

Interactional reflective practice: The relationship between reflective practice and verbal interaction in initial teacher training programs

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Abstract

This article presents a conceptualization of interactional reflective practice that sheds light, at the theoretical level, on the relationship between reflective practice and verbal interaction in a collective perspective of reflection. These aspects are commonly associated within initial teacher training programs. Yet their association presents a paradox; reflective practice is generally conceptualized as an individual process that does not justify *a priori* the use of external interventions such as interaction. Drawing on the Vygotskian semiotic mediation theory, it is possible to think that verbal interaction is both a *driving force* and an *observable* of reflective practice. Interactional reflective practice would benefit from further exploratory empirical research in order to progressively identify its main discursive representations, thereby opening promising entry points for reflective practice as it develops among teachers in initial teacher training programs.

Introduction

Reflective practice is considered as an important competency in initial teacher training programs in several countries. Yet, it is a concept that has diverse conceptualizations at the theoretical level, and, at the present time, does not have a standardized definition. One of the limitations relates to the difficulty of knowing how to observe and assess reflective practice since it is generally conceptualized as a phenomenon internal to the individual. Therefore, verbal interaction seems to offer an interesting entry point for reflective practice. These two aspects are commonly associated with initial teacher training, especially through group discussions or Internet-mediated communications (newsgroup, mailing list, etc.). This suggests that reflective practice may have a collective dimension, complementary to the individual dimension that the literature generally assigns to it. However, the paradoxical connection between an intrapersonal phenomenon, such as reflective practice, with an interpersonal phenomenon, such as verbal interaction, still needs to be explained. In this respect, interactional reflective practice appears to offer an interesting interpretation of the relationship between reflective practice and interaction, making reflective practice a collective act. After having discussed reflective practice in initial teacher training programs, this paper presents a conceptualization of interactional reflective practice, which aims to provide a theoretical insight to empirical studies on reflective practice and verbal interaction.

Reflective Practice: A Central Concept Having
Diverse Applications in Initial Teacher Training Programs

Over the past thirty years, reflective practice has been gaining interest in initial teacher training programs (Richardson, 1990). However, it is a concept that has multiple theoretical conceptualizations, making it difficult to apply in initial teacher training programs.

Inclusion of Reflective Practice in Initial Teacher Training Programs

The inclusion of reflective practice in initial teacher training programs is a worldwide movement¹ that originates from a desire to increase the quality of education (OECD, 1989). In Canada, each province develops its own initial teacher training program: in Ontario, reflective analysis forms part of the principles supporting the initial teacher training framework (Ontario College of Teachers, 2006); in British-Columbia, the seventh teaching standard states that educators must engage in a process of professional development and reflective practice (British Columbia College of Teachers, 2008); the initial teacher training program in Alberta is less explicit, but the teacher quality standards state that “teachers engage in ongoing professional development to

enhance their: understanding of and ability to analyze the context of teaching; ability to make reasoned judgments and decisions” (Government of Alberta, 1997, p. 7); and finally, the Ministry of Education (2001) in Quebec has formalized the role of reflective practice in its initial teacher training program by including it as a component of the 11th competency². This component consists of “reflect[ing] on [one’s] practice (reflective analysis) and mak[ing] the appropriate adjustments” (p. 108).

Reflective Practice: A Developing Concept

Reflective practice, as it is set out by Schön (1983), a prominent figure of the concept, was heavily applied in education sciences in the mid-eighties (Richardson, 1990). Schön (1983) was particularly interested in reflection as a relationship between theory and action among professionals (Valli, 1992), which gave rise to a now well-known distinction in the field of reflective practice between reflection-in-action and reflection-on-action (Schön, 1983). Although Schön’s (1983) conceptualization of reflective practice had an immediate effect in education, it was not a new concept. Notably, it had been worked on by another founding father: Dewey (1933). Dewey (1933) approached reflection in terms of “reflective thinking” (Dewey, 1933), which he defined as “the 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” (p. 6). Although the theoretical foundations of reflective practice are commonly attributed to Dewey (1933) and Schön (1983), it is possible that the many interpretations that presently exist are both the cause and consequence of a lack of clarity related to reflexive practice (Beauchamp, 2006; Fendler, 2003). Before discussing the limitations of reflective practice in initial teacher training programs, an overview of its main models are presented, as classified by the author into four types: sequential models; evaluative models; thematic models; and finally, models from theoretical frameworks other than reflective practice.

Sequential models: Sequential models address reflective practice as a series – a sequence – of stages that constitute the reflective process. These stages are largely interlinked, except for the case of Sparks-Langer and Colton’s (1993) model, which proposes a rigorous and formal division of the reflective process. Moreover, this type of models is generally interpreted as cyclical. Dewey’s (1933) and Schön’s (1983) models are representative of these types of models.

Evaluative models: Some reflective practice models do not relate to stages but to levels of reflective practice. In other words, the emphasis is on the quality of reflection rather than on the reflective process, which implies a gradation of different reflection levels. Contrary to sequential models, they usually include an ethical dimension at the highest levels of reflection. Reflective practice is, therefore, inseparable from social, political and moral considerations (Zeichner & Liston, 1996). Historically, the first model of this type seems to be the one from Van Manen (1997). Along this line, Valli’s (1997) model also identifies five distinguishable levels of reflection, according to her literature review.

Thematic models: Thematic models focus on one aspect of reflective practice from which they distinguish across different contents. Zeichner and Liston (1996) propose a typology of reflective teaching traditions. Each tradition emphasizes a particular aspect of teacher reflection. Similarly, Tom’s (1985) model distinguishes across different “fields of reflection” (*arenas of problematic*), such as the teaching-learning process, discipline-related content knowledge, political and ethical principles underlying teaching, and finally, the society, including educational institutions.

Models coming from theoretical frameworks other than reflective practice: While coming from different theoretical frameworks, other models have inspired conceptualizations of reflective practice. Notably, this is the case with Habermas (1971), whose influences are particularly felt in evaluative models (Moon, 1999). Kolb’s (1984) experiential learning cycle, inspired by Dewey’s (1933) work, is another model often included in the field of reflective practice, especially by Moon (1999).

In spite of the theoretical diversity that reflective practice faces, some authors, such as Beauchamp (2006), have sought to clarify the multiple definitions of reflective practice in the literature. Such theoretical studies are rare and represent valuable support for identifying convergent and divergent conceptions of this concept. Beauchamp (2006) identifies six rationales that underlie reflective practice in education: “think differently or more clearly”; “justify one’s stance”; “think about actions or decisions”; “change thinking or knowledge”; “take or improve action”; “improve student learning”; and “alter self or society”. This typology turns out to be interesting for characterizing the different writings on reflective practice.

A Difficult Application in Initial Teacher Training Programs

Subsequently, the concept of reflective practice has multiple theoretical conceptualizations. At the practical level, there are also multiple applications of reflective practice in initial teacher training programs (Jay & Johnston, 2002). Several studies sought to present, analyze or compare initial teacher training programs (Calderhead, 1989; Desjardins, 2000; Jay & Johnson, 2002; Korthagen, 2001; Tom, 1985; Valli, 1992, 1993; Zeichner, 1987). The objects of reflection (Desjardins, 2000), the reflective process (Grimmett, MacKinnon, Erickson & Riecken, 1990; Zeichner, 1987) or even the place of teaching practicums (Calderhead, 1989) are some of the points that seem to vary from one program to another. Since reflective practice is disparately applied from one program to another, it is likely that there is not one but several competing reflective competencies within initial teacher training programs. In other words, preservice teachers are trained in reflective competency... but which one? Furthermore, regardless of the application of reflective practice in initial teacher training programs, its implementation is hampered as it is difficult to observe and assess this competency. Indeed, the observables of reflective practice are not yet known, that is, measurable evidence demonstrating development and mastery of the competency. Korthagen (2001) expresses this difficulty as follows:

Another fundamental problem in researching reflection is that much of what we are attempting to measure takes place in the teacher's head. Although techniques such as stimulated recall ..., the analysis of supervisory discourse, or logbooks may be helpful, there is always a question concerning whether these approaches present us with valid data about what really happened inside the person. (p. 91)

There is no guarantee that the observables used to assess reflective practice in initial teacher training programs are reliable indicators. However, following Ohlsson (1996), we are inclined to think that discourse, particularly in comparison to action, offers the most "reliable" insight of reflective practice. Indeed, as this author argues, a tight relationship exists between knowledge and abstract concepts and discourse. The relationship between reflective practice and discourse seems, therefore, to be a promising avenue to better understanding reflective practice in initial teacher training programs.

Interactional Reflective Practice

If discourse seems to offer an interesting entry point for reflective practice, then it becomes necessary to question their relationship.

Reflective Practice and Verbal Interaction: A Theoretical Paradox and Possible Conceptualizations

In initial teacher training programs, reflective practice is often linked to verbal interaction activities. Indeed, Crow and Smith (2005) note six frequently-used ways to develop reflective practice, three of which (reflective conversation with a mentor, reflective conversation with a "critical colleague" and joint reflective conversation on shared teaching experience) are linked to interaction. This suggests that verbal interaction – considered here as a type of discourse – is seen as one of the driving forces of reflective practice, a "place" of reflection (*locus of reflection*) as Ottesen (2007) puts it. There are several illustrations of this relationship in reflective practice literature (Richert, 1992; Goodfellow, 2000; Smyth & Cherry, 2005). The connection between reflective practice and verbal interaction suggests that reflection is not limited to the individual level, but can also be a collective act, where verbal interaction becomes the "reflective medium" through which individual reflections are shared and enriched.

However, the role of interaction in the development of reflective practice is not formally explained by the latter. Indeed, reflective practice essentially refers to an individual process (Ottesen, 2007; Korthagen, 2001; Zeichner & Liston, 1996). Therefore, interaction appears to be a potential location for reflective practice, but this relationship is not explicitly built in reflective practice theory since reflective practice does not formally include a collective dimension. Yet, verbal interaction, as an interpersonal phenomenon, necessarily implies the presence of the "other". Therefore, any empirical study of the relationship between reflective practice and verbal interaction must first develop a theoretical framework that will shed light on this area of research.

If reflective practice is not capable of formalizing its relationship with interaction, note that some authors have outlined possible conceptualizations. Two main trends seem to stand out. The first one is related to situated cognition, as it is defined by Lave and Wenger (1991). Following from situated cognition, the concept of "community" – and particularly the community of practice (Wenger, 1999) – is used by several authors to link

reflective practice and interaction (Allaire, 2006; Chanier & Cartier, 2006; Daele & Charlier, 2006; Zhao & Rop, 2001). However, with a view to formalizing the relationship between reflective practice and verbal interaction, there is a limitation with the theory of community of practice in relation to the nature of interaction. Indeed, the relationship that we seek to establish here is solely concerned with reflective practice through verbal language. Yet, community of practice seems more suggestive of social interaction, an interaction that includes, but is not limited to, verbal interaction (Cobb & Bower, 1999). In other words, community of practice defines interaction at a more global level than its verbal component. That does not mean that verbal interaction is not taken into account, but the latter seems to be seen as a tool to support social participation rather than as a location of reflection *per se*. Its role, therefore, is instrumental. Subsequently, it appears that community of practice does not allow for an accurate theorization of the relationship between reflective practice and verbal interaction.

Semiotic Mediation: The Point of Intersection of Reflective Practice and Verbal Interaction

In this respect, the second approach seems more relevant since it precisely targets verbal interaction as a location of reflection. This approach was inspired by socio-cognition and seems to originate in Vygotsky's (1962) semiotic mediation. Moreover, several authors of reflective practice (Pugach & Johnson, 1990; Korthagen, 2001; Guiller, Durndell & Ross, 2008; Levin, He & Robbins, 2006; Reingold, Rimor & Kalay, 2008) directly refer to this author to explain the relationship between reflective practice and verbal interaction.

Vygotsky (1962) conceptualizes the development of cognition as a progressive and transformative internalization of social interaction, where verbal interaction is the main medium. According to this author, the mechanisms involved in this internalization process are based on two levels: the interpsychological level and the intrapsychological level. More precisely, higher mental functions are first developed at the interpsychological level and then at the intrapsychological level. Yet, it is not a mere transfer but a reconstruction that modifies the process by changing its structure (Marti, 1996). The transition from the interpsychological level to the intrapsychological level led Vygotsky (1962) to develop an interesting concept for learning: the zone of proximal development, which, in the words of Matthey (1996), is defined as "the distance between what a child can do alone, autonomously, and what he succeeds in doing in collaboration with an adult" (p. 91). The zone of proximal development can, therefore, be considered as the point of articulation between the interpsychological and intrapsychological axes.

By transposing the theory of semiotic mediation on reflective practice, we postulate that reflective practice initially occurs with social interaction between an individual and their human and social environment before it becomes appropriated by the individual at the cognitive level. Verbal interaction, as the main medium of social interaction, is explicitly regarded as a medium of reflective practice development, which makes it possible to shed light on their relationship. Figure 1 shows the model that we propose to explain the relationship between verbal interaction and reflective practice. The zone of proximal development, as the distance between higher mental functions developed in collaboration and in autonomy, lies between the inter- and intra-psychological levels. It represents the location at which reflective practice develops, which was first stimulated at the interpsychological level before being internalized, thus giving rise to autonomous operation. Since it focuses on situations of interaction, this model urges us to approach reflective practice in its interactional dimension, thereby implying that reflective practice can be a collective act.

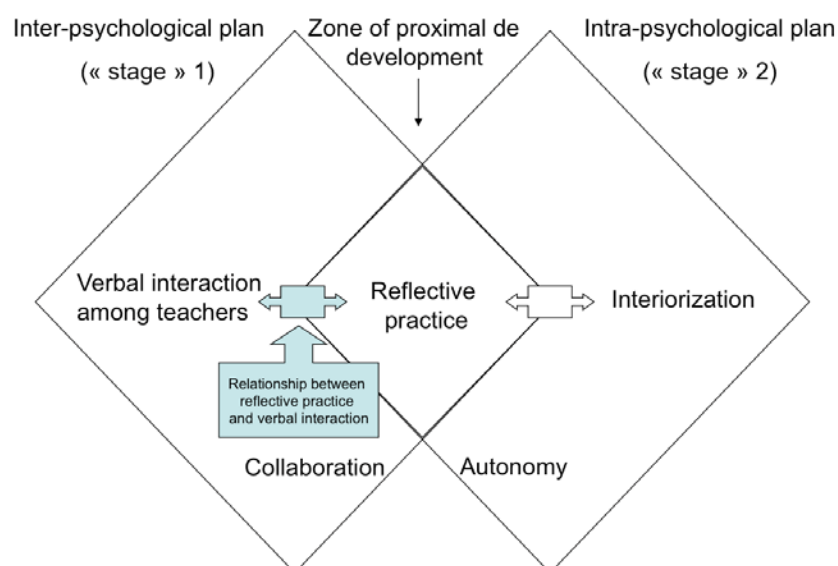


Figure 1: Conceptualization of Interactional Reflective Practice

Note that this model was developed to correspond with situations of interaction among professionals. Transposed to the educational context, it translates to teachers interacting among themselves about their professional practice, which necessarily implies they are not teaching. In other words, this model covers reflection-on-action but not reflection-in-action, according to the distinction made by Schön (1983).

However, the binding of the Vygotskian theory with reflective practice faces some limitations that are worth mentioning. In effect, Vygotsky (1962) developed his theory with children in mind, that is, individuals whose higher mental functions are under development. Semiotic mediation then enables the child to stimulate their higher mental functions and to develop their capacity to conceptualize. What happens when individuals have reached maturity and whose higher mental functions are already developed? It is possible to think that verbal interaction is not used to develop higher mental functions in adults (as they already are), but to operate them. In other words, we assume – with caution – that semiotic mediation between adults engages their “developed” higher mental functions, which enables them to operate their full potential to conceptualize. We are, therefore, inclined to think that semiotic mediation also applies to adults (Wells, 1999; Wertsch, 1985). It is not surprising then to learn that authors such as Vanhulle (2005) include Vygotskian theory as one of the pillars of their initial teacher training programs.

Interactional Reflective Practice: A Research Avenue?

In addition to formalizing a practice commonly used in initial teacher training programs, Vygotskian theory provides an interesting contribution in that it considers verbal interaction as an entry point for reflective practice, approaching the latter from a collective perspective. It is, therefore, through analyzing verbal interactions of teachers in initial training programs that we look for reflective practice³ in discursive acts. Some empirical research, although different conceptual frameworks were adopted, have already sought to analyze verbal interaction in terms of reflective practice (Hawkes & Romiszowski, 2001; Joiner & Jones, 2003; Levin, He & Robbins, 2006). For example, Makinster, Barab, Harwood and Andersen (2006) sought to compare several types of online communication among 12 teachers in initial training programs, including an individual e-journal and two newsgroups, where access was restricted for one group of teachers, while the other group had open access to several educational stakeholders (teachers in training, teachers, teacher trainers). Drawing on Bonk, Hansen, Grabner-Hagen, Lazar and Mirabelli’s (1998) typology, these authors found that the two newsgroups developed reflective practice not only among *interactants* displaying their professional practice, but also among responding interactants, which is contrary to the mixed results of the e-journal. In this study, collective reflective practice seems to support reflection among teachers in initial training to a greater extent than individual reflection.

Finally, it is important to mention two limitations often confronted by studies dealing with reflective practice and verbal interaction. Firstly, there is some confusion about the nature of observable reflexive indicators. Some researchers, like Mansvelter-Longayroux, Beijaard and Verloop (2007), supported their analysis with

observables such as “recollection”, “evaluation”, “analysis”, “critical processing”, “diagnosis” and “reflection”. These observables are reminiscent of processes found in the field of cognition. However, these are not applied to the reflection of teachers in initial training; instead they are applied to the discourse that follows. In other words, cognitive observables are applied to discursive material, which leads us to question the reliability of such indicators. Since reflective practice is observed through discourse, it seems preferable to rely on similar indicators; that is, linguistic observables, such as the example by Hawkes and Romiszowski (2001) who searched for discursive extracts linked to description or explanation.

Furthermore, the majority of tools used for the analysis of interactional reflective practice are static, which means that they reflect isolated “reflective facts” (i.e. different codes assigned to reflection are not connected to one another). This seems harmful given that interaction – and the reflective process that it is meant to support – is profoundly dynamic. In other words, it is possible that statistical analysis tools only capture a small part of interactional reflective practice. However, there are dynamic analysis tools, which enable the identification of both reflective statements and the influence they mutually exert. For example, Felton and Khun’s (2001) model is composed of a list of codes that are divided in three categories: transactive questions; transactive statements; nontransactive statements. Codes related to transactive questions and to transactive statements allow the “question-answer” pattern, which is characteristic of face-to-face verbal interactions and through which the reflective process is built, to be reproduced.

Conclusion and Recommendations

The purpose of this article was to present a model of interactional reflective practice in order to formalize the relationship between reflective practice and verbal interaction. From the origins of this theoretical construct we find that reflective practice is often linked with verbal interaction activities in initial teacher training programs, implying that reflective practice can be a collective act, although this association is not explained at the theoretical level. Subsequently, the conceptualization of interactional reflective practice aims to provide theoretical insights on the analysis of reflective practice as a collective phenomenon occurring from verbal interaction. It results from the binding of semiotic mediation (Vygotsky, 1962) with the reflective practice theory. It postulates that reflection among teachers in initial training programs develops through their verbal interactions about their practice, before they internalize it, in order to be able to operate autonomously in their teaching. In so doing, it is possible that verbal interaction is both a driving force and an indicator of reflective practice of teachers in training. In this respect, analyzing interactions related to reflective practice seems to offer an interesting entry point from which to approach the development of reflective practice among teachers in training.

Studies whose purposes are to understand the relationship between reflective practice and verbal interaction presently face limitations, especially because the instruments used are mostly static in nature whereas interaction (and the construction of reflective practice that it underlies) is a highly dynamic phenomenon. However, some models, such as the one by Felton and Khun (2001), seem to be able to reproduce the process by which reflective practice in verbal interaction is constructed, as well as “reflective facts” present in interaction. The codes that are proposed shed light on the reflective process underlying the interactional dynamic (e.g., question-answer, negotiation, argumentation, etc.).

More exploratory research on interactional reflective practice is needed to enable the progressive identification of its main discursive manifestations. Whether peer interactions, interactions between student teachers and their trainers, interactions between student teachers and experienced teachers (mentorship) or even online interactions, interactional reflective practice applies to a variety of research contexts. From this perspective, it would be interesting to compare different types of interactions (face-to-face interaction, synchronous online interaction, asynchronous online interaction) and different types of interactants (peer, experienced teacher, teacher trainer) in terms of interactional reflective practice in order to determine which interactional contexts seem the most appropriate to support reflective practice development among initial teacher training students.

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Notes

¹ For French-speaking Belgium, see *Administration générale de l'enseignement et de la recherche scientifique*, 2001; for France, see *Haut conseil de l'éducation*, 2006 ; for the United-States, see National Council for Accreditation of Teacher Education, 2008 ; for Europe, see *Institut national de recherche pédagogique*, 2005.

² The 11th competency is untitled "To engage in professional development individually and with others". It includes the following components: "To take stock of his or her competencies and takes steps to develop them using available resources"; "To discuss the relevance of his or her pedagogical choices with his or her colleagues"; "To spearhead projects to solve teaching problems"; "To involve peers in research related to the mastery of the competencies targeted in the programs of study and to the educational objectives of the school"; and "To reflect on his or her practice (reflective analysis) and makes the appropriate adjustments". This last component is the one we are interested in in this article.

³ Analyzing verbal interactions as indicators of learning construction is already a research object in the fields of foreign language acquisition (see Matthey, 1996) and scientific concept acquisition (see Baker, 1994; 1996; Baker & Lund, 1997; De Vries, Lund & Baker, 2002).