sequencing) that would be it, I mean, for the last period.

T: And a good transfer. It's well-organized because you would be having the transfer part at the end.

S2: Yes, and I left this at the end because it's actually production, not just completing.

T: You've done a lot of practice, so I think this is fine.

S2: Yes. (Session 8)

Bearing in mind the MCT (van de Pol, 2012), one can classify the supervisor's steps as cycles, consisting of four steps (see Table 1). After identifying the steps, all the interaction fragments were analysed for cycles of contingent teaching. No instances of Step 4 were found in the whole data. The supervisor was found to use only incomplete cycles. *1-3* cycles (n = 59, 58%), which consisted of Step 1 and Step 3 turns were the most frequent ones. *1-2-3* cycles (n = 39, 38%) in which the supervisor made use of Steps 1, 2, and 3 were also found but their frequency of occurrence was lower than that of *1-3* cycles. Only four instances of *3* cycles were found (4%), which consisted of only a Step 3 turn were observed.

2 The original quote was in Spanish. The translation was made for publication purposes.

Contingency

In order to provide tailored assistance, a teacher needs to adjust his/her support to the student's current level of understanding. From the perspective of the MCT (van del Pol, 2012) this can be achieved by means of diagnostic strategies which enable the teacher to gather information and decide on the most appropriate kind and amount of help to provide the students with. All interaction fragments were coded for contingency, taking into account whether the supervisor helped the student-teachers after having diagnosed their understanding through at least one diagnostic strategy. Contingent cycles, in which the supervisor resorted to a diagnostic strategy before offering help, occurred most often (n = 98, 96%). Due to the fact that the supervisor resorted to different diagnostic strategies in almost all the interactions analysed, very few non-contingent cycles, in which the supervisor gave immediate support, were found (n = 4, 4%).

In most of the contingent interactions, the supervisor first diagnosed the student-teachers' level of understanding by means of four different strategies, namely *posing a diagnostic question*, *reading the student-teachers' work*, *listening to the student-teachers' explanations/choices*, and/or *diagnostic prompts*. Therefore, the support provided to aid their learning and understanding aimed to address the specific needs and difficulties the supervisor observed and/or the student-teacher expressed. In these cases, the teaching cycles were *1-3*. On other occasions, the supervisor gathered some information about the student-teachers' understanding and further inquired of the student-teacher in order to make sure that the assumptions she was making were accurate. In other words, the supervisor checked whether and/or to what extent her diagnosis was correct and/or reflected the student-teachers' true level of understanding. In these cases, the teaching cycles were *1-2-3*. Resorting to a Step 2 turn (checking diagnosis) enhanced the diagnostic phase and provided the supervisor with more precise information and, consequently, tools to give contingent support. The following example illustrates a contingent interaction fragment, which consisted of a *1-2-3* cycle (Session 13). The turns in the fragment have been numbered and each step has been identified at the end of the corresponding turn to help the analysis.

(1) T: OK, tell me. (Step 1)

(2) S3: [The students] are studying *have got*, so I thought that as earlier this morning they were reviewing it, they have already studied it, they are reviewing it.

(3) T: Then you don't need to present it as a new topic. Right? (Step 2)

(4) S3: I don't have to present anything new.

(5) (T is reading) (Step 1)

(6) S3: So, this is the exercise. They have to complete with the negative form or the other way around (?). I have problems with the timing.

(7) T: What about a warming-up? You haven't included anything in, you just, it's like you get into the classroom and say "OK, hello, open the books." Have you thought of anything like that? (Step 3)

(8) S3: To be honest I did it so quickly.

(9) T: Because I think you…

(10) S3: I'm going to come tomorrow, so that's why I wanted you to correct some things.

(11) T: I'd suggest you include a warming-up, especially because they don't know you, you don't know them, so something to break the ice that might be related to the topic or not, but it's like a lead-in for practice in this case because you are not going to introduce anything, it would be interesting, it would be the best actually, so leave that. OK, let's move on to the next part but please for tomorrow think about something through which they can actually remember, recycle, whatever in connection to in this case *have* and *has got*, so first this exercise, then, you have the warming-up and after that, you move to this exercise. (Step 3)

(12) S3: Right as a way to start…

(13) T: Besides, you won't' be sure whether they remember the topic or not, the warming-up activity can help you to check that, how much they remember, because if you start with an exercise like this one without having checked if they remember, then maybe they cannot do it and the activity is spoiled and… (Step 3)

(14) S3: Right, so that they know this topic well and can move into the following exercise smoothly.

(15) T: That's right, the warming-up activity can also consist in rearranging the elements into a sentence, something fast. (Step 3)

(16) S3: Now I remember [the cooperating teacher] told me that she had asked the students to bring pictures of *Monsters Inc*. to describe them, but they didn't have enough time to do it, so I was thinking of doing it next Monday.

(17) T: OK, let's hope they bring them again to class. (Step 3)

(18) S3: All of them brought the pictures this morning and asked her: "Can we work with the pics?" They were really interested, so maybe I could work with the two leading characters during the warming-up so as to…

(19) T: That would be fine. (Step 3)

(20) S3: Maybe I could ask them a few questions or…

(21) T: Because they already know the interrogative form. (Step 2)

(22) S3: Yes.

(23) T: It'd be great then; you engage the students, check if they can do the activity and see if they remember el topic or not. (Step 3)

(24) S3: So, I'd do this activity to practice *hasn't* and…

(25) T: Great.[3]

This fragment appeared at the beginning of tutoring session 13, so it depicts the exchanges that took place between the supervisor and one student-teacher regarding the starting point of a lesson plan. In this example, the supervisor prompted the student-teacher to explain the choices she had made for the upcoming lesson (Step 1) and learnt in Turn 2 that the student-teacher had to work with the structure *have got*. The information "earlier this morning they were reviewing it, they have already studied it, they are reviewing it" helped the supervisor assume that the student-teacher had planned a revision lesson. The supervisor's statement in Turn 3:"then you don't need to present it as a new topic. Right?" integrated this information and served to check whether her assumptions were correct (Step 2). She restated the student-teacher's explanation by referring to the idea of *revision* as *not presenting a new topic*. The supervisor went on reading the lesson plan (Step 1) to gain further insights into the student-teacher's decisions and this diagnostic activity was enhanced when the student-teacher showed and briefly explained to the supervisor the first activity she had chosen. The fact that the student-teacher had chosen a transformation exercise to start the lesson (Turn 6) helped the supervisor identify the first weakness that the lesson plan had since it lacked a warming-up activity as the following supervisor's own words show: "You haven't included anything in, you just, it's like you get into the classroom and say *OK, hello, open the books.*" The different instances of support (Step 3) which follow in the interaction (Turns 7, 11, 13, 15, 17, 19, 23, and 25) stemmed from this perceived weakness and aimed to address it. Turns 7, 11, 13, and 15 helped the student-teacher first think about including a warming-up activity and then consider the underlying reasons and a possible alternative. In Turns 16, 18, and 20, the student-teacher came up with her own activity to start the lesson: describing the film *Monsters Inc*. and/or asking students questions about it. Then, the supervisor specifically helped the student-teacher as regards this activity as can be seen in Turns 17, 19, 23, and 25. This interaction fragment can be considered contingent since the help and support the supervisor gave was intrinsically linked to a particular weakness she had spotted.

The interaction fragment that follows also illustrates the concept of contingency as it shows how the supervisor collected diagnostic information she could rely on to provide support. The fragment presents a *1-3* contingent cycle (Session 1).

(26) T: (T is listening) (Step 1)

(27) S4: Well so the first activity, I was planning to do a very short warm-up, asking questions going back to *do you like…?* in English, just to make them feel comfortable, so I'm going to say: "good morning", a bit of Spanish and then come back "do you like cleaning your room?", so "do you like cleaning your room? Do you like washing the dishes?" Yes, just to warm them.

(28) T: OK, you may need visuals for that. (Step 3)

3 The original quote was in Spanish. The translation was made for publication purposes.

(29) S4: Visual aids, yes pictures.

(30) T: Visual support, in case, there are too many so if the last person there in the room, you know, doesn't hear… (Step 3)

(31) S4: Or wears glasses…

(32) T: Oh that's a detail.

(33) S4: Yes, I know how it feels

(34) T: so you'll need big pictures. (Step 3)

This fragment appeared at the beginning of Session 1 after the participants had talked about the aim of the lesson and the number of students in the class. The supervisor got to know how the student-teacher had planned to start her lesson by *listening to the student-teacher's explanations/choices* (Step 1) as the sole diagnostic strategy. Drawing on the information provided in Turn 27, the supervisor assisted the student-teacher (Step 3) by calling her attention to the usefulness of resorting to visual aids (Turns 28 and 30). In Turn 31, the student-teacher introduces the issue that some students may wear glasses, which triggered another piece of advice on the part of the supervisor (Turn 34). All in all, the fragment was contingent since the help the supervisor provided was based on the information already gathered.

Non-contingent interactions occurred four times in the whole data set. Drawing on the MCT, they consisted of only a Step 3 turn (intervention strategy). In these interactions, the supervisor provided help immediately without first gathering diagnostic information. These interactions were all initiated by the student-teachers and shared one feature: they raised an issue or concern the student-teachers had. That is to say, they did not involve explanations regarding the lesson plan. A non-contingent interaction is illustrated by the example that follows (Session 2). The turns in the fragment have been numbered and each step has been identified at the end of the corresponding turn to help the analysis.

(35) S3: And then exercise number 7 is rearrange, the same thing, I mean, the first time in class, I'm just revising, I cannot show things maybe I want to.

(36) T: no problem. (Step 3)

(37) S3: Maybe for later.

(38) T: But you've been asked by the teacher. (Step 3)

(39) S3: Right I have to continue.

(40) T: If it was a substitution class.

(41) S3: That would be my chance.

(42) T: That would be your chance, so it's just fine, the thing is how you would go through this. (Step 3)

(43) S3: In English and in Spanish.

(44) T: Right, with your own style, that's the important thing here. Don't worry about a bit of revision, don't worry, you might have to introduce a topic or not in these training classes. (Step 3)

(45) S3: She told me later, the difference between *will* and *going to* and I'll try to do it inductively.

(46) T: So, we'll see then.

In this example, the student-teacher was concerned about not having the freedom to choose and/or design her own activities as seen in Turn 35: "the first time in class, I'm just revising, I cannot show things maybe I want to." The supervisor addressed this concern immediately in Turn 36 till the end of the interaction (Turns 38, 42, and 44), which rendered the fragment non-contingent as the supervisor did not make use of any diagnostic strategy to have a clearer picture of the student-teacher's understanding.

The findings described in the section above focused on the steps taken by the supervisor and the contingency of her help. All in all, contingent interaction fragments, which comprised *1-3* and *1-2-3* cycles, had the most occurrences. They were characterized by a key feature: diagnostic strategies informed the supervisor's decisions as to how much and what kind of help the student-teachers required. These interaction fragments were thus found to be contingent. Non-contingent interactions had the least number of occurrences. They were characterized by being initiated by the student-teachers' concerns, which were immediately addressed by the supervisor.

Discussion and Conclusion

This study has captured the interactive nature of scaffolding as the ways and the extent to which the supervisor's actions and utterances served to scaffold the student-teachers' learning-to-teach process in the context of the one-to-one tutoring sessions could only be understood by analysing them in relation to the student-teachers' actions and utterances. In other words, the role of dialogue in the on-going interactions between the participants is a crucial component of scaffolding as several researchers contend (Puntambekar & Kolodner, 2005; Stone, 1998a, 1998b; Tharp & Gallimore, 1991; Wertsch, 1979).

From a qualitative perspective, the findings of this study suggest that the scaffolding process in the tutoring sessions comprises two main steps or phases: a diagnostic phase and an intervention phase. The MCT distinguishes Step 1 turns (diagnostic strategies) from Step 2 turns (checking the diagnosis). Resorting to only Step 1 turns or both Step 1 and Step 2 turns together reveals the supervisor's need to gather essential information in which to ground her decisions as to what type of and how much help or assistance to give the student-teachers. In the tutoring sessions, the use of Step 2 turns seems to reinforce the diagnostic phase since it serves to round-off the supervisor's assumptions and/or get a more focused idea of the student-teachers' level of understanding. Therefore, Step 2 turns may be subsumed under the diagnostic phase since their purpose resembles and complements that of Step 1 turns. The intervention phase is manifested by the use of multiple and simultaneous ways of offering help, which lends support to the use of synergistic scaffolds proposed by Tabak (2004).

In the study described here, teaching cycles, which consisted of *1-3* or *1-2-3* steps of the MCT, were the most recurrent ones. Consequently, the findings indicate that a diagnostic phase made up of either Step *1* or of both Steps *1-2* is common practice in the tutoring sessions. However, other studies have found the use of diagnostic strategies to be scarce (van de Pol et al., 2011). This difference may be motivated by the expected or defined structure of the one-to-one tutoring sessions in the context researched here. One of the teachers in van de Pol et al.'s (2011) study was found to base his help on his beliefs about what is difficult for students, and it was found that another teacher rarely resorted to diagnostic strategies due to time-constraints. In the tutoring sessions, the student-teachers were expected to explain their choices and the decisions behind lesson planning. In other cases, the supervisor read their lesson plans. There seemed to be a negotiated agreement between the participants as to how the tutoring sessions should proceed. Both activities provided the supervisor with clear insights into the student-teachers' level of understanding as well as their learning needs. This pre-defined structure of the tutoring sessions gives the supervisor plenty of information on which to draw in order to provide the most adequate amount and type of help or assistance required. The supervisor hardly ever provided support without first gathering information about the student-teachers' level of understanding. This was only found to occur in cases in which the student-teachers initiated the interaction by raising a difficulty or concern they had, which was immediately addressed by the supervisor. To sum-up, the structure and the overall purpose of the tutoring sessions imply an initial stage of diagnosis which pre-determines the function of both the supervisor's and the student-teachers' actions and utterances.

The fact that complete teaching cycles consisting of Steps *1-2-3-4* were not identified in the one-to-one tutoring sessions analysed here is noteworthy. The supervisor was found to take great effort to diagnose the student-teachers' current level of understanding and, thus, provide tailored support but she did not check the student-teachers' new learning afterwards. It appears as if the supervisor assumed that teaching necessarily amounted to learning. In other words, the supervisor seemed to take for granted that all the support she provided the student-teachers with by different means

led to new understandings and learning. Of all the steps of the MCT, the supervisor focused mainly on Steps 1 and 3, but the lack of Step 4 should make us wonder to what extent true scaffolding occurred. This finding requires further research.

The qualitative analysis also sought to reveal the patterns of contingent and non-contingent teaching cycles. The present research has found the practicum supervisor to act contingently upon the student-teachers' level most of the time because she usually resorted to diagnostic strategies before providing actual support. In keeping with the findings reported here, Chin (2007) found the teachers to provide their students with contingent support because they showed evidence of offering situated help and thus adjusting to the knowledge base of the students. In the context of the tutoring sessions, contingency can be best understood by resorting to Chin's metaphor, which describes contingent support in student-teacher interactions as "rungs of a cognitive ladder" (p. 837) since the teacher's help builds on the students' prior knowledge and, at the same time, it helps them achieve higher levels of competence. From the perspective of SCT, the use of diagnostic strategies helps teachers determine the students' maturing functions and, therefore, their ZPDs. The situated support they provide them with helps them to become self-regulated and to internalize knowledge and skills and reach higher levels of cognitive development since their ZPDs gradually evolve (Chaiklin, 2003). In conclusion, diagnostic strategies seem to be a crucial dimension of scaffolding and a stepping stone for fostering learning and development in the context researched here because they appear to be a necessary condition for providing contingent support, enhancing the student-teachers' potential for learning (Wells, 1999) and gradually handing over the responsibility for teaching to the student-teachers themselves.

Scaffolding is a complex and dynamic phenomenon which is gradually shaped by the participants' intervention modalities and, at the same time, influences the participants' on-going interactions. What both the supervisor and the student-teachers do and say are closely intertwined since they are two sides of the same coin. Even though on the surface the analysis of scaffolding may seem to focus solely on the supervisors' roles and skills, it necessarily incorporates the student-teachers' perspectives since true scaffolding is characterized by its interactive dialogic nature. Consequently, this study has attempted to narrow down a gap in research by including the recipients of the teacher's help (Randall & Thornton, 2001) in the analysis.

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