Paradigms Lost: The Role of Reason in Reflection

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In this article I present the argument that the simple inclusion of the reflective component in student teaching is insufficient. Both supervising teacher and student need to examine what they understand by reflection and what they mean by teaching. It is possible that, in their mutual assumption that these terms share a common definition, communication between the student and the supervising teacher is being undermined. I suggest that the use of an unexamined reflection as a tool for teacher education has the potential for causing confusion and frustration.

Dans cet article, je montre que le simple fait d'exiger de la réflexion est insuffisant dans l'enseignement. Le professeur et l'étudiant ont besoin d'examiner ce qu'ils entendent par la'réflexion et par l'enseignement. Il est possible que l'on assume que ces deux termes aient une définition commune. A ce moment, la communication entre professeur et étudiant est vouée à l'échec. Je suggère donc que l'utilisation d'une réflexion d'une manière arbitraire, comme outil dans la formation des maîtres, peut devenir éventuellement un élément de frustration et de confusion.

The Reflective Prism

Reflection, as the intentional self-examination of thinking, is a concept that is attracting attention in the field of research into the education of teachers and other professionals (Cruikshank, 1987; Dewey, 1904/1962, 1933; Erickson & MacKinnon, 1990; Schön, 1983, 1987, 1990). However, the purpose of reflection remains inadequately defined in either conceptual or operational terms (Griffiths & Tann, 1992; Richardson-Koehler, 1988; Tom, 1984). Descriptions of the reflective component of reflective teaching tend to be somewhat vague, and, depending on the context, the use of the term varies. While developing an awareness for the process behind the act of teaching, the term reflection itself does not guarantee an understanding of its limitations — it does not ensure the examination of personal knowledge

or belief systems (Tom, 1984). My understanding of reflection as used by Schön (1983, 1987, 1990), leads me to believe that this activity could occur equally within a strictly technical or empirical perspective. For example, a teacher can reflect upon his or her teaching of a poem in terms of progression towards a given objective (were the appropriate eliciting questions used to guide students to an understanding of Milton's lines, "We know no time when we were not as now"?) without deliberating upon the wider issues of content or context. Here, it can be argued that reflection of a sort has occurred. However, it does not take into account any kind of critical examination by the teacher of the personal and normative filter through which all educational and social influences must pass. When reflection is presented to student teachers as being desirable and necessary, what is the understanding behind the term? To include reflection in the preparation of teachers without further definition of what is to constitute the reflective component can result in methodological ambiguity (Henderson, 1989).

I would caution, then, that reflection, as it is currently used in teacher education, is not a focusing lens but a diffracting prism comprising three facets — conclusions, content, and context — each one of which, when taken singularly and without consideration of the grounds for its use, can dramatically influence the nature of communication.

A study which I recently carried out showed that this diffraction can have a particular impact upon the communication occurring between a student teacher and a supervising teacher.

My orientation in this paper is to argue that unless all three facets of the reflective process are considered (that is, that reflection not only includes consideration of the *conclusions* reached, but also of the *content* and the personal *context* of the situation or problem) the potential for its misuse will render it questionable as an educational tool in the preparation of teachers.

In order to make this argument, I present:

1. The historical background to the concept of reflection drawn from the literature on teacher thinking and the origins of its current fragmentation.

2. An example of the difficulties that can arise due to the different images projected by a fragmented reflective process, illustrated by the missed communication between Peter, a supervising teacher, and Janis, his interning student teacher.

3. The considerations that must be included in the development of a "focused" reflective practice.

The Fragmentation of Reflection

The origin of fragmentation. Dewey (1933) originally defined reflective thought as

> the active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends ... it includes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality. (p. 9)

According to Dewey's pragmatic interpretation of the scientific method, the veracity of a conclusion or the adequacy of an action was to be determined by the degree of fit that existed between the conclusion and an external norm (truth) or by how closely the results of the action approximated the desired effects (Church, 1977). The purpose of Dewey's reflection was to compare acts and conclusions to empirical evidence through the logical reduction of general information to facts.

Removed from the straightforward logic of Dewey's positivism, the world is no longer independent of the perceptions that framed it. The postmodernist era replaced the assumption that facts are based upon a single and transcendent truth with the concept of *facts* as being a product of the theoretical construct which defined them (Rorty, 1980). What is perceived is the world (Merleau-Ponty, 1962). Reflection within such a

nonpositivistic paradigm takes into account the existence of multiple realities. The absence of external criteria by which to evaluate either the adequacy or correctness of thought and action precludes the concept of an a priori behavioral norm. Dewey's philosophy, shaped by the influences of the progressive era in which he lived, was grounded in the certainty of fact. However, his emphasis on the importance of the "warrantable" statement can also be applied within a philosophy that accepts the existence of multiple realities (Dewey, 1933). In Dewey's words,

> Reflection is not identical with the mere fact that one thing indicates, means, another thing. It commences when we begin to inquire into the reliability, the worth of any particular indication; when we try to treat its value and see what guarantee there is that the existing data really point to the area that is suggested in such a way as to justify acceptance of the latter. (p. 11)

By taking as a *test of value* the integrity of an individual's evaluative system, rather than the congruency of his or her thoughts and actions with an external absolute, Dewey's reflective thought maintains its validity as a process. The modification of validating an individual's beliefs within that individual's way of seeing does not alter the concept of reflection as a personal retrospection of the processes and factors which culminate in action or belief.

However, what such a modification does do is to confine the relevance of the resulting conclusions to the parameters of the particular world-view of that individual. By incorporating the perspective of the individual into the concept of reflection, another important facet of the reflective process is brought forward. That which is reflected upon becomes as important as the manner in which reflection occurs. Pollock (1986) states that "reflection is based on comparison to norms." To compare requires first the formulation of the anomaly or predicament from an analysis of the situation. Schön (1983) refers to this process as "framing." He suggests that the way in which the problem is approached is part of the solution process. Margolis (1987), taking this notion of framing one step further, implies that what constitutes a problem in the first place is also a matter of personal interpretation. He states that often what appears to be an

anomalous response to a situation is, in fact, a rational reaction to a problem "that means something in the life experience of the person giving the response" (p. 6). In other words, to separate the realm of observable action from the reasoning that motivated it is to reduce behavior to a series of technical problems, where the function to be performed specifies the problem itself. Teaching, under these conditions, is reduced to matching teaching technique to curricular objective.

The three facets of reflection. Margolis's statement suggests that normative comparison not only operates in the formulation of the problem (Schön) and the solution of the problem (Dewey) but also in determining what is problematic and demanding of reflection in itself.

While it is unreasonable to expect that the way in which student teachers deliberate upon their teaching can neatly be confined to one of the three elements, emphasis on the significance of any particular facet of reflection not only reduces the likelihood of a personal construction of meaning, but also increases the ease with which reflection can become shaped to suit and support a particular educational approach. That is, when the reflective component of teacher education is used to emphasize the consideration of desirable conclusions, then student teachers are encouraged exclusively to think in terms of the technical aspects of the educational process; the purpose of reflection becomes the systematic matching of existing method to predetermined objective. For example, if the objective is to have a pupil correctly identify the functions of nouns, verbs, and adjectives, then transferring the process of identification from teacher to pupil becomes the pedagogical problem to which a teacher can apply prescribed solutions. This concept of reflection defines the *teacher as technician.*

The second facet of reflection, that concerning content, can also both shape teacher thought and influence the kind of teaching that will result from its application. To examine the substance or content of what is to be taught certainly reduces the significance of means, but only at the expense of emphasizing ends. Schön, in discussing the apprenticeship of the reflective practitioner, is primarily concerned with the ways in which the

neophyte is encouraged to develop his or her own approach to the situation, whether it be designing a building or instructing a student. To function successfully within this particular view of reflection requires primarily a thorough knowledge of the content under consideration. The desirability of the ends being pursued or the value of the content itself are not questioned but are taken as given. This view of reflection considers the *teacher as expert*.

The third concept of reflection centers on both the context of the individual and the context within which he or she is functioning. Considering this facet in isolation tends to highlight the immediate demands and uniqueness of each teacher's classroom situation while downplaying the importance of the pedagogical and instructional aspects of education. The student teacher who functions primarily within this facet of reflection is confronted with a concept of education that can become idiosyncratic and arbitrary. Reflection here sees the *teacher as iconoclast*.

The grounding of reflection. The fragmentation of reflection establishes a distinction between the finished act and the normative elements of teaching which is plausible only for the purposes of explication. On the classroom floor, every decision guiding practical action — and there may be many in the average day — relies on a teacher's personal interpretation of the situation. Reflection, considered here in its entirety, becomes a function of a teacher's informed response to a given situation and, as such, may be integrated in terms of his or her personal paradigm and as oriented by his or her knowledge and experience (Elbaz, 1983). To make sense of what teachers do, therefore, requires an understanding of the norms by which they define their work (Nespor, 1987).

For student teachers, interning with experienced teachers and functioning within established classrooms, problems in making sense of the activities of teaching can become further compounded by unaddressed incongruencies in the norms guiding the teaching practices and beliefs of their supervising teachers.

A Case of Missed Communication

The interplay of the three components of reflection discussed above became apparent during my study of one interning student teacher, Janis, and her supervising teacher, Peter. This investigation was guided by two central interests: the meaning that the phenomenon of teaching has for those involved in the act of teaching, and the relationship that this meaning has with underlying values and beliefs in the formation of a theory of professional practice. In order to explore these interests, I observed and talked with Janis and Peter for approximately ten hours during a four-week period. I was present in Peter's classroom to observe the teaching of both Janis and Peter, and was also present during pre- and post-conferencing, where eight of the lessons which Janis had taught and I had observed were discussed. These conferences were audiorecorded for later transcription and analysis. The information I obtained in this way became the catalyst for my subsequent questioning of the rationale behind their statements. In similar fashion, their responses to my questioning guided further observation of their actions.

At the core of this investigation were the questions: What guides a student teacher's reflective inquiry? When we (as teacher educators) ask student teachers to reflect or deliberate upon their teaching practices do we question within which theoretical framework they are operating? Are we asking to what normative base they are comparing themselves?

In the profiles presented below, we can see illustrated the degree to which the student teacher's reflection and behavior are influenced by her interpretations of the supervising teacher's statements or actions.

Peter

The supervising classroom teacher who contributed to this investigation had twelve years of elementary school teaching experience at a variety of grade levels. At the time of this study Peter was teaching a Grade 8 class which was designated as academically talented. Throughout our conversations, and from the observation of his classroom teaching, the emergent theme was one of situation. His teaching style was based on an awareness of the wider social, economic, and temporal factors which

influence the educational process. For him, the essence of teaching was growth — both his own and the children's. He stressed the need for teachers to know the community surrounding the school before beginning to teach in it. "It's important for educators to know where they stand on issues and to express a sensitivity towards the community." Peter cited as an example his decision not to introduce the Darwinism/Creationism debate (as he had done before in another school setting) in a school within a strong fundamentalist community. He did not see this as compromising himself as an educator, as long as it did not "damage the kids." He stated that if a child were to bring up the subject, then he would discuss it: "The child needs to grow within his own context."

Peter's major concern about current educational practice was what he called "the instant gratification of teaching." He saw this as another symptom of the modern desire for the "fast, neat, and easy." To function optimally as a teacher today, Peter believes that he must look to the long term effects of his teaching. To him, the children in his present class will be adults in a world that he cannot inform them of, but which he can nonetheless prepare them to cope with.

> Giving them neatly packaged answers would be simple ... it's not teaching, but it would be simple. Teaching ... is prolonged, difficult and often frustrating ... learning is like that too .... Information may be immediately available, but what you can do with it, and how to do it, isn't.

When considered within the terms of the three facets of reflection, Peter's comments suggest that he interprets his teaching through the lenses of context and content. That is, his role as teacher appears to lie in the creation of a match between the content of the curriculum and its relevance within the wider context of the child's life. When Peter was asked to think about his teaching, he did not dwell on the technical aspects of his actions.

Janis

The student teacher interning in Peter's classroom, Janis, was a psychology major with a B.A. degree completing an after-degree teaching program. Observation of her teaching and subsequent discussion of her lessons revealed a predominance of the technical aspect of reflection. Her use of teaching techniques and the children's ability to use skills were given prime consideration when she rated the degree to which she felt the lesson was more or less successful.

After a physical education lesson on basketball, she commented that she was disappointed because the children did not understand and appropriately use a particular move that she had demonstrated. While discussing this with Peter, she commented that she did not "blame the kids" but felt at fault herself for introducing a skill "they clearly weren't ready for." Further questioning revealed that she had taught this skill because those children who would go on to play competitive basketball would need the skill during competition.

This incident occurred after Peter's comments on the importance of preparing children for an unknown future and suggests that a breakdown in communication had occurred between Peter and Janis. Peter, when thinking about the future needs of his pupils, had addressed questions that ask *what* (content) should he be doing to prepare them and also *why* (context) should he be doing it. Janis, on the other hand, translated Peter's statement in terms of *how* (objectives) she could pass on a set of skills. Not only was Peter functioning at a level of abstraction that Janis was reworking in more concrete terms and hence altering his meaning, but this (typical) expert/neophyte conceptual asymmetry was compounded by the fact that they each were unaware of the reflective frame of reference of the other (Benner, 1984).

Mid-way through the observation period, Janis introduced a new element into her conversation, one which implied that her reflections on her teaching now included an awareness of the way that the content of her teaching was used by the children. From a preoccupation with the mastery

of skills that she brought with her to Peter's classroom, Janis's conversation and teaching practice showed an inclusion of the second facet of reflection — that of a concern for content. Janis began to talk about the "practicality of the lesson." By "practicality" she meant the relevance that the information had for the child. "How do I apply it to the kid's life so they [sic] can relate to it rather than just getting it across?"

By the time of our final meeting Janis's concern for the relevance of her teaching had developed into a deeper awareness of the role that technique itself can play in education. That is, that having a child master a specific skill does not necessarily connote understanding in that child.

> I don't want the kids to just do something because that's the way I've taught it. I want them to be able to use it in a way that means something to them ... sure, even if it means they question what I've told them, that would be OK, too. That would make me think about it.

The third facet of reflection, context, remained missing from Janis's teaching during my observation period. The reasons for this will not be addressed in this paper but could include such possibilities as the influence of College of Education procedures which tend to emphasize isolated teaching skills, lack of experience or opportunity to critique the educational *status quo* or, simply, immaturity. What is relevant to the argument being presented here is that she remained unaware that contextual factors played such an important role in Peter's thinking about his teaching.

Focusing

In learning the "manner of an educator" the intern exists in the tension between being a student and being a teacher (Fenstermacher, 1986). In the familiar role of student, interns bring with them at least 12 years of vocational observation to teaching practice (Armaline & Hoover, 1989). However, this observation is of the performance side only (Weinstein, 1989). Consequently, the intern's perceptions of teaching are likely to be unilateral. Bolin (1989) believes that interns bring to their field experience a latent philosophy of education which

> may be tempered by student teaching but remains largely unchanged. Students must become conscious of their own taken-for-granted philosophy of education and attempt to understand how they arrived at it in order to adequately critique and develop it. (p. 53)

The three facets of the reflective process — conclusions, content, and context — when taken as a whole can serve to remove the restrictions to teacher thinking and professional growth inherent in the taken-for-granted mind-set that Bolin writes of. In doing so, they also facilitate the communication between student teacher and supervising teacher. Janis's misinterpretation of Peter's concern about preparation for the future resulted in disappointment for her and confusion for the children she was teaching. At this time, Janis was functioning within a paradigm that saw teachers as the dispensers of skills and knowledge, while Peter was operating within one in which teachers were guides and mentors within a given temporal and societal context. Consequently, Janis's reflection concentrated on the technical aspects, whereas Peter's tended towards the substantive and contextual. Because neither Janis nor Peter thought to question their own paradigms, the value of Peter's experience and approach was lost in the translation from his logic to hers. Without confronting the frameworks that influence their teaching practice, intern and supervising teacher may unknowingly be at odds. The supervising teacher, therefore, has to discover the values and beliefs that the intern holds about teaching and learning while examining his or her own. How the interning student teacher views both teaching and the purposes of the practical component of teacher preparation may have implications for the consequent development of a personal theory of teaching that is grounded in action. That is, interning student teachers may not make the necessary connections between the information that they are being presented with and the beliefs that they, and the supervising teacher, hold (Shuell, 1990). The supervising teacher may, consequently, proceed under the mistaken assumption that the way he or she thinks about education and the manner in which these beliefs give meaning to his or her classroom practices is correct, evident and understood by the intern.

The one-sidedness of the supervising teacher-intern dyad, the imbalance of power and authority between the actors, can further distort the construction of meaning. Rather than arriving at a belief because it is supported by evidence, the individual (supervising teacher or student teacher) may accept the evidence because it appears to support a belief that he or she already holds. For example, when Peter shared his perception of his role in preparing his students for the future, Janis accepted this statement without further question because it complied with her current understanding of education as a progression through a hierarchy of skills. Janis assumed that "preparing students for the future" entailed their mastering advanced levels on the skills continuum.

It is the intern, by nature of his or her role in the dyad, who is more likely to be confronted with "reconstructed logic," that is, the forms in which facts are presented as a *fait accompli* without divulging the thought processes or circumstances from which they are derived (Soltis, 1990). Consequently, to remove the constraints that an unexamined and fragmented reflection can have upon belief and action, I would suggest that a process of consensual understanding be incorporated into the fabric of the reflective component of teacher education.

Such a process requires an appreciation that understanding and meaning are built intersubjectively. It also demands that both speaker and listener have access to the reasoning that supports a stated belief or action (Habermas, 1984). It does *not* mean that agreement necessarily has to be reached, but only that the reasons behind the speaker's statements are clear and understood.

By encouraging supervising teachers and their interning students to examine the framework for the beliefs and actions of the other and of themselves, there is less likelihood of misinterpretation of the messages they receive from each other. Attending to the reflections of the other while asking, What is the question that shaped this response? can alert the listener to the kind(s) of reflection in operation. Are these questions of the *how, what,* or *why* variety? The listener is then less likely to make erroneous assumptions about the rationale guiding the teaching of the

other. If, for example, Janis had asked Peter why he believed it was necessary to prepare children for the future, she may sooner have realized that he was not merely referring to the acquisition of skills.

Conclusion

I have argued in this paper that the unexamined use of reflection can compound the difficulties already inherent in supervising teacher/intern communication and that, for the purposes of teacher preparation, the framework provided by the notion of a fragmented reflection serves, if not to actually overcome these difficulties, then at least to make their existence known.

The interning student teacher can only be expected to alter his or her own personal understanding of the classroom situation to the extent that he or she understands the supervising teacher's interpretations as being relevant. Observing individuals as they teach and asking them to reflect upon their actions needs to be complimented by a consideration of "what their actions mean within the frameworks which give their actions meaning" (Olson, 1989, p. 174).

To come to an understanding of the beliefs and actions of another requires an understanding of the beliefs and actions of oneself. The ways in which a personal theory of education colors all matters pertaining to teaching and learning need to be recognized if the reflective process is to be a useful tool in the development of teachers.

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