# Looking to GROW: The absence of goal setting in post-lesson mentoring conversations on work-integrated learning placements

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The post-lesson mentoring conversation on work-integrated learning placements in teacher education is an opportunity for students to critically reflect on their practice. The potential for this learning to take place is diminished however, if the mentor is unskilled in the art of leading these conversations. This skill involves creating a dialogue where the mentee can discuss their practice in relation to learning goals. This study analyzed the transcripts of 54 post-lesson mentoring conversations. The study found that goals were rarely mentioned when conversations were closer to monologues than dialogues. If this is representative of the larger sample, then the mentoring monologue constitutes a waste of the latent learning potential of the post-lesson mentoring conversation. The implications of the study center on the post-lesson mentoring conversation requiring more scaffolding in the way of protocols that promote growth through a critical dialogue of the professional learning goals of the teacher education student.

Keywords: Mentoring conversations, goal setting, post-lesson feedback conversations.

The post-lesson mentoring conversation on work-integrated learning (WIL) placements in teacher education programs is an opportunity for the teacher education student to critically reflect on the lessons they teach. The intense reflection of teaching a lesson can lead into a rewarding and productive learning experience. This kind of learning experience is highly regarded in the culture of the teaching profession. The teaching profession's uncritical faith in the power of the practicum precludes a closer examination of the actual learning activities that comprise a WIL experience, of which the post-lesson mentoring conversation is but one. This research undertook a close examination of post-lesson mentoring conversations to explore the ways in which supervising teachers and teacher education students use this professional learning activity to propel critical reflection and learning.

The analytical framework used to analyze the data from the mentoring conversations was GROW, a simple goal-setting protocol. The G stands for goal of the current lesson, the R for reality, the O for options and W for what next. The protocol has been designed for professional learning contexts to promote post-lesson mentoring conversations where there are clear goals, a discussion of the teaching and learning activity within a lesson and a critical dialogue on the range of teaching options that could have been taken, followed by a recalibration of the mentee's goals for the next lesson. Each of these components potentially enhances the teacher education students' reflection on their lesson. In the short-term, the discussion of goals (either for the current lesson or for an upcoming lesson) provides students with guidance on where best to direct their teaching focus during the limited WIL experience. In the long-term, the theory of action in these conversations is to instill an empowering, forward-looking orientation in mentees built upon productive mentoring conversations. Thus, in the current study, 54 mentoring conversations were examined using the GROW protocol to establish a benchmark of the current composition of post-lesson mentoring conversations. This benchmark will be used to

understand the extent to which these conversations may be optimized to exploit the rich professional learning opportunities in WIL in teacher education.

The research study was funded by the NSW Department of Education and sought to investigate the extent to which supervising teachers make use of the language of the graduate teaching standards in written and oral feedback to teacher education students on their WIL experiences. The first author was invited to undertake the study because of the interest of staff members employed in the division responsible for WIL in the Department of Education in NSW, in one of their publications (Loughland & Ellis, 2016).

## LITERATURE REVIEW

This review critically examines the literatures relating to post-lesson mentoring conversations and goal setting.

*Post-Lesson Mentoring Conversations in Work-Integrated Learning*

Policy reform across the Federation of Australia in the last decade has focused attention on the classroom readiness of teacher graduates and the role that WIL experiences in teacher education play in this preparedness for the classroom (Craven et al, 2014). The increasing importance of WIL experiences in initial teacher education programs has made the school-based mentoring/supervisory role critical. There is extensive extant literature that provides empirical evidence substantiating the positive impact of mentoring on teacher education students' competence (Mena et al., 2017), on their development of professional identity (Devos, 2010), and for the provision of both career and psychological support (Hennissen et al., 2011). Literature also discusses the effectiveness of different mentoring skills in supporting teacher education students (Edwards-Groves, 2014; Hennissen et al, , 2008). One of these skills is the ability to conduct an effective post-lesson mentoring conversation.

There is a growing body of empirical evidence that attests to the benefits of the post-lesson mentoring conversation as a mediator of teacher education students' learning (e.g., Chizhik & Chizhik, 2018; Edwards-Groves, 2014; Helgevold et al., 2015). Post-lesson mentoring conversations can create a powerful learning environment in which knowledge and skills are co-constructed in the social context of the school. The mentoring relationship forms an integral aspect of a community of practice (Wenger, 1998) in WIL where the knowledge and skills learned are context specific and practice oriented. Together, strong relationships with the mentoring teacher and nuanced understandings of specific school contexts help students to translate their WIL experiences as teachers into knowledge and practice for their teaching careers.

However, there is an inherent danger in a universalistic assumption that the post-lesson mentoring conversation is always an effective mediator in the learning of teacher education students. There is evidence that the post-lesson mentoring conversation is not always generative for the teacher education student (Clarke., 2014; Gurgur, 2015; Korver & Tillema, 2014; Ladonna & Watling, 2018). To be effective, the post-lesson mentoring conversations must provide evidence and guidance for teacher education students to learn, foster their reflection (Land, 2018), and to identify the next steps in the improvement of their practice (Korver & Tillema, 2014; Orland-Barak & Klein, 2005). This highlights the importance of the content and effectiveness of the post-lesson mentoring conversation.

A systematic review of the literature in 2008 identified the five major areas of research interest in mentoring conversations as the "content and topics dealt with, the style and supervisory skills of the

mentor teacher, the mentor teachers' input, time aspects of the dialogue and phases of the dialogue" (Hennissen et al., 2008, p.173). A mentoring conversation framework was developed from the Hennissen et al. (2008) review that provided the theoretical foundation for a number of studies (e.g. Crasborn et al., 2011; Mena et al., 2017) that examined different aspects of the mentor's role (imperator, initiator, advisor, and encourager) in mentoring conversations. The initiator, and encourager aspects are non-directive with the difference being that the initiator introduces topics whilst the encourager does not (Mena et al., 2017). The imperator and advisor aspects are both directive with the imperator introducing topics whilst the advisor does not (Mena et al., 2017). Of interest to this study was the finding that the imperator was the most frequent aspect of the mentoring role observed by Mena et al. (2017). Although there has been a great deal of research examining these four aspects of the mentor's role in the last 14 years (Korver & Tillema, 2014; Tillema & Van der Westhuizen, 2013; Hennissen et al., 2011; Crasborn et al., 2011; Miller, 2008; Sheridan & Young, 2016), less research has focused on other aspects of mentoring conversations.

Only a few studies have focused specifically on the use of post-lesson mentoring as formative assessment (Tillema, 2009) and self-assessment tools for teacher education students in the context of WIL placements. The use of these conversations as a formative assessment tool helps students to engage in a process of critical reflection of their teaching – a process that they can continue to use throughout their teaching careers. There has also been less attention to how mentoring conversations can be used for teacher education students to reflect on their goal setting, serving as an "enabling factor in professional growth" (Ross & Bruce, 2007, p. 153,). Tillema (2009) argues that the different stakeholders in WIL in teacher education need to create opportunities for teacher education students to learn via the setting of goals to direct their practice. Without the time and space to reflect and discuss teaching goals with mentor teachers, students lack feedback and guidance on how best to improve their teaching practice. It may be that goal setting and goal reflection is one way that conversations with mentors help to mediate classroom experiences into learning for teacher education students. This notion is further supported in that goal setting has been identified as an area for further focus in research and practice in WIL in teacher education. The contribution of mentoring conversations in meeting the needs and the goals of the teacher education student is highly advocated in the literature (Crasborn et al., 2011; Gurgur, 2015; Hobson et al., 2009; Hennissen et al. , 2008). There is strong support for giving teacher education students the opportunity to express their views and develop awareness of their professional learning goals. The current research is needed to continue the discussion on the presence of goal setting in post-lesson mentoring conversations during WIL.

*Goal Setting.*

Extant research has shown that goal setting is an important component of academic and professional success (Locke & Latham, 2002). Goals help to create a dissonance between a current and desired state that people are motivated to minimize (Martin, 2011). When striving toward a goal, people are better able to focus on possible avenues to improve performance. Such effects are even more pronounced when goals are personally relevant, specific rather than vague, and challenging rather than easy to obtain. (Locke & Latham, 2006).

Researchers have found that goal setting holds benefits for many stages and aspects of teachers' careers. For example, Malmberg (2008) found that students who set more adaptive teaching goals tended to have higher levels of reflective thinking and intrinsic motivation for teaching. Moreover, researchers have found that types of teaching goals (e.g., mastery goals) tend to be associated with more positive career outcomes (e.g., perceived benefits of help-seeking; Butler, 2007), adaptive teaching behaviors

(Retelsdorf & Gunther, 2011), and teachers' students' outcomes (e.g., perceived teacher support; Butler & Shibaz, 2008). Therefore, evidence suggests that goal setting can benefit teacher education students' program learning, long-term careers, and future learning and development.

There is little research evidence of the extent to which teacher education programs provide opportunities for students to focus on and practise their teaching goals. One aspect of teacher education programs that could easily embed goal setting are the WIL components. The WIL experiences are valued by teacher education students because they can practice their teaching and instructional strategies in authentic classroom settings. In addition, teacher education students receive timely feedback from both university supervisors and experienced teachers at the school. Researchers have found that post-lesson feedback conversations with experienced teachers are highly valued by teacher education students (Chizhik & Chizhik, 2018). This is because the experienced teachers are present during their mentee's lessons, can discuss specific aspects of their lessons, and are able to provide more immediate feedback than university supervisors (Chizhik & Chizhik, 2018). Thus, such post-lesson conversations seem a natural place where teacher education student can focus on their teaching goals and identify pathways to improve their teaching strategies in line with their personal goals. Indeed, in research on medical students' practicums, researchers have found that discussions on personal goals are an important component of mentoring conversations that help students engage in their feedback sessions and identify goals that are personally relevant and career advancing (Farrell et al., 2017). Moreover, as teaching practicums in the Australian context occur during an entire school term, discussions on the teacher education students' specific teaching goals may develop over the course of several weeks. This offers teacher education students the opportunity for complex development and growth in teaching goals and teaching success.

Despite the theory pointing to the possible relevance of goal setting discussions in feedback sessions during teaching practicums, little is known about the extent to which discussions of goal setting occur in post-lesson mentoring conversations. As noted above, although there has been extensive research into other aspects of post-lesson mentoring conversations (e.g., the role of the mentor, tools during discussion), less research has focused on the extent to which these conversations focus on goals and the potential benefits of goal setting. Therefore, the current study aims to better understand the primary theme of typical post-lesson mentoring conversations, including the extent to which teacher education students and supervising teachers discuss students' teaching goals during these conversations. The research questions for this study were:

1. What is the primary theme of post-lesson mentoring conversations?
2. How do post-lesson mentoring conversations include each component of the GROW protocol?

METHODS

*Participants*

Fifty-four dyads of supervising teachers and teacher education students participated in the current study. Researchers recruited participants for the study by sending an invitation to school contacts in New South Wales (Australia) who then recruited supervising teachers. Recruitment took place in two phases. In the first round of participant recruitment (terms three and four in 2017), 76 schools were invited to participate via school contacts. By the end of term four of 2017, 39 supervising teachers had submitted data sets. The second participant recruitment was conducted from school term one to school term four of 2018. The research study invitation was distributed to the school contacts of 71 schools in term 1 of 2018. By the end of term 4 of 2018, 84 supervising teachers in total had submitted data sets.

Participants were included in the analyses for the current study if they provided a recording of a post-lesson mentoring session between a supervising teacher and teacher education student. Of the 84 supervising teachers who submitted data to their school contacts, 55 had a recording of their post-lesson mentoring conversation. One of the recordings was eliminated from the analyses because the recording device had failed during the mentoring conversation. Therefore, the final dataset included 54 recordings and transcripts of post-lesson mentoring conversations.

The supervising teachers were from 29 schools in NSW, capturing a wide range of primary and secondary schools across the state. In addition, the participating teacher education students were from multiple universities in NSW, thereby capturing a range of different teacher education programs.

*Ethics*

The study was granted ethics approval (#HC17581) by the UNSW Human Research Advisory Panel. All participants participated voluntarily, and written consent was obtained by sending consent forms and an information sheet about the study to supervising teachers who responded in the affirmative to an emailed invitation. The supervising teachers and their teacher education students were given the opportunity to read 'the letter of invitation' and 'the participant information statement', and sign the consent forms to acknowledge their willingness to participate.

*Data Collection*

The school contacts of the participant schools were asked to randomly recruit one (or more if possible) teacher who was supervising a teacher education student undertaking a block professional experience (i.e., WIL) during the two rounds of data collection (i.e., Term 3 or 4 in 2017; any term in 2018).

All the documents related to the study were sent to the school contacts who forwarded the documents to the supervising teachers and teacher education student. The participant supervising teachers were given an instruction sheet that provided detailed instructions to guide them in the compilation and submission of their data and recordings.

The data for the current study were part of a larger research project that included three types of supervising teacher feedback data. As the focus of the current study is on post-lesson mentoring conversations, only those supervising teachers who had a usable recording of a post-lesson mentoring conversation between themselves and a teacher education student were included. Thus, although a total of 84 supervising teachers participated in the larger study, only 54 had a usable recording of a post-lesson mentoring conversation.

The participant supervising teachers were instructed to use a recording device or a smartphone to randomly select and record one mentoring conversation after their teacher education student taught a lesson and upload the audio file to a shared cloud storage folder. All audio files were downloaded and transcribed by the research team and imported into NVivo (version 12) for data analysis.

The total time of each mentoring conversation varied so the unit of analysis coded was the proportionate amount of time spent discussing each area of the GROW protocol as well as proportionate time when the supervisor or teacher education student were talking.

*Data Analysis*

Transcripts were coded for any occurrence of each component of the GROW protocol. That is, when either a supervising teacher or teacher education student mentioned a teaching goal for the lesson being discussed, it was coded as 'Goal'; when either party described what happened during the lesson, it was coded as 'Reality'; when the focus was on ways to improve aspects of the lesson, it was coded as 'Options'; and, when the discussion focused on a goal for the next lesson, it was coded as 'Where next.' This enabled researchers to determine the proportion of the conversations focused on each component of the GROW protocol.

Two researchers independently coded 14 of the transcripts to determine rates of agreement on each of the codes. There was relatively high agreement among the researchers for each GROW component (Goals = 97.9%; Reality = 64.9%; Options = 86.9%; Where next = 97.3%). One researcher continued to code the remaining transcripts but marked areas that were ambiguous and open to further discussion. Once coding was complete, three researchers discussed ambiguous sections to resolve coding discrepancies.

In addition to coding the GROW components, researchers also tracked the proportion of participation in the conversation for supervising teachers and teacher education students. For example, in some conversations, the teacher education student spoke less than 15% of the time (and thus, supervising teachers dominated the conversation), whereas in other conversations there was a more even spread (i.e., each spoke about 50% of the time). The focus was on tracking this information to determine if some conversations elicited more participation from the teacher education student. For example, it may be that teacher education students contribute more to discussion focused on their goals rather than lower-level descriptions of the lesson that had occurred.

FINDINGS

There were two main findings from the analysis of the mentoring transcripts. The first finding is that the majority of mentoring conversations were dominated by two components of the GROW protocol: the Reality of what happened in the lessons along with the Options that the teacher education student may have chosen. As shown in Figure 1, there was little focus on the teacher education students' goals of the current lesson (i.e., 'goals') or areas of focus for a future lesson (i.e., 'where next') from either the supervising teacher or the teacher education student. For example, post-lesson feedback conversations tended to begin with a brief question from the supervising teacher asking how the teacher education student felt about the lesson. This was followed by a brief response from the teacher education student, typically focused on describing the 'Reality' of the lesson irrespective of their teaching goals:

> Transcript 17:
> *Supervising teacher*: Okay firstly I'll ask how do you think you went?
> *Teacher education student*: Good, I definitely am getting way better, getting them to listen, this sort of tactics.

> Transcript 7:
> *Supervising teacher*: What do you think about the Year 9 and 10 combined class?
> *Teacher education student*: I think the start and the half way, they were doing stuff quite well, answering questions. Toward the end, some kids were talking, some of them were doing something on the phone. Maybe I could do better, ask them not to talk. And I used the game

activity at the end, to engage them, cuz I know they were getting a bit bored, I did that in the end.

Transcript 18:
*Supervising teacher*: Okay [student] how do you think the lesson went?
*Teacher education student*: I think it went pretty well. They've learned the aspects of when technology can be used in the coaching and use videos to coach. I think they realized they can use videos to give examples. Positive feedback, I am doing well and I can keep doing it.

FIGURE 1. Proportion of GROW components during post-lesson mentoring conversations.
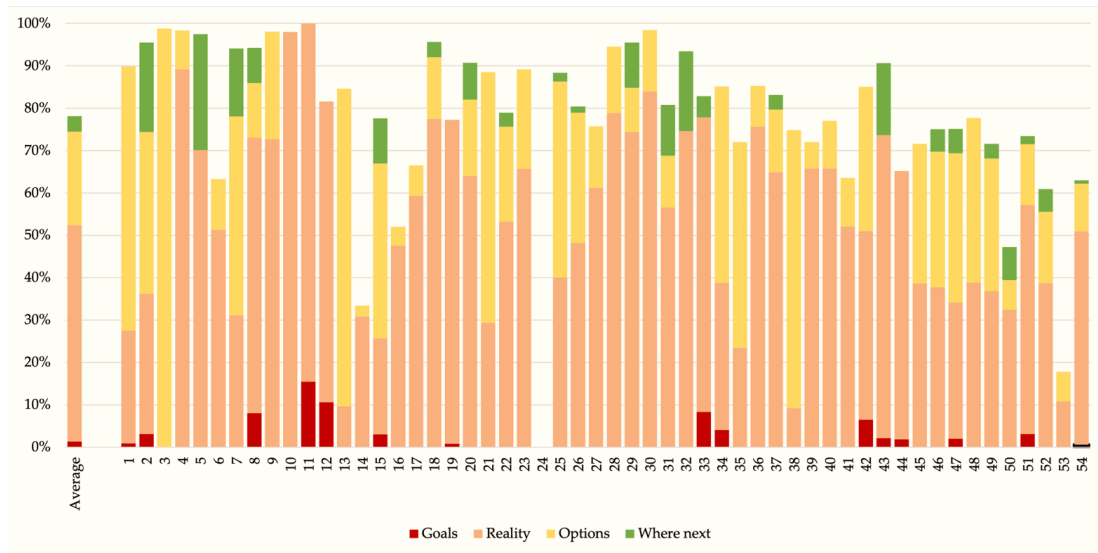


Figure 1 depicts the proportion of Goals, Reality, Options, and Where Next in each of the 54 mentoring transcripts. The proportion is expressed as a percentage of the total words in the transcript.

The supervising teacher would then follow up with their own description of what happened during the lesson, sometimes including various options available to the teacher education student:

Transcript 17:
*Supervising teacher*: Yeah excellent okay well I'll go through what I had written down, you started off really really strong, they've been distracted all day as we've spoken about, so you're really good at gauging kind of what they needed at an emotional level, that you kind of got them down, they were all quiet just doing the hand gestures as well, they were all focused and that was a great way to begin to start, and it's good that you guys are learning now that you need to do that before you should start your lesson, doesn't matter if your lesson starts late, if you haven't got their attention there's no point kind of jumping into it…

Transcript 21:
*Supervising teacher*: Yeah great, as you can see that I've written up here so many strengths that you're showing, so the introduction was really strong that your students know why they're doing this lesson and you know what the end goal was, lots of really good prompting to get the kids focus… so I have just got some little pointers for you,

In several cases, the post-lesson conversation began with the supervising teacher immediately describing the lesson, rather than asking the teacher education student how they thought the lesson went at all:

> Transcript 3:
> *Supervising teacher*: So just to go through kind of chronologically just because that's how I wrote it, I think and it's difficult because you have probably not observed me doing this, but it's something that I would have done at the beginning of having the class, but I've dropped it off as I've gotten to know them and as I've built relationships with them, and as I've got their behavior under control, some of those things slip, so I'm telling you to do stuff and you're probably thinking like why doesn't she do it then, but it's just the practice that you might go through at the beginning like when you're building that rapport with a class, so I would line them up outside before they come in…

Overall, most of these post-lesson feedback conversations focused on what happened during the lesson and on other options the teacher education student could have made during the lesson. Although it may be helpful for students to reflect on what happened during the lesson, it is perhaps more difficult for students to assess the extent to which their experience in the lesson helped to improve an aspect of their teaching practice or where they could aim to improve in a future lesson. These types of conversations may be more abstract or difficult for students, making it an important component to reflect on with the guidance from a supervising teaching. Indeed, very few conversations included any discussion of goals – either goals for the lesson being discussed ('Goals') or goals for a future lesson ('Where next') during their practicum. When goals were included in the conversation, their discussion was often very brief. For example, on rare occasions, goals were mentioned briefly at the beginning of a conversation before shifting to the reality of the lesson:

> Transcript 34:
> *Supervising teacher*: Your lesson notes were excellent, you obviously had as you said gone through the content knew exactly what you were going to do. Our observation focus for this lesson was to ensure that all children were involved in the lesson through whole class, sweeping eye contact, questioning using the paddle pop sticks, and movement of you throughout all areas of the classroom during desk work…

> Transcript 2:
> *Supervising teacher*: Fantastic alright, so I will talk about the evaluation that I have written for you today. Now the goals that you have been focusing on is your explicit teaching and how well that you're introducing that topic to the students and also your classroom management and also a bit of differentiation within your lesson plans.

Moreover, there were only two occurrences of supervising teachers asking teacher education students what their goals for the lesson were during the conversation:

> Transcript 33:
> *Supervising teacher*: Great and just clarify and expand on the some of the focus areas we talked about in our pre-conference.
> *Teacher education student*: I was hoping to try and cater for all learners and making the learning more significant especially the cultural part of the lesson.

Thus, it was often that supervising teachers simply imposed a goal on the teacher education student or briefly reminded them what they thought the teaching goal was, without letting the teacher education student articulate goals for themselves. Similarly, it was typical for any discussion of future goals (i.e., 'Where Next') to occur briefly at the very end of the conversation, with little opportunity to discuss them in depth:

> Transcript 7:
> *Supervising teacher*: Good. What do you think you can improve next time?
> *Teacher education student*: Give them feedback, spend more time telling them what is right and wrong about their answers, and tell them the content in the beginning what to expect, and when they talk I should tell them to focus on their work, and the time for the game, the game is good, but maybe don't ask them to take the books out again.

> Transcript 15:
> *Supervising teacher*: Okay so I think you've clearly been very focused in terms of the areas you've identified as strengths and weaknesses and trying to move forward to lift your pedagogy in terms of the next observation or a next conversation, where would you like that direction to go? And my second question is what sort of resources as your mentor where would you like me to be in this journey?
> *Teacher education student:* Yes I suppose I would still like us to continue focusing on behavioral management because I feel like that's definitely something I'd like to continue improving, and I'd like to make sure that by the end you know I'm excelling in that, but that's probably the most important component of ensuring a safe learning environment, other than that I would probably like to because we're moving into a new topic I'd like us to focus on something to do with the resources involved, resourcing, basically like making sure that what I'm doing is giving them the information they need

Again, there were several occasions where supervising teachers imposed a future goal onto the teacher education student without asking them to articulate new goals for themselves:

> Transcript 8:
> *Supervising teacher*: Yeah I think an area where we sort of need to focus next is the 2.3.1 where it says use curriculum assessment and reporting knowledge to design learning sequences and lesson plans, so maybe thinking about assessment and how would we assess some of this stuff though of the knowledge they just gained so I know you did some whole lot of thinking questions and stuff, but later on you know I mean thinking long term we want the kids to be able to sit this exam at the end of the term, so what sort of questions would you be asking in the you know in the class to help them, support their learning to be able to do that test, or even in the test what sort of assessment would you set for that, so that's something that we should look at a little bit later on.

When analyzing the proportion of supervising teacher and teacher education student participation in the post-lesson conversation, results presented in Figure 2 demonstrate that there was a wide range of teacher education student participation (0.9% - 76.7% of the total conversation time). Indeed, in nine post-lesson conversations, teacher education student spoke less than 10% of the time suggesting that supervising teachers may need to offer more opportunity for teacher education student to openly reflect and participate in these conversations.

FIGURE 2: Patterns of GROW components with different levels of teacher education student participation
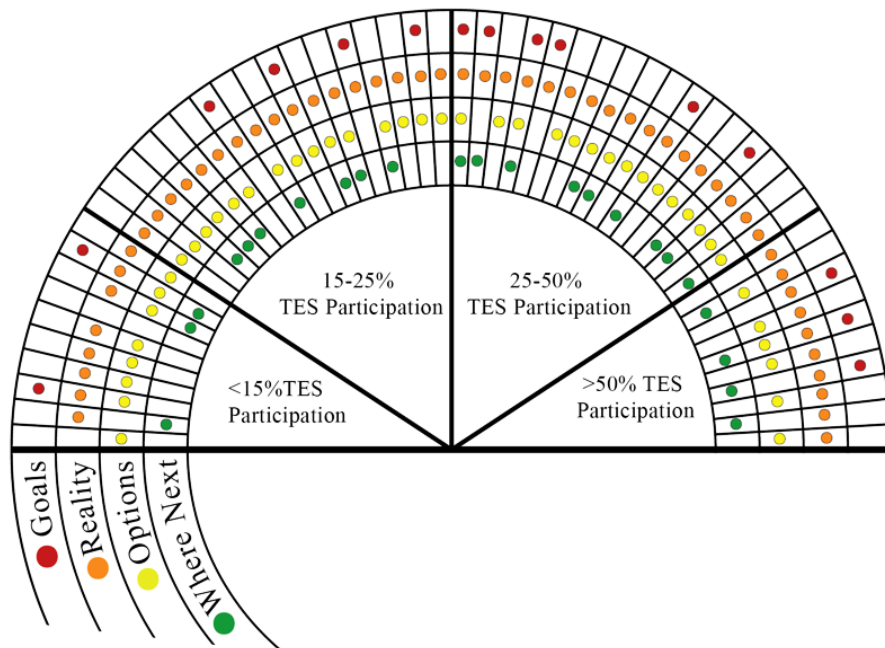


Although 'reality' and 'options' are common components across all levels of teacher education student participation, there is some evidence of higher rates of 'goals' and 'where next' components with more teacher education student participation. The correlation between teacher education student participation and goal-relevant references (i.e., 'goals' and 'where next') was positive and marginally significant ($r = .27$, $p = .053$); the correlation between supervising teacher participation and goal-relevant references was negative and significant ($r = -.28$, $p = .04$).

The results of the analysis represented in Figure 2 suggest that when post-lesson mentoring conversations had a greater focus on goal-relevant discussions there tended to be a greater contribution from the teacher education student. This was investigated through examining the correlations between teacher education student participation and the total number of GROW-relevant references in the conversation. Although there was not a statistically significant association between teacher education student participation and total number of GROW-relevant references ($r = .15$, $p = .29$), there was a marginally significant positive association ($r = .27$, $p = .053$) between teacher education student participation and the total number of goal-relevant references (i.e., either 'Goal' or 'Where next'). There was a significant negative association between supervising teacher participation and goal-relevant references ($r = -.28$, $p = .04$). This finding suggests that that the discussion of teaching goals, rather than descriptions of the lesson (i.e., 'Reality'), may help to bring teacher education student into the conversation and enable their active participation in the conversation. Although both the supervising teacher and the teacher education student can describe what happened in the lesson, it is the teacher education student who is able to articulate the teaching goals that are important to them. Thus, we see a higher chance of more substantial contribution from the teacher education student when the post-lesson mentoring conversation includes goals.

DISCUSSION

The evidence from this study points to a clear absence of goal setting in post-lesson mentoring conversations in WIL experiences in initial teacher education for these participants. The discussion of the evidence from this study begins with this first main finding. Further below, we provide a discussion of the second main finding of a positive relationship between higher teacher education student participation in the mentoring conversations and goal-relevant components of the GROW protocol.

The current study found that very little time or attention was given to goals in post-lesson mentoring conversations. The conversations mainly focused on the reality of the lesson and the alternative instructional strategies that the teacher education student may have used. The lack of a dialogue on the goals of the teacher education student creates challenges for their professional learning as teachers. One of the challenges is that the supervisor and their teacher education student may have different goals for their lessons (Farrell et al., 2017), which would inhibit the teacher education student acting upon their supervisor's feedback (Carless, 2006). When supervising teachers and teacher education student do not communicate about the goals of a lesson or the overall WIL experience, there can be added confusion for the teacher education student and supervising teacher. For example, when there is a disconnect between the goals of the teacher education student and supervising teacher, neither goal may be met. This lack of discussion makes post-lesson mentoring conversations less conducive to teaching goals, and in turn, to teaching outcomes. Another challenge arising from the absence of goal setting is that supervisors may overestimate the quality of their feedback (Korver & Tillema, 2014). When the goals are apparent to both parties, it helps the supervising teachers to give higher quality feedback that enables teacher education student to reach their teaching goals faster (Korver & Tillema, 2014). In this way, dialogic post-lesson mentoring conversations about goals improve the teaching capability of the teacher education student and enables supervising teachers to become more influential mentors.

The need for dialogic post-lesson mentoring conversations relates directly to the second key finding of this study: post-lesson mentoring conversations that include more input from teacher education students also tend to have a greater focus on goals. It may be that when students actively participate in the conversation, they are more likely to initiate discussion about their teaching goals. It may also be that when goals are included in the conversation, students are more likely to participate because they have more to contribute to the conversation. In either case, it is important that students actively participate in (and in some cases, drive) these conversations to ensure the supervising teacher is aware of the aims and concerns of the student. Indeed, one study found that clinical reasoning in medical education was enhanced when the supervisor adopted a discursive rather than a directive disposition in their approach to clinical discussions (Delany et al, 2020). It is likely that a discursive approach to post-lesson mentoring conversations also offer an opportunity for both supervisor guidance and student reflection surrounding teaching goals, rather than pure descriptions of the lesson that took place.

*Alternative Explanation for these Findings*

The lack of attention to goal-setting by the supervising teachers may be due to their lack of understanding of the graduate teacher standards (Ellis & Loughland, 2017) that constitute the assessment criteria for WIL in teacher education in Australia. Future studies could interview supervising teachers to explore if this is indeed the case. Another explanation for the absence of goal setting in post-lesson mentoring conversations may relate to the lesson feedback documentation

supplied by initial teacher education providers. For example, the structure and content of lesson feedback forms may constrain the opportunity for the goal-setting conversations that may be beneficial for the professional learning of teacher education students.

*Implications for Practice*

There are clear implications for the conduct of post-lesson mentoring conversations from this study. The evidence from this study suggests that lesson feedback forms that include an explicit focus on the goals of the teacher education student for the lesson may enhance post-lesson mentoring conversations. One of the underlying premises of the GROW protocol is that there are ways for teachers to reflect and improve upon their teaching. Setting goals and striving toward them is a powerful tool for increasing performance (Locke & Latham, 2002). The GROW protocol enables teacher education students to identify and work towards goals in WIL. This skill learnt early can have positive effects on their capacity for professional learning not just in their WIL, but also throughout their career.

CONCLUSION

This study analyzed the transcripts of 54 post-lesson mentoring conversations. The study found that goals were mentioned rarely in these conversations and that these conversations were closer to supervising teacher monologues than dialogues with teacher education student. To the extent this is representative of post-lesson mentoring conversations in general, there are several opportunities to enhance these conversations through a focus on goal setting to minimize the potential waste of the latent learning experience of the post-lesson mentoring conversation. The implications of the study are that the post-lesson mentoring conversation requires more scaffolding in the way of protocols and resources that promote a critical dialogue of the professional learning goals of the teacher education student. These dialogical exchanges become potential sources of formative assessment for the student if they include critical reflection on goals set for the current lesson as well as future focused goal setting for the next lesson.

ACKNOWLEDGMENTS

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**About the Journal**

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL, in 2018 the journal name was changed to the International Journal of Work-Integrated Learning.

In this Journal, WIL is defined as "*an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace*". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurships, student-led enterprise, etc. WIL is related to, but not the same as, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

The Journal is ongoing financially supported by the Work-Integrated Learning New Zealand (WILNZ), www.nzace.ac.nz and the University of Waikato, New Zealand, and received periodic sponsorship from the Australian Collaborative Education Network (ACEN) and the World Association of Cooperative Education (WACE).

**Types of Manuscripts Sought by the Journal**

Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

*Research publications* should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion preferably including suggestions for further research.

*Topical discussion articles* should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights to how to advance the issue further, and implications for other researchers and practitioners.

*Best practice and program description papers*. On occasions, the Journal also seeks manuscripts describing a practice of WIL as an example of best practice, however, only if it presents a particularly unique or innovative practice or was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.