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Reciprocal peer observation: a mechanism to identify professional learning goals

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ABSTRACT

Reciprocal Peer Observation involves a pair of teachers with similar degrees of experience and status who mutually agree to observe each other's practice. Both act as observer and observee. Individual reflection and mutual constructive feedback are provided, enabling the sharing of knowledge to identify goals for improving their teaching practice. In this study, 228 primary and secondary teachers followed a four-stage cycle of peer observation: pre-observation meeting; observation and brief report by observee; feedback meeting; and reflective writing by observee with a learning goal. Using different instruments (post-observation report, audio recording of the feedback meeting, final reflective synthesis; evaluation questionnaire and group interviews), the study has shown that most teachers identified the learning goal in the three stages of the cycle, which allowed them to refine it based on their own reflections and those of the observer; and to make better use of the feedback. Consequently, this process has led to higher quality learning goals. However, these same teachers also formulate – to a lesser extent – lower quality goals. The study provides criteria to further guide reciprocal peer observation towards the improvement of teacher learning.

KEYWORDS

Reciprocal peer observation; learning goals; teacher learning; reflective practice; written guidelines

Introduction

Lifelong learning, or continuous professional development, has long been considered a critical factor in improving teacher quality, schools, and teachers' impact on student learning (Opfer & Pedder, 2011). However, research on professional development has typically focused on the activities that provide teachers with knowledge and expertise, rather than on the particular contexts in which teachers apply such knowledge (Webster-Wright, 2009).

Darling-Hammond, Hylar, and Gardner (2017) defined Effective Professional Development “as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes” (p. 7). According to this and a review of other relevant research (Boeskens, Nusche, & Yurita, 2020), the following

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characteristics appear to be particularly important in distinguishing the concept of professional learning from the simple concept of professional development: (1) an active role for teachers (individually and collectively) who are considered to be reflective professionals; (2) a context-based process that recognises the importance of teachers responding to the particular learning needs of their students and of schools serving the specific demands of their communities; (3) a strong evaluative dimension in which teachers systematically examine the effectiveness of their own practice; (4) a long-term process that is integrated into the regular life of the school and includes systematically planned opportunities for professional development; (5) a process that leads to changes in teachers' knowledge bases, beliefs and practice or capacity for practice. The research presented is based on these principles.

Reciprocal peer observation: a teacher learning reflective practice in the job-embedded context

Reciprocal Peer Observation (RPO) involves a pair of teachers with similar degrees of experience and status who mutually agree to observe each other's practice (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023). Both act as observer and observee. Individual reflection and mutual constructive feedback are provided, enabling the sharing of ideas and knowledge to identify goals for improving teaching practice (O'Leary, 2022).

Based on previous research Duran Gisbert, Corcelles Seuba, and Miquel Bertran (2020); Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, and Ribosa-Martínez (2023), and following the contributions of O'Leary (2022) and O'Leary and Savage (2020), the procedure followed in the RPO practice of this study has been concretised in a four-stage cycle, which is carried out reciprocally: 1) Pre-observation: both teachers agree on the aim of observation and decide some indicators. They review the teaching guides to support a constructive feedback meeting. 2) Observation in the classroom and a brief report by the observee once class is over. 3) Feedback meeting: the observer initiates the dialogue and invites the observee to make a self-assessment based on the previous report. The observer then presents their observations and the observee actively participates in the conversation. Together they define an improvement area in the observee's teaching practice. 4) Written reflective synthesis by the observee specifying a learning goal.

The RPO provides benefits in improving the participants' perceptions in relation to teaching collaboration, particularly in relation to collective agency and collaborative attitudes. It is a good practice for building a collaborative culture that has a positive impact on teachers, school and on student learning (Corcelles-Seuba, Sala-Bars, Soler, & Duran, 2024).

Throughout this process, the opportunity for both teachers to reflect on their practice and decide how to improve it by setting a professional learning goal is another of the most valuable benefits (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023; O'Leary, 2022). It is important to further explore this mechanism since there are relatively few empirical studies that aim to understand in-service teachers' professional learning goals from a teachers' perspective (Louws, Van Veen, Meirink, & Van Driel, 2017).

According to O'Neill (2000) and O'Neill, Conzemius, Commodore, and Pulsfus (2006), professional goals formulated by teachers must be contextualised and meet several characteristics; they are called SMART objectives. In accordance with the acronym, each goal must be Specific, Measurable, Attainable, Relevant and Time-bound. Teaching goals, written according to these characteristics, are more manageable to achieve. These goals should be written in a clear and meaningful way, they should link to the needs of the classroom and focus on student learning, and they should identify the next steps to achieve them within a specified timeframe (Brown, Leonard, & Arthur-Kelly, 2016). This research is based on the characteristics of SMART learning goals.

(out)

Reflection helps teachers to identify specific goals for their professional development and to implement strategies for long-term sustainability (Korthagen, 2014, 2017; Stingu, 2012). Moreover, reflection involves analysing and critically reviewing one's own experiences and contrasting them with theoretical foundations that allow teachers to explore further (Anijovich & Cappelletti, 2018).

The RPO process involves a variety of reflective practices, both individual and collaborative, as well as in writing or in a dialogue (Duran Gisbert, Corcelles Seuba, & Miquel Bertran, 2020). The act of writing reflections not only improves the ability to remember information and helps to make connections (Graham, Kiuahara, & MacKay, 2020), but it also encourages teachers to evaluate their teaching practice in more depth (Farrell, 2013; Janssen, Kreijns, Bastiaens, Stijnen, & Vermeulen, 2012) becoming a self-assessment tool with a heightened sensitivity towards student learning (Lakshmi, 2014).

Writing is the most used strategy to stimulate teachers' reflective practice (Nocetti, Otondo, Contreras, & Pérez, 2020) and, when done in a guided way, it can promote professional learning Pires Pereira, Cristo Parente, and Vieira Da Silva (2016) because it facilitates the creation of concise and accurate professional learning goals (Orakci, 2021).

Regarding collaborative reflection through feedback, RPO emphasises the benefits of both the roles of observer and observee, and the commitment of both to specify actions to generate a constructive conversation (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023). This guided practice promotes interaction and reflective dialogue with others in a climate of safety and trust that promotes the construction of knowledge (Perrenoud, 2004; Rose & Reynolds, 2008). For this reason, and given the importance of being able to generate quality feedback, several studies show the need to train teachers to generate focused and specific feedback that helps to identify learning goals (Drew et al., 2017; Latifi, Noroozi, & Talaei, 2021; Rosselló & De la Iglesia, 2021).

Two previous studies analysing the perceptions of different groups of teachers in relation to their RPO practices (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023; Corcelles-Seuba, Miquel, & Duran, 2023) show the writing potential. Writing up the post-observation report and the final individual reflective synthesis, and participating in the feedback meeting, are favourable moments for each teacher to identify their learning goal. In fact, the authors argue that those participants who claimed to have identified teaching improvement areas in the post-

observation report were able to draw up more specific learning goals at the end of the process. Therefore, observing and being observed helps to identify aspects of improving teaching practice, and individual written reflection and reflective dialogue during the process help the teacher to express the learning goal in a more enriched way.

The present research is about RPO as a mechanism that allows teachers to identify professional learning goals from their own practice, using different written guidelines in a four-stage cyclical process. Although the results found in the literature show the benefits of reflective peer cycles for improving teaching practices (Anijovich & Cappelletti, 2018; Esteve & Carandell, 2011; Thurlings & Brok, 2017), there is a lack of studies that show how these practices allow for specific enrichment of teacher learning goals and become practices of goal-oriented peer observation (Drew et al., 2017).

With this in mind, the objectives of this research are as follows:

01. To identify the stage in the RPO cycle when the improvement area included in the final learning goal is identified (in chronological order: post-observation report, feedback meeting, final reflective synthesis).
02. To analyse the relationship between the stage when the improvement area included in the final learning goal is identified, and the quality expressed in how the goal is worded.
03. To analyse teachers' perceptions of the usefulness of the written guidelines provided in the RPO cycle as a support to identify learning goals.

Method

Sample and data collection

The study sample is based on 228 voluntary primary and secondary teachers from Catalonia and the Balearic Islands. Before recruiting participants for the study, the Ethics Committee of the Universitat Autònoma de Barcelona approved the study, respecting the obligations derived from the Organic Law 3/2018 on Protection of Personal Data and the Guarantee of Digital Rights, General Data Protection Regulation (EU) 2016/679 and the current complementary legislation.

This study relies on the data collected throughout the implementation of the RPO cycle, using a total of five instruments (see a summary in [Table 1](#)).

Firstly, after the observation, each participant had an organisation sheet on which they were asked, among other questions, if they had identified any element of improvement in their practice – post-observation report (Instrument 1, see APPENDIX). Secondly, the two feedback meetings were carried out, each focused on the observee, and the conversations were audio-recorded (instrument 2). In the last phase of the RPO cycle, each teacher wrote a specific learning goal for their own teaching practice and specific actions to achieve it in the document provided; the “Final Reflective Synthesis” (instrument 3, see APPENDIX).

At the end of the RPO cycle, the participants individually answered two items of a questionnaire on a Likert scale from 1 to 4 (with 1 being “not at all” and 4 being “very much”) (instrument 4). They were asked about the usefulness of instrument 1 and 3 in supporting written guidelines to identify learning goals.

Table 1. Relationship between research phases, instruments, and objectives.

	Phase	Instrument	Objectives
RPO	1. Pre-observation		
	2. Observation	1. Post-observation report	Ob. 1, 2, 3
	3. Feedback Meeting	2. Audio recording	Ob. 1, 2
	4. Final reflective synthesis	3. Final reflective synthesis	Ob. 1, 2, 3
Post-RPO		4. Questionnaire (two items)	Ob. 3
		5. Groups interview	Ob. 3

Table 2. Criteria for classifying the learning goals into different levels of quality, and examples.

Quality level	Criteria	Example
Low	(1) It deals with topics not relevant to professional learning and/or student learning - regardless of whether there is a specific action plan -, or (2) it deals with improving teaching practice in classroom management without a clear action plan.	(2) "Giving feedback is very important, it is a good tool to use with students as it makes them much more aware of what they are learning or doing". (XCB-183)
Medium	(1) It deals with improving teaching practice in classroom management with a clear action plan or (2) it deals with a relevant topic but without a clear action plan.	(1) "Have better control of the order in the classroom and check when the computer should be used and when not. Try it in the next class". (XCB-266)
High	It deals with very relevant topics that have a direct impact on students' learning and provides a clear action plan.	"Improving the use of self-regulated learning tools. At the next coordination meeting, we can create a Drive folder for students to manage their learning". (XCB-192)

The criteria for the learning goals classification were established, ratified, and updated by the working team. Each member of the team coded the learning goals following the agreed criteria and put them together to assess the degree of agreement and discrepancies, until absolute agreement was reached.

Three months after completing the RPO practice, a random sample of 46 teachers participated in four group interviews, with 10–15 teachers per interview. They were asked about the usefulness of Instrument 1 and 3 in supporting written guidelines for identifying learning goals, with the following questions: "How do you assess the fact that both instruments involve writing activities?", "How do you assess the fact that both instruments should be prepared individually?" and "How do you assess the two instruments in terms of how they help to identify learning goals?". Finally, they were asked for suggestions about how to improve the use of the two instruments.

Material and data analysis

To satisfy objective 1 (to identify the stage in the RPO cycle when the improvement area included in the final learning goal is identified), firstly, the topics included in each participant's learning goal were identified in the final reflective synthesis (instrument 3). In parallel, it was also identified whether each participant's answers to the post-observation report (instrument 1) proposed an aspect directly related to the topic of the final learning goal as a possible area of improvement. At the same time, it was determined whether this area of improvement was discussed in the feedback meeting (instrument 2). The analysis was carried out teacher by teacher, indicating whether at each moment (post observation and feedback meeting) it coincided or not with the learning goal topic.

To decide on the compatibility of the topic, the second author made a proposal that was validated by the first and third authors. Discrepancies were discussed and agreed upon until absolute agreement was reached.

To carry out the analysis, the statistical descriptions of the frequency and weight of the number of teachers distributed according to the stages of the RPO cycle were calculated. The Chi-square test and the Chi-square goodness of fit test were used to study the relationship between the different stages. Four possible patterns were identified, according to the combination of the stages of the RPO cycle in which the area for improvement was identified.

Regarding the second objective (to analyse the relationship between the stage when the improvement area included in the final learning goal is identified, and the quality expressed in how the goal is worded), on the one hand the data obtained from objective 1 were used, and the learning goals collected in instrument 3 were analysed.

Given the characteristics of SMART objectives (Brown, Leonard, & Arthur-Kelly, 2016), the learning goals in this study were categorised in three levels of quality (low, medium, high). The quality of learning goals is determined by the relevance of the topics covered and whether they specify a timeframe for achieving them (Table 2).

A learning goal must be aligned with the school's values, needs and strategies, and should have a direct correlation with improving student learning. In addition, the actions that the teacher wants to take to achieve the learning goal need to be specified by steps and time to achieve them. These aspects are also key in the professional improvement proposal that arises from RPO (O'Leary, 2022).

For data analysis, the distribution of the number of teachers was calculated, in terms of frequency and weighting, according to the quality level of the learning goal and the pattern followed. The Chi-square test and the Chi-square goodness of fit test were used to study the relationship.

The calculations for objectives 1 and 2 were carried out using Jamovi 2.3.21 software with a significance level of 0.05.

To respond to objective 3 (to analyse teachers' perceptions of the usefulness of the written guidelines provided in the RPO cycle as a support to identify learning goals), the mean and SD of the responses collected in the questionnaire were first calculated. Paired-sample Wilcoxon test was used to show differences in the ratings of the two instruments. Subsequently, the interventions of the participants in the group interviews were categorised; out of the 46 teachers in the group interviews, 21 intervened. The four dimensions directly corresponding to each of the questions were identified. Next, ad hoc categories emerged within each dimension, according to the answer content, creating a useful categorisation system for all 4 groups of interviewees. The second author carried out an initial analysis and thematic categorisation of the answers, based on the transcription of the audio-recordings. Next, the first author and then the third author outlined the suggested categorisation and finally the three researchers reached absolute agreement on the category system and coding. To perform the analysis, the statistical descriptions of the frequency and weight of the interventions were calculated.

Results

O1: To identify the stage in the RPO cycle when the improvement area included in the final learning goal is identified

Once the Chi-square goodness of fit test has been carried out, which checks whether the distribution is uniform, both among the 4 patterns at the same time and when comparing two by two, it always gives a statistically significant result. Therefore, the patterns are not evenly distributed.

As can be seen in [Table 3](#), pattern 4 is the most frequent, which means that 139 teachers (almost 61% of the total) identified what they considered to be their area of improvement immediately after the observed class (post-observation report); it was then discussed during the feedback meeting and finally drafted as a learning goal at the end of the RPO process.

The feedback meeting encouraged 54 teachers (almost 24% of the total) to start talking about what their final learning goal would be. They follow pattern 2. In a smaller quantity (pattern 1: 23 teachers) there would be teachers who do not identify a learning goal until the final reflective synthesis. And the least common pattern (pattern 3: 12 teachers) is formed by those participants who, having identified an area for improvement after the classroom observation, do not comment on it in the feedback meeting, but the observee does write it down as a final learning goal.

Table symbols: Not similar learning goal (NoLG), Yes similar learning goal or final learning goal (YesLG).

O2: To analyse the relationship between the stage when the improvement area included in the final learning goal is identified, and the quality expressed in how the goal is worded

The Chi-square goodness of fit test is statistically significant in relation to the high-quality level, but not between the low and medium levels, indicating that they are similarly distributed. As can be seen in [Table 4](#), most of the learning goals are of low

Table 3. Frequency and weight of the number of teachers who follow each pattern.

Pattern	Post Observation	Feedback meeting	Final reflective synthesis	F	%
1	NoLG	NoLG	YesLG	23	10.09
2	NoLG	YesLG	YesLG	54	23.69
3	YesLG	NoLG	YesLG	12	5.26
4	YesLG	YesLG	YesLG	139	60.96
			total	228	100

Table 4. Frequency and weight in relation to the different quality levels of the learning goals.

Quality level of learning goal	F	%
Low	94	41.23
Medium	96	42.10
High	38	16.67
Total	228	100

Table 5. Distribution of teachers among the different patterns and the different quality levels of the learning goals.

Pattern			Quality level of learning goal			Total F (%)
			Low F (%)	Medium F (%)	High F (%)	
1	NoLG	NoLG	11(47.83)	7(30.43)	5(21.74)	23 (100%)
	Standardized residuals		0.68	-1.20	0.69	
2	NoLG	YesLG	28(51.85)	23(42.59)	3(5.56)	54 (100%)
	Standardized residuals		1.81	0.08	-2.51	
3	YesLG	NoLG	7(58.33)	4(33.33)	1(8.33)	12 (100%)
	Standardized residuals		1.24	-0.63	-0.80	
4	YesLG	YesLG	48(34.53)	62(44.61)	29(20.86)	139 (100%)
	Standardized residuals		-2.57	0.96	2.13	
Total			94	96	38	228 (100%)

and medium quality, with just over 40% each. High level learning goals do not reach 17% of the total.

Table 5 shows the frequency of teachers who follow each pattern distributed according to the quality level of the learning goal, and in parentheses the weight of each level within the pattern. Considering the distribution of learning goals among the different patterns, the number of expected cases has been calculated, and the standardised residuals are shown in the table.

The Chi-square goodness of fit test, associated with Table 5, is significant, which confirms that the distribution of the quality level of learning goals among the different patterns is not uniform.

In the first three patterns, teachers with low-quality learning goals are the most frequent, followed by medium-quality ones. However, in the pattern most followed by participants, pattern 4, the distribution is the other way around, with teachers with medium-quality learning goals (62 — 44.61%) being above those with low-quality learning goals (48 — 34.53%).

Based on the standardised residuals, pattern 2 has a lower-than-expected amount of high-quality learning goals (-2.51), given the distribution of learning objectives across the patterns. However, pattern 4 has a lower-than-expected amount of low-quality learning goals (-2.57) and a higher amount of high-quality learning goals (2.13). Teachers who had already identified their area of improvement in the post observation report, reaffirmed it in the feedback meeting, and wrote it in the final synthesis, wrote more high-quality learning objectives than would be expected.

03: To analyse teachers' perceptions of the usefulness of the written guidelines provided in the RPO cycle as a support to identify learning goals

For the third objective of the research, data was obtained from two sources. In relation to the answers to the two assessment items of the written guidelines, the final reflective synthesis scores an average of 3.21 out of 4 (SD = 0.67) and can therefore be considered a very positive assessment. The post-observation report scores 2.25 out of 4 (SD = 0.61) and in this case the rating is lower. Paired-sample Wilcoxon test shows a significant difference ($p < 0.001$) in the ratings of the two instruments.

To clarify and better explain these results, group interviews were carried out.

Table 6. Dimensions and category analysis of the group interviews.

Dimension	Category	F	% (within dimension)	% (total)
How do you assess the fact that both instruments involve writing activities?	negatively	1	4.55	1.19
	positively but with limitations	13	59.09	15.47
	positively with explicit benefits	8	36.36	9.52
	Total	22	100%	26.18%
How do you assess the fact that both instruments should be prepared individually?	negatively	2	9.09	2.38
	positively but with limitations	11	50	13.09
	positively with explicit benefits	9	40.91	10.71
	Total	22	100%	26.18%
How do you assess the two instruments in terms of how they help identify learning goals?	negatively	1	5	1.19
	positively	3	15	3.57
	positively but with limitations	12	60	14.29
	positively with explicit benefits	4	20	4.76
	Total	20	100%	23.81%
Suggestions to improve the use of the two instruments	not necessary	8	40	9.52
	improvement with suggestions	12	60	14.29
	Total	20	100%	23.81%
	Total interventions	84	100%	100%

Regarding the answers to the group interviews, we present the frequencies of interventions in each category, and the weight of the categories within each dimension and in relation to the total number of interventions (Table 6).

In relation to the global data, the distribution of the interventions in each dimension was very balanced (between 23.81 and 26.18%). As far as the analysis within each dimension is concerned, in the first dimension, in almost 95% of the interventions participants positively assessed that the two support guidelines for identifying the learning goals involved writing. However, within these, 59% pointed out certain limitations related to the lack of time available to teachers in schools, the lack of help and the effort required to complete them.

The fact that it involves writing implies prior reflection, and sometimes we need to find time in our day-to-day life which is very busy. (XCB-203)

In around 36% of the interventions participants stated the benefits: it allowed them to reflect, verbalise their emotions and focus on their learning goals.

They are documents that require time to prepare but help you to think more. Writing can be difficult, but it can help you to define your thoughts. (XCB-229)

In the second dimension, the fact that both documents were written individually was also very positively evaluated by participants in almost 91% of the interventions. However, 50% expressed some limitations, again due to lack of time and because it generates more work and effort, or because they consider it necessary to share what each one writes with their colleague.

It's a more introspective moment and we don't have time; we need more time for ourselves to reflect and we don't have that space for ourselves. (XCB-89)

Nevertheless, in almost 41% of the interventions participants expressed explicit benefits because they were carried out individually, emphasising that they made it easier to reflect and verbalise one's own thoughts.

It has been very good for me to stop to think and draw conclusions; otherwise we don't stop to reflect. It's good to do them separately since everyone has their own point of view. (XCB-149)

In the third dimension, in 95% of the interventions participants positively assessed the usefulness of the two support guidelines to help identify learning goals, although within these, 60% of participants also identified certain limitations due to a lack of knowledge, and lack of time and help emerged as a limitation again. The two documents were differentiated by emphasising that "the document for doing the reflective synthesis is more directed and allows you to focus on specific aspects of improving practice".

However, in 20% of the interventions participants reported explicit benefits in the fact that the two documents provide help, they can be shared orally and with a colleague.

Finally, in the fourth dimension analysed, regarding the suggestions for improving both the written guidelines and their use, in 40% of the interventions it was commented that no improvements were needed and that although they generate work and require time to be written, they are useful for identifying learning goals. Whereas in 60% of the interventions suggestions were made for improvements related to the need to adapt the school calendar to the stages of the RPO cycle in which it is necessary to write, to indicate the time required to provide quality and to help to focus on identifying the learning goal (as discussed).

I would suggest being clear about what it will involve in relation to dates and times, to organise ourselves better. We have a lot of meetings, coordination, documentation, and we don't have time for reflection. It takes time to write up a thorough and quality document. (XCB-72)

Discussion and conclusion

The results of this research show that participating in RPO practices allows teachers to identify their own learning goals, but few teachers focus them on impacting on student learning and clarify an action plan to achieve them. It is at the post-observation phase that most teachers identify their area for improvement, reflect on it further in the feedback meeting and finally write it down as a learning goal. Written guidelines to support the identification of learning goals are highly valued.

Based on the characteristics of professional learning (Boeskens, Nusche, & Yurita, 2020), RPO is an effective strategy for teachers to learn in collaboration with their colleagues (Alam, Aamir, & Shahzad, 2020; Hamilton, 2013; Tosriadi, Asib, Marmanto, & Azizah, 2018), acting as self-directed learners with a sense of agency (Louws, Meirink, Van Veen, & Van Driel, 2017; Pyhältö, Pietarinen, & Soini, 2015; Roumbanis Viberg, Forslund Frykedal, & Sofkova Hashemi, 2023). As a context-based practice, RPO facilitates reflection and leads to learning to improve daily work practice by providing an embedded collaborative practice in the regular work context (Althaus, 2015).

Referring to the evaluative dimension of professional learning, teachers act as active inquirers of their own practice, engaged in a continuous reflective process that results in change (Gudeta, 2022). The RPO cycle can be repeated throughout the school year providing different opportunities for professional improvement and the skills to provide peer feedback (Parr & Hawe, 2017). And to consolidate and transfer the learning achieved (Golden, Hemmeter, Edmonds, & Ledford, 2021).

In previous research, teachers' perceptions had been analysed in relation to the evaluation of RPO as a tool for identifying learning goals, based on the memory of a past event (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023; Corcelles-Seuba, Miquel, & Duran, 2023). The innovative contribution this article makes is the direct analysis of the documents prepared by the teachers and their dialogues at each of the stages of the RPO cycle.

The fact that the observee identifies an area for improvement and reveals it in the feedback meeting – because it was written in the post-observation report – helps to focus the shared reflections, since if the observer knows the aspect on which the observee would like to improve, they can better focus their comments, and promote more effective feedback (Drew et al., 2017). Otherwise, the feedback provided may be too general or vague (Karagiorgi, 2012). We could say that identifying the area of improvement at the beginning of the RPO cycle is decisive for teachers to end up writing a learning goal, but it does not ensure that it will be of high quality.

The amount of high-quality learning goals was much lower compared to the other two quality levels, possibly influenced by teachers' lack of knowledge about the characteristics of high-quality learning goals and how they contribute to more effective professional improvement (O'Neill, Conzemius, Commodore, & Pulsfus, 2006; Sparks, 1999). Teachers' learning goals lacked a clear purpose in terms of improving student learning as well as explaining a specific action plan to achieve this improvement, both key characteristics of the highest quality goals.

The data analysed suggest **two possible areas of improvement** for the RPO cycle to be an effective professional development mechanism. Firstly, getting even more teachers to identify an area of improvement in their own practice in the post-observation report. And secondly, that this area of improvement is specified in a high-quality learning goal at the end of the process.

Looking ahead to future situations, the written guidelines offered to teachers could be expanded using metacognitive support scaffolds (Richardson et al., 2022). This should include more precise training on how to develop high-quality learning goals (Brown, Leonard, & Arthur-Kelly, 2016). It should also ask more directly, particularly in post-observation reports, whether observees have identified areas for improvement in their practice (focus on just a few questions: Am I satisfied with the planning, choice of resources, teaching strategies and assessment? What didn't work and why? What areas of my practice have I identified for improvement?).

Regarding the observer and observee roles, throughout the RPO cycle support could be extended to include how to carry out a critical discussion about one's own practice (Meierdirk, 2016) and guidelines could be provided to advance peer feedback that is already taking place, towards feedforward; moving from simply focusing on identifying aspects for improvement, to focusing on developing an achievable improvement plan to be able to reach the learning goals (Reimann, Sadler, & Sambell, 2019). Different forms of feedforward can be

identified (Sadler, Reiman, & Sambell, 2023), but can be as important as peer feedback in collaborative learning environments which is often neglected in both theory and practice (Latifi, Noroozi, & Talaei, 2021). We can also consider video clips of the observed class, they facilitate reflection and analysis, leading to more meaningful collaborative interactions (Murray, Ma, & Mazur, 2009).

Finally, the time investment involved in the use of these written tools and feedback meetings must be combined with the teaching activities (Motalebzadeh, Hosseinnia, Domskey, & Popescu, 2017). These practices of collaborative reflection protect teachers from experiencing burden and stress (Soini, Pyhältö, & Pietarinen, 2010), situations that limit their predisposition to the effort involved in a cycle of professional improvement. School head teachers can help with scheduling and time by allowing teachers more flexibility in their daily routines and more time for observations and meetings (Murray, Ma, & Mazur, 2009; Nocetti, Otondo, Contreras, & Pérez, 2020).

Limitations and further investigation

As regards the limitations of the research, the perceptions and actions of different teachers could have been analysed more precisely using the case analysis methodology, with teachers who had written learning goals of the different quality levels and deepening the explanation and understanding of the differences.

One way to continue the study would be to investigate the transfer of learning goals to daily practice (Corcelles-Seuba, Duran-Gisbert, Flores-Coll, Miquel-Bertran, & Ribosa-Martínez, 2023) and how they affect students' outcomes (Thurlings & Brok, 2017), exploring whether the transfer occurs differently depending on the quality of the learning goals.

Lastly, another line to explore would be to design and analyse an RPO cycle involving the students of the observed classroom. Initiatives that have included student perceptions as a stimulus for teaching development rate this very positively (Messiou & Ainscow, 2015, 2021). Zwart, Wubbels, Bolhuis, and Bergen (2008) have identified learning situations – when teachers interact more with students not only in their role as a teacher, but also by asking for feedback from them or listening to and answering their questions – that can become learning activities for both students and teachers.

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Appendix

Instrument 1:

Post-observation report

Write the essential elements of your report very concisely. We suggest you ask yourself questions such as: How did I feel when I was being observed? Did my students learn what I intended? Am I satisfied with the planning, selection of resources, teaching strategies and assessment? What hasn't worked and why? if you were to do the class again, would anything change? Because? What have I discovered about myself as a teacher? Have I seen areas for improvement in my practice?

Instrument 3:

Final reflective synthesis

Identified element for improving teaching practice. Based on your reflection and the reflections from the feedback meeting, briefly write down your learning goal (or goals).

Improvement plan or activities to ensure improvement. Identify what specific actions you will take to improve.