# IDENTIFYING AND SUPPORTING REFLECTION IN PRE-SERVICE TEACHER EDUCATION: A RUBRIC FIT FOR PURPOSE

## Maria Ellison

mellison@letras.up.pt Faculdade de Letras da Universidade do Porto (Portugal)

Abstract: It is widely accepted that reflection and reflective practices are necessary components of teacher education programmes. However, these are not always explored or even fully understood by the very people who are expected to reflect – the student-teachers themselves. Support for these practices is therefore required so that students may understand what reflection is and helped to become reflective practitioners. This article describes the construction and use of a rubric to identify and support reflection in pre-service foreign language teacher education. It begins by reviewing key literature on reflection before moving on to a study of types of reflection and conceptual frameworks in the literature. Four types of reflection were identified and attributed labels: Type 0. Descriptive/behavioural; Type 1. Descriptive/analytical; Type 2. Dialogic/interpretative; and Type 3. Critical/transformatory. These were then used to construct the rubric which incorporated a matrix of five categories: discourse; rationale; level of inquiry; orientation to self; and views of teaching. Examples of how the rubric has been used to both capture and support reflection are provided. It is not a stand-alone tool, but one which is situated within a reflective practice model of teacher education which requires reflexive teacher educators, tools and practices which provide opportunities for reflection. It is flexible enough to allow teacher educators (and students) to identify types of reflection in spoken or written accounts, which may help when self-assessing, giving feedback, and supporting the momentum of reflection during a course or practicum.

**Keywords**: reflection; reflective practice; teacher education; rubric; types of reflection

#### 1- Introduction

The term 'reflection' appears in many course descriptions for teacher education and has become synonymous with the professional practice itself, yet it remains something of a hollow buzzword, necessary but seldom fully understood to the extent that it may be applied "uncritically and unreflectively" (Griffiths 2000: 538). Much is made of how to operationalise practices which provide opportunities for

reflection, but less of what it actually is and how reflection may manifest itself. Is it any wonder then, that when student-teachers are told repeatedly *to reflect* or to *reflect more* during their teaching practice, they frequently do more of the same, which leads them to end their practicums relieved, though none the wiser, of the nuances of change which they *did* actually undergo, and with the theory-practice divide as broad and intact as ever. As Lane, McMaster, Adnum & Cavanagh state (2014: 482), "Reflective practice should be taught explicitly because in most cases, simply telling pre-service teachers to reflect on their experiences is not sufficient."

In order to prevent premature routinisation of novice teachers' thoughts, teacher education which claims to develop reflection must address reflection itself. Dewey (1933) was indeed right when he said that reflection requires a certain mindset that needs to be taught. Dismissing it as something that just happens, something that we do all the time every time we think is not enough. To reap the benefits of reflection, we need to understand what it is. We may, therefore, add that reflexivity i.e., understanding reflection, is a pre-requisite to reflective practice.

Reflection is a necessary component and catalyst for change leading to personal and professional development. As Ellison (2014: 123) states, "change will not happen unless it is preceded and accompanied by reflection". It reveals itself as "new understandings and appreciations" (Boud, Keogh & Walker 1985: 19). It requires commitment from reflexive teacher educators who support students in acquiring "theoretical underpinnings" and "analytical and reflective skills" (Vélez-Rendon 2002: 459-461). In essence, reflection and reflective practice go hand in hand with professional practice, and collegial and personal awareness. And for this, student-teachers need to know what reflection is and what reflective practice constitutes so that they can then make this part of their life-long development, not something done in merely to survive the practicum, so that "its relevance becomes apparent in the practice of being a teacher" (Ellison 2014: 6). The knowledge-base of foreign language teacher education or any other, will not evolve unless we capture teacher reflection (Borg 2003; Mann & Walsh 2017; 2013). Understanding what reflection is and capturing it are key.

### 2 - Understanding reflection

Unsurprisingly, criticism levelled at student-teachers' (in)ability to reflect may indeed stem from the fact that it is notoriously difficult to define, a fact noted by many (Gimenez 1999: 130; Hatton & Smith 1995: 33; Jay & Johnson 2002: 73). The quest to uncover it has been frequently journeyed. It is a well-trodden one, made all the more interesting by the many perspectives of those who have made that journey, and the diversions and new routes taken along the way. Jay and Johnson's (2002: 73) acclamation that "in its complexity lies its worth" is apt indeed. It may be perceived as a silent, invisible power, which unless tapped intoby skilled teacher educators, may leave precious teacher-theories buried and the profession none the wiser.

Reflection and reflective practice are foregrounded by the work of Dewey (1933) and anchored in the professional psyche by that of Schön (1983) with the former laying down the principles of attitude, mindset and process, and the latter concretising this in professional practice. The oft-quoted Dewey (1933: 6) describes reflective thought as "Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends". Inherent in this is the idea that reflection is conscious, continuous deliberation and a challenge to existing beliefs in light of new perspectives against the backdrop of what preceded them. Dewey's process includes five steps: "(i) felt difficulty; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reason of the bearings of the suggestion; (v) further observation and experiment leading to its acceptance or rejection; that is, the conclusion of belief or disbelief" (Dewey 1933: 72). He believed that the mind could be trained to follow the procedure and evaluate each step.

Schön's work is synonymous with the professional's theorising of their practice. For him, theorising occurs at two distinct points in time and distance from action. These he labels, reflection in action or "knowing in action" and "reflection on action". The former occurs during practice itself whilst the teacher is engaged the act of teaching. It is here that they draw upon their experience, knowledge or awareness of what works during practical decision-making in the classroom. It is what may be interpreted as the intuition of the expert or knowing practitioner. This needs to be mediated through reflection in and on action when new practice or unexpected occurrences happen which could lead to new perspectives and changes in practice. Such 'knowing' is often difficult to surface, capture and articulate to others. Reflection on practice happens after the event where the teacher alone or with others ponders on their practice. This may involve application of existing theories or their own, questioning, hypothesizing and a consideration of how actions may influence further practice. Distance enables this to be somewhat objective, allowing assertions to emerge and consideration of changes to ensue.

Reflection has been variously conceptualised in studies of pre- and in-service teacher education. Two key dimensions are identified in these studies (see Ellison 2014), namely 'content' and 'type' of reflection. However, dimensions frequently overlap such as is the case with one of the earliest and oft-cited works - that of Van Manen (1977) whose three-level framework consists of: 1) Technical rationality; 2) Practical application/contextual; and 3) Critical reflection/dialectical. This scholar intended these levels to be "distinct ways of knowing and of being practical" (1977: 205). This is viewed as a hierarchy or continuum of developing behaviours, attitudes and knowledge as the novice gains experience in becoming a teacher. Though widely appreciated, Van Manen's work has been criticised for undervaluing the technical and practical (LaBoskey 1993; Noffke & Brennan 1988; Valli 1992) – skills which will always need to be acknowledged and revisited throughout examination of practice.

Types of reflection are synonymous with levels (Pachler & Field 2001; Sparkes.

Langer *et al.* 1990), hierarchies, developmental stages (Hatton & Smith 1995; Kitchner & King 1977 cited in Ross 1995); processes (Jay & Johnson 2002) and quality. It is important for teacher educators to be aware of these types of reflection in order to develop strategies which best support them so that student-teachers can realise their potential and monitor their growth during and beyond the practicum. Capturing reflection needs to be part of an approach to teacher education which is evidence-based (Mann & Walsh 2017). This is particularly important where the ability to reflect and reflection constitute criteria for assessment in "the assessment driven culture of higher education "(Young, James & Noy 2016: 137).

## 3 - Identifying types of reflection

In her study, Ellison (2014) identified four types of reflection in the literature with a view to creating a rubric which could be used to identify types of reflection of student-teachers to monitor, support and help them better reflect during their teaching practice. In a preliminary stage, a corpus of twenty studies about preand in-service teachers' reflections were analysed in order to identify types of reflection, as well as how these were characterised and organised, and the terms used for this e.g., 'hierarchy', 'continuum' (see Appendix 1 for a table of studies). The next stage involved listing the characteristics of the types of reflection identified which enabled comparison across studies and four broad types of reflection to be determined. These were labelled with an indicator of the main characteristics of the type and tendency towards a particular behaviour or action. The four types with references from some of the studies are as follows:

**Type 0: Descriptive/behavioural.** This is a state of "non-reflective action" (Mezirow 1991) and routinised behaviour which occurs without thought (Valli 1992; McCotter 2004). In the practice of teaching, this may be the teacher's description of procedure and operations or "recall" (Lee 2005) without any justification for inherent actions or indeed any change in practice. As such, it is labelled Type 0 as little to no thought is involved nor action occurs.

**Type 1. Descriptive/analytical.** In this type of reflection, there is justification for action which stems from personal beliefs and common sense (LaBoskey 1993). Theory is unquestioned or under-explored (Mezirow 1990 cited in Kember *et al.* 1991; Sparkes-Langer *et al.* 1990). It is accepted and taken for granted. Reflection is focused on the teacher and the technical side of teaching, what Van Manen (1977) describes as "Technical rationality" and others (Hatton & Smith, 1995; Valli, 1992) as "technical" and the development of competences for this. The term 'critical' may be used in the sense of blaming someone or the context for a lack of success.

Type 2. Dialogic/interpretative. Here teachers begin to question their beliefs and actions, and are more open to the perspectives of others which they see as having the potential to influence and change their own practice. They repeatedly analyse, interpret and reframe their practice in order to prepare for further action (Schön 1983). This is done in light of other perspectives and is thus, "comparative" (Jay & Johnson 2002). Teachers show commitment to change which they see as having consequences on others (Pachler & Field 2001). For Valli (1992) it is a type of reflection which is "deliberative" and "personalistic" in the sense of developmental. The teacher's attitude is mindful and responsible (Dewey 1933). This level is characterised by the teacher dialoguing and hypothesising with themself (Hatton & Smith 1995; MacClellan 1999; Ward & McCotter 2004).

Type 3. Critical/transformatory. This type is characterised by the realisation of the potential of the teacher's actions and the "contribution" (Chamoso *et al.* 2012) they can have within and beyond the teaching context to transform practices. It is seen as 'critical' in that it reveals a deeper understanding of teaching and open-mindedness (Hatton and Smith 1995; Jay & Johnson 2002; MacLellan 1999; Valli 1992). Changes in attitude and practice are evidenced, as is a disposition toward further practice to effect change. This sense of transforming practice is integral to the feeling of emancipation (Pachler & Field 2001). Teaching is acknowledged as complex and a critical stance is adopted which reveals itself in questioning and further deliberation on new-found perspectives, what Mezirow (1999) refers to as "perspective transformation" which may incorporate the ethical, moral or political (Sparkes-Langer *et al.* 1990: 27).

#### 4 - Creation of the rubric

The rubric of types of reflection began as a four-columned table with a set of descriptors for each of the four types identified. For each type of reflection there was a long list of descriptors. Upon further analysis, it could be seen that there were similarities in the foci of descriptors across types of reflection. This led to the grouping of these characteristics into five categories of foci framed within the field of teacher education: discourse type; rationale; level of inquiry; orientation (position of self); and views of teaching. This would not only facilitate the organisation of the rubric, but also coherence in terms of content of descriptors across the levels (see Table 1. below). These were not initially used as separate foci for analysis, as accounts do not always contain all such characteristics (see section 5 for how they could be used). Instead, a type of reflection was attributed by virtue of a broad tendency towards that type.

Descriptive/behavioural (0)	Descriptive/analytical (1) Elements of 0 plus:	Dialogic/interpretative (2) Elements of 1 plus:	Critical/transformatory (3) Elements of 2 plus:
Discourse type  Descriptive. Straightforward simple description (of content theme; of action: recalling events, procedure, operations)	Discourse type  Descriptive/low-level explanatory	Discourse type  Descriptive/explanatory/ interpretative	Discourse type  • Descriptive/explanatory/interpretative/critical
Rationale  No attempt to reason/ justify/explain terms/action  'Action without thought'	Rationale  Description and explanation of content theme; action/practice includes attempts to justify it but in limited way  Limited thoughtful action	Rationale  Description and explanation of content theme; action/practice includes attempts to justify it in more in-depth way	Rationale  Description and explanation of content theme; action/practice is principled, critical, evaluative and includes multiple justifications and considerations of contextual factors
Level of inquiry  Does not question anything Can answer 'how' and what' questions in straightforward procedural terms	Level of inquiry  Low-level analysis (one -to- one correspondence) through:  Theory (absolute, unquestioned) which informs practice Own beliefs/values/ experience Can answer 'why' questions in limited way Problematises, but does not offer solutions Questions, but does not attempt to answer/make suggestions	Level of inquiry  Higher level of analysis and interpretation  Can answer 'why' questions in more depth Evidence of own voice Discours/argumentation with self Examines/questions own actions/decisions Deliberation of ideas Hypothesises Suggests/explores alternatives Offers solutions/advice	Level of inquiry  Reveals widening scope of thought and ability to problematise  I sopen-minded to further change  Asks new questions/makes further suggestions about practice
Orientation (position of self)  Little/no indication of position	Orientation (position of self)  Self-oriented towards own teaching/competences  Identifies/acknowledges own strengths and weaknesses  Blames others/context or lack of experience for lack of success  Expresses opinion in general terms  Acknowledges own learning in general terms  Reliant on own previous knowledge/viewpoint  Littlefno indication of change in perspective brought about by new knowledge or practice	Orientation (position of self)  Less concerned with self – understands effects of own practice on others  Recognises responsibility to others  Questions or attempts to reframe, re-articulate ideas/beliefs in light of new understandings of practice  Justifies/acknowledges strengths and weaknesses and how weaknesses and how weaknesses can be overcome  Expresses opinion in specific terms  Acknowledges own learning in specific terms  Sees relationship between actions and theory. Practice influencing theory.  Initial theory- building/transformation  Appreciates multiple viewpoints  Reveals openness to change	Orientation (position of self)  Affirms and justifies new perspectives Articulates new understandings and appreciations in in-depth way in relation to other factors beyond own practice. Shows awareness of contribution of practice to theory Sees potential/worth of new knowledge and actions beyond self to school community and elsewhere Sees underlying influences on teaching beyond the observable (political, moral, ethical)
Views of Teaching  Teaching is seen in terms of operations, procedures, obligations which must be followed  Success is the fulfillment of procedures, obligations  Teachers have little/no control	Views of Teaching  Teaching is problematic  Teachers have little control/influence  Success in teaching is seen as the achievement of simple personal goals/institutional requirements	Views of Teaching  Teaching is problematic and complex, but success is achieveable  Teachers can influence change  Teaching involves 'mindful, committed action'  Success is seen in terms of learner achievement	Views of Teaching  Teaching is complex and depends on many factors within and beyond the control of the teacher  Teachers are responsible for their own development  Teachers have an important role in change  Success is wide-reaching

Table 1. Rubric of Types of Reflection from Ellison 2014

The intention of the rubric was to identify types of reflection in both written and spoken accounts of student-teachers' practice. Therefore, it had to account for both modes and was piloted accordingly. When piloting, the author became aware that there could be more than one type of reflection exhibited in any one account. This resulted in the inclusion of "Elements of (...) plus" as indicated, if read from left to right, from Type 1 - Type 3 which is also consistent with the use of such rubrics to denote development along a continuum, in this case from reflection without thought to one which is critical and transformatory, from low to high, or deeper level of reflection. Each paragraph in written reflections and long turns in transcribed audio-recorded interviews and seminar discussions about teaching practice was attributed a number which corresponded to a majority Type of reflection. Rater reliability was performed. This involved three university professors from three universities in two countries. The 'raters' were sent a sample of coded data which contained the range of reflection types, the rubric and a set of instructions. Raters were asked if they agreed with the coding attributed. If they disagreed, they were asked to justify this. All three raters agreed with the coding of the sample.

### 5 - Using the rubric

The rubric was initially applied to the study of three student-teachers conducting their practicum in a Masters involving the teaching of English as a foreign language in primary schools, and their reflections on their implementation and practice of Content and Language Integrated Learning (CLIL) in these school contexts. It was used to identify the types of reflection before, during and post practicum in the student-teachers' written and spoken accounts (individual, group seminar, pre-post lesson discussions, video-viewing of lessons) of their experience of teaching CLIL over an academic year (see Ellison 2014). In this particular study, it enabled the author to identify types of reflection on eight specific foci previously determined prior to the study and whether types of reflection on these foci changed over time. Frequency of each type of reflection on each focus was calculated at each phase allowing broad tendencies to be determined. This allowed comparisons to be made of broad tendencies across the phases and between teachers. Results revealed that there was a range of types of reflection at each phase which refutes the idea that student-teachers may move along a continuum of reflection from lower to deeper levels by the end of a practicum. In this study, Type 3 reflection was least engaged in and more distanced from action. Student-teachers tended to respond to immediate pedagogical circumstances which prompted more Type 1 and 2 reflection.

Aside from the original purpose described above, the rubric has been used to stimulate reflection and develop reflective practices, namely while developing a pedagogy of reflection. It has been used in pre-and post-lesson discussions during the practicum, in the construction of dialogue journals and discussion of critical incidents during Masters degrees involving the teaching of English as a foreign language at the same institution. Its uses are described below.

## 5.1 - Teaching about reflection

As mentioned in the first part of this article, knowing what constitutes reflection and how to reflect should be part of teacher education. The rubric has been introduced to students on Masters degrees involving the teaching of English as a foreign language at the Faculty of Arts and Humanities of the University of Porto (FLUP) in an effort to develop a pedagogy of reflection. Here students are introduced to the concept of reflection and reflective practice in the curricular unit of didactics of English. They learn about reflection in theory and its relevance in teacher education with respect to becoming reflective practitioners (Zeichner 1996). This is facilitated by using Bassot's (2016) metaphorical mirrors applied to the practice of teaching which helps students appreciate the importance of the role of self-awareness in reflective practice. Students also begin to (de)construct their beliefs about teaching through analyzing how they themselves were taught foreign languages, as well as the main influences on their decision-making with regards to entering the profession. They identify approaches, methods and techniques of how they themselves were taught. To facilitate this, they answer an open-ended questionnaire about their personal 'visions of teaching' in order to begin the process of reflective writing. They are encouraged to keep this questionnaire and revisit it during their practicum the following year.

The rubric has been used to teach about types of reflection in exercises involving the identification of these types in authentic extracts from former student-teachers' written dialogue journals, thus providing "modelling of evidence-based practice" (Lane *et al.* 2014: 482). The aim of these exercises is to alert students to the importance of different types of reflection and the need to reflect in more ways than simply describing the practicum. Thus, from the extracts below, students would have to identify the broad type and justify their answers using the rubric itself. Types of reflection in the extracts below are identified.

#### Type 0.

As a warmer, and to start the class in a different way, I showed the video clip of the song without sound and asked the students the rooms in the house they saw. I handed them out a worksheet with the lyrics where some words related to pieces of furniture were substituted by images and asked the students whether they knew their names. I played the song for them to confirm their answers. I then wrote the names of the different rooms they had previously elicited on different columns and told the students' to write, during one minute, the name of as many different pieces of furniture they remembered in each column. I filled in the columns with the students' words and some others that they hadn't mentioned.

This is a straightforward descriptive account of a lesson procedure. There is no attempt to justify any elements of this procedure, nor assess the efficacy of the actions. The extract is clearly Type 0 reflection.

## Type 1.

After this first lesson I realized that here are some points that I have to improve: Instructions must be given more precisely, for example setting the limit of time and the transitions must be done smoothly, as I have been too direct with it. I also have to correct the way I question the students, as the questions are frequently not well done and also avoid the yes/no answers.

Here the teacher's description includes justification for her actions, but these are limited to her own perspective and there is no attempt to shed further light on why she acts the way she does. She is aware of her own developing competence upon which success in teaching depends.

## Type 2.

While the group work was the most successful part of the lesson, the least successful part was when I tried to explain the modal verbs. I had some difficulties being clear and organised as I had idealised. Unfortunately, the feeling I had was that students were not completely sure about this particular item. Grammar teaching is very complex and requires a particular methodology. In this case, after the lesson I asked to myself: did I put into practice what I learned in theory? Did I give opportunity for the students to practice? Did I make clear the connection between the rule and its function? Next time I teach grammar, I will consider this experience and try to improve my methods.

The teacher examines and interprets her actions in relation to their effects on her students. She frames and re-frames her teaching (Schön 1983: 40) through a series of self-posed questions which reveal her awareness of methodology and the complexity of teaching. However, she does not formulate any answers to these questions or suggestions as to how she will improve her methods.

## Type 3.

Another skill I believe I have developed is knowing how to assess my lessons in terms of the aims I have established for them. It helps to scrutinize them more objectively and understand whether the decisions I have made contributed to or impeded successful teaching. This is also an important factor to take into account when choosing the weaknesses on which I want to work in future lessons. As I cannot focus on every problematic area at once, I deem it necessary to select only some of them and base that selection on the impact those issues can have on a particular lesson. For example, if it is a speaking lesson, perhaps it makes more sense to prioritize skills such as giving good feedback and making discussions as inclusive as possible by asking students to comment on each other's ideas. Although there is a range of teaching factors that should always be considered, irrespective

of the lesson's goals, I find it easier to choose specific problems, depending on their prominence and importance for each lesson and try to solve them gradually.

The teacher is able to problematize and interpret her own actions objectively. She is aware of the complexity of teaching and has worked out her own strategies of coping with it which are manifest as practical theories. These have come from her knowledge and awareness of theory as well as her own practice. She can engage in both problem solving and problem setting to the wider benefit and has turned "experience into learning" (Boud *et al.* 1985).

## 5.2 - Pre- and post-lesson discussions

During the teaching practica of the Masters degrees involving teaching English as a foreign language in local primary or secondary schools at FLUP, student-teachers teach lessons which are observed by school mentors and faculty supervisors. In many cases, the faculty supervisors are also involved in the teaching of subjects (e.g., didactics) in the first year of the masters. This greatly facilitates discussion as these faculty supervisors are able to engage students in reflecting on key issues introduced in the Masters degree. They are aware of what has been introduced in theory and are well-positioned to see if student-teachers draw on this when reflecting on their practice (re-Types 1-3 of reflection).

In pre-observation discussions, there is a need for student-teachers to situate their lessons within a lesson sequence, describe the procedure as well as justify their decision-making regarding approach, methods and techniques selected. Thus, at this pre-lesson stage, there are opportunities for the demonstration of all four types of reflection in the rubric. In post-lesson feedback, all observers (other student-teachers, school mentor and faculty supervisor) reflect on the lesson after the student-teacher has done so. There is no need for a description of events or procedure as this is common knowledge to all. Instead, there is more emphasis on analysis and interpretation of actions, as well as acknowledgement of success, often noted as the mastery of certain teaching competences and awareness of learner achievement.

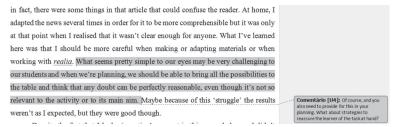
Supervision is key to the process of evidencing student-teacher reflection, and best achieved by adopting a "classic collaborative" approach (Wallace 1991: 110) where the mentor and supervisor act as facilitators rather than those with "extreme authority and expertise" (Ellison 2014: 159). However, they need to be adept at knowing *when* and *how* to probe when listening to the discourse of the student-teacher. Numerous scholars have offered frameworks or models for how this can be done (see for example Kolb 1984; Handal & Lauvas 1987; Korthagen & Vasalos 2005). Processes are described as linear, staged or cyclical, but what all include is the systematic identification, analysis and re-evaluation of one's actions in light of one's own or others' new perspectives on practice.

Skilled supervision will afford student-teachers opportunities to problematise, offer solutions and explore alternatives which may incorporate the perspectives of others during inquiry into their practice, thus developing their ability to analyse

and interpret and answer the all-important 'Why?' questions, as well as ask themselves 'What if?' Here the rubric's five categories (discourse types; rationale; level of inquiry; orientation (position of self); and views of teaching) may be used as separate foci on which to base questions and/or analyse the spoken reflection of the student-teacher. The closer to action that such reflection on practice takes place, the more likely it is to reveal the nuances of teacher-thinking. The later, the more tacit this becomes, and harder to surface and articulate.

## 5.3 - Dialogue journals

Journal writing has long been a means of capturing student-teachers' reflections on their practice. The act or discipline of writing requires a reflexive mind-set. As Burton (2009: 303) states, "Writing is a composing process, which means that it actually involves reflection. (...) writing has the ability to function as a uniquely effective reflective tool." Student-teachers may be guided to write on specific topics or left to decide their own foci. The main purpose of the journal is for the author to note how and in what way they are developing as a teacher. Such journals may be private or shared with others. If the latter, they may take the form of dialogue journals in which the teacher educator may write comments or questions on the entries, thus prompting further 'discussion' in subsequent writing or conversation. Such 'dialogue' may help to maintain the momentum of reflection along the practicum, provide encouragement as well as provoke further reflection. Crucially, it enables the teacher educator to engage the student-teacher in different types of reflection, and improve the 'quality' of such thoughts (see Figure 1. below). This is particularly important where a student-teacher repeatedly describes rather than analyses and interprets their practice or experiences difficulty in determining on what to focus their thoughts. Ultimately, the goal is for the student-teacher to enter into dialogue with themselves, questioning their own actions and hypothesising on their practice, relying less on the scaffolding provided by the teacher educator and more on their own ability to understanding their teaching.



**Figure 1.** Excerpt from a student-teacher's dialogue journal with comment from the teacher educator.

#### 5.5 - Critical incidents

Providing student-teachers with opportunities to talk about moments in their own teaching which have impacted on them in some way, either positively or negatively, with other student-teachers can be extremely beneficial to all. If this is done in open class, then it affords yet further opportunities for more similar or varied perspectives to be given. The fact that student-teachers are responsible for choosing their critical moment itself necessitates intense introspection, marrying the development of knowledge of teaching with autonomy and responsibility (Calderhead & Gates 1993). This is a disciplined act which demands multiple layers of knowledge, understanding and reflection, the importance of which is acknowledged by Loughran (2002: 38), "The ability to recognize, develop and articulate a knowledge about practice is crucial as it gives a real purpose for, and value in, effective reflective practice: it is a powerful way of informing practice as it makes the tacit explicit, meaningful, and useful."

Student-teachers can be asked to prepare their critical incident in advance and guided to describe, analyse and interpret it, as well as explain how it has contributed to their personal and professional development. This helps them to organise their thoughts as well as engage them in different types of reflection. The advantage of this mode of reflecting is that it enables the teacher educator and other student-teachers present to tap into previously uncovered beliefs and assumptions, and new understanding of teaching, there and then. It also allows other student-teachers to show their developing knowledge and understanding, and possibly identify and narrow the gaps between theory and practice. The comments and questions of other student-teachers enable them to assume a collegial role in identifying and supporting different types of reflection in each other. As mentioned by Moon (1999: 172-173), "Learning to be helpfully supportive to another person's reflective processes can be a learning process just as much as learning to reflect itself." Clearly this is best achieved in an environment of trust and support, where those present are empowered to offer constructive criticism, as well as reassure and empathise.

### 6 - Conclusion

This article has conceptualised reflection and identified four types of reflection in key studies in the literature, namely: Type 0. Descriptive/behavioural; Type 1. Descriptive/analytical; Type 2. Dialogic/interpretative; and Type 3. Critical/transformatory. It has described the construction of a rubric which incorporates these types of reflection and descriptors of five foci related to teacher education: discourse type; rationale; level of inquiry; orientation (position of self); and views of teaching. An explanation of how the rubric was used within a study (Ellison 2014) is given, as well as how it has been used in Masters degrees which include the teaching of English as a foreign language at the Faculty of Arts and Humanities of the University of Porto.

In the profession of teaching, reflection "involves a complex intersection of

foci, problems, ideas and solutions which spiral rather than follow neat cycles" (Ellison 2014: 369). The rubric provides teacher educators with a flexible tool fit for the purpose of systematically identifying and supporting the reflection of student-teachers as they experience such 'movements' during their practicum. Its use may afford opportunities to capture this reflection, thus contributing to the much-needed evidence base in this field. Used by student-teachers themselves, it may help guide their thinking and development as they strive to become more autonomous reflective practitioners. It is fitting, therefore, that the final words of this article should be left to one such student-teacher.

From my point of view, the reflection process is a continuum, which we should always try to reinforce and improve as we develop as teachers and thinkers. Since my reflective journey started last year, when I was able to express my fears, motivations and emotions about my future role as a teacher, I find it crucial to start from there, analyse and make a comparison to what I'm feeling right now that I finally am one.

#### REFERENCES

- Bassot, B. (2016). The Reflective Journal. London: Palgrave.
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, 36, 81-109.
- Boud, D., Keogh, R. and Walker, D. (eds.) (1985). *Reflection: Turning Experience into Learning*. London: Kogan Page.
- Burton, J. (2009). Reflective Practice. *In Burns, A. and Richards, J.C.* (eds.) *The Cambridge Guide to Second Language Teacher Education*. Cambridge: Cambridge University Press, 289-307.
- Calderhead, J. and Gates, P. (eds.) (1993). *Conceptualizing Reflection in Teacher Development*. London: Falmer Press.
- Chamoso, J.M., Cáceres, M.J. and Azcárate, P. (2012). Reflection on the teaching-learning process in the initial training of teachers: Characterization of the issues on which pre-service mathematics teachers reflect. *Teaching and Teacher Education*, 28, 154-164.
- Dewey, J. (1933). How We Think. New York: Dover Publications, Inc.
- Dinkelman, T. (2000). An inquiry into the development of critical reflection in secondary student teachers. *Teaching and Teacher Education*, 16, 195-222.
- Ellison, M. (2014). CLIL as a Catalyst for Developing Reflective Practice in Foreign Language Teacher Education. (Unpublished doctoral thesis). Porto: Faculty of Arts and Humanities, University of Porto.
- Gimenez, T. (1999). Reflective teaching and teacher education contributions from teacher training. *Linguagem & Ensino*, 2 (2), 129-143.
- Griffiths, V. (2000). The reflective dimension in teacher education. *International Journal of Educational Research*, 33, 539-555.
- Handal, G. and Lauvås, P. (1987). Promoting Reflective Teaching: Supervision in

- *Practice.* Milton Keynes: The Society for Research into Higher Education & Open University Press.
- Hatton, N. and Smith, D. (1995). Reflection in Teacher Education: Towards definition and implementation. *Teaching and Teacher Education*, 11 (1), 33-49.
- Jay, J.K. and Johnson, K.L. (2002). Capturing complexity: a typology of reflective practice for teacher education. *Teaching and Teacher Education*, 18, 73-85.
- Kember, D., Jones, A., Loke, A., McKay, J., Sinclair, K., Harrison, T.S.E., Webb, C., Wong, F., Wong, M. and Yeung, E. (1999). Determining the level of reflective thinking from students' written journals using a coding scheme based on the work of Mezirow. *International Journal of Lifelong Education*, 18 (1), 18-30.
- Kolb, D.A. (1984). Experiential Learning: Experience as the Source of Learning and Development. New Jersey: Prentice Hall.
- Korthagen, F. and Vasalos, A. (2005). Levels in reflection: core reflection as a means to enhance professional growth. *Teachers and Teaching: theory and practice*, 11 (1), 47-71.
- LaBoskey, V.K. (1993). A Conceptual Framework for Reflection in Preservice Teacher Education. *In Calderhead, J. and Gates, P. (eds.) (1993). Conceptualizing Reflection in Teacher Development.* London: Falmer Press, 23-38.
- Lane, R., McMaster, H., Adnum, J. and Cavanagh, M. (20214). Quality reflective practice in teacher education: a journey towards shared understanding. *Reflective Practice*, 15(4), 481-494.
- Lee, H.J. (2005). Understanding and assessing preservice teachers' reflective thinking. *Teachers and Teacher Education*, 21, 699-715.
- Loughran, J.J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 53 (1), 33-43.
- Maclellan, E. (1999). Reflective Commentaries: What do they say about learning? *Educational Action Research*, 7 (3), 433-449.
- Mann, S. and Walsh, S. (2017) Reflective Practice in English Language Teaching: Research-Based Principles and Practices. New York: Routledge.
- Moon, J. (1999). *Reflection in Learning and Professional Development*. London: Kogan Page.
- Noffke, S.E. and Brennan, M. (1988). *The Dimensions of Reflection: A Conceptual and Contextual Analysis*. Annual Meeting of the American Educational Research Association. New Orleans, 5-9 April 1988.
- Pachler, N. and Field. K. (2001). From mentor to co-tutor: reconceptualising secondary modern foreign languages initial teacher education. *Language Learning Journal*, 23, 15-25.
- Ross, D.D. (1995). First Steps in Developing a Reflective Approach. Journal of *Teacher Education*, 40 (2), 22-30.
- Schön, D.A. (1983). The Reflective Practitioner: How Professionals Think in Action. USA: Basic Books.
- Sparkes-Langer, G.M., Simmons, J.M., Pasch, M., Colton, A. and Starko, A. (1990). Reflective Pedagogical Thinking: How can we promote it and measure it? *Journal of Teacher Education*, 41 (4), 23-32.

- Thorsen, C.A. and DeVore, S. (2013). Analyzing reflection on/for action: A new approach. *Reflective Practice*, 14 (1), 88-103.
- Valli, L. (ed.) (1992). *Reflective Teacher Education: cases and critiques*. New York: State University of New York Press.
- Van Manen, M. (1977). Linking Ways of Knowing with Ways of Being Practical. *Curriculum Inquiry*, 6 (3), 205-228.
- Vélez-Rendón, G. (2002). Second Language Teacher Education: A Review of the Literature. Foreign Language Annals, 35 (4), 457-467.
- Wallace, M.J. (1991). *Training Foreign Language Teachers: A reflective approach.* Cambridge: Cambridge University Press.
- Ward, J.R. and McCotter, S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and Teacher Education*, 20, 243-257.
- Young, K., James, K. and Noy, S. 2016). Exploration if a reflective practice rubric. *Asia-Pacific Journal of Cooperative Education*, 17 (2), 135-147.
- Zeichner, K.M. and Gore, J.M. (1991). Action Research and Reflective Teaching in Preservice Teacher Education: A Case Study from the United States. *Teaching and Teacher Education*, **7** (2), 119-136.
- Zeichner, K.M. and Liston, D.P. (1996). *Reflective Teaching: An Introduction*. New Jersey: Lawrence Erlbaum Associates.

**Appendix 1**. Table of studies used to identify types of reflection

Study/author/year	Types/criteria/dimensions	Organisation of types
Van Manen 1977	Technical rationality Practical application-contextual Critical reflection-dialectical	Hierarchy/continuum
Kitchener 1977 & King 1977	Seven stages in the development of reflective judgement	Hierarchy
Noffke & Brennan 1988	Sensory dimension Ideals/idealogical dimension Historical – comparative dimension Determinants dimension	Dimensions/planes/ fields Multi-dimensional
Sparks-Langer et al. 1990	No descriptive language Simple, layperson description Events labelled with appropriate terms Explanation with tradition or personal preference given as rationale Explanation with principle or theory given as rationale Explanation with principle/theory and consideration of other factors Explanation with consideration of ethical, moral, political issues	Framework for reflective pedagogical thinking: seven types of language and thinking
Mezirow 1991	Non-reflective action: Habitual action Thoughtful action Introspection Reflective action: content, process, premise	
Zeichner & Gore 1991	Technical rationality Practical application-contextual Critical reflection-dialectical	Hierarchy (based on Van Manen)
Valli 1992	Behavioural Technical decision-making Reflection-in-action Deliberative (social efficiency, cognitive) Personalistic (developmental, narrative) Critical (social reconstructionist)	Levels, quality, content of reflection Hierarchy

LaBoskey 1993	Common sense thinkers Alert novices Pedagogical thinker	Contiuum
Hatton & Smith 1995	Technical Descriptive Dialogic Critical Contextualization of multiple viewpoints	Hierarchy: developmental sequence Rubric for analysis of written reflections: Descriptive information Descriptive reflection Dialogic reflection Critical reflection Reflection in action
Ross 1995	Low Moderate High	Hierarchy Criteria for assessing level of reflection Level of reflection by topic
Maclellan 1999	Technical Descriptive Dialogic Critical reflection	Hierarchy of types of reflection Content analysis on: Conceptualisations of the practice Implications of the practice Veracity of the practice
Kember et al. 1999	Habitual action Introspection/thoughtful action Content reflection/process reflection/content and process reflection/premise reflection	
Dinkelman 2000	Critical reflection – broadly defined Critically reflective teaching – broadly defined Critical reflection – strictly defined Critically reflective teaching – strictly defined Social studies rationales Democratic education	Key coding categories for analysis of teachers' reflections
Pachler & Field 2001	Technical Practical Critical or emancipatory Professional	Developmental sequence

Jay & Johnson 2002	Descriptive Comparative Critical	Typology of reflection: dimensions and guiding questions for student teachers Teaching reflection
Ward & McCotter 2004	Routine Technical Dialogic Transformative  Precipitant type and level of reflection What and how	Three frames: cyclic nature (framing and reframing problems), issues over period of time or across a variety of situations; breadth of perspective (other viewpoints considered, moral questions); inquisitive stance (centred on questions, uncertainty expressed or not).  Situated nature of reflection.  Three dimensions: focus, inquiry, change
Korthagen & Vasalos 2005	Environment Behavior Competencies Beliefs Identity Mission	Core levels on which reflection takes place
Lee 2005	Recall level (R1) Rationalization level (R2) Reflectivity level (R3)	Depth of reflective thinking criteria
Chamoso et al. 2012	Generality Description Argumentation Contribution	Four levels of depth of reflection on: Teaching of content Learning of content Methodology
Thorsen & DeVore 2013		Developmental Continuum of Reflection on-/for- Action Rubric