

Reflective Practice And Professional Knowledge: Understanding The Linkages

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ABSTRACT

A qualitative study into reflective practice in the practicum shows that some student teachers' reflections are private and hidden from their supervisors. Others are written in their catatan reflektif or journals. Supervisors often neglect even the written reflections. Consequently, the educative value of writing reflections is compromised. Although BPG has conceptualised a model to guide knowledge development (BPG, 1996), the evidence suggests that it has remained unoperationalised. Its philosophical and conceptual roots have not been made clear. Hence, supervisors are guided by vague conceptions of reflection. Thus, the post conferences also fail to promote student teachers' professional knowledge. Supervisors' understanding of reflection has emerged as one of the keys to promote reflective practice that leads to professional development. This paper addresses that issue by proposing a framework to understand reflection by identifying its key attributes. The framework also links reflective practice to teachers' professional knowledge. Thus, it makes explicit the knowledge construction process.

INTRODUCTION

Our preservice teacher education program adopts a reflective stance. Its commitment to reflection is seen in the conceptual model (henceforth, Practicum Model) that was introduced in 1996 to guide the implementation of reflective practice in the practicum (BPG, 1996, p.2). Although a reflective focus is depicted in the model, there is a lack of elaboration. Instead, the practicum guidebook makes references to a number of sources (Schon, 1983, 1987; Shulman, 1987; Smyth, 1989) without identifying a specific conceptual focus.

As researchers have cautioned against implementing reflective programs that are guided by generic notions of reflection (Feiman-Nemser, 1990; Tabachnick & Zeichner, 1991), reasonable doubts exist over our success in developing our student teachers into reflective practitioners. This paper reports some findings from a qualitative case study into reflective practice in the 17-week KDPM Phase II practicum, which was the context for the study.

Some key questions concerning reflective practice that guided the study were "What was the nature of student teachers' reflective practice?", "How did student teachers understand reflection?", and "Were supervisors able to operationalize reflection in practice?". These inquiries were aimed at uncovering how reflective practice was enacted in the Malaysian practicum and how it contributed to the student teachers' professional knowledge development.

THE REFLECTIVE PRACTICE LITERATURE

The Challenge of Reflection

Although Dewey (1933) called upon teachers to act reflectively, it was almost half a century later, with the publication of Schon's (1983, 1987) work, that the reflective teacher education (RTE) paradigm took root among the teacher education community. This long delay has been attributed to the domination of the behavioural paradigm (Adler, 1991) as well as to changing concerns in reforms within teacher education itself (Cochran-Smith, 2001). Nevertheless, reflection has come a long way, and is now considered the grand ideal in teacher education (Jay & Johnson, 2002).

The RTE movement has a long history in North America. There are many teacher education programs that are guided by particular conceptions of reflection (University of Houston, 1993; Sparks-Langer, Simmons, Pasch, Colton, & Starko, 1990). Surprisingly, even in these programs, the empirical evidence has not matched the rhetoric of reflective practice (Burch, 1999; Calderhead, 1989; Francis, 1995; O'Donoghue & Brooker, 1996). In many cases, the goals of reflection have remained elusive and the RTE concept has proven to be a formidable challenge. Consequently, efforts aimed at conceptualizing successful RTE programs continue to this day (Zay, 1999).

Issues in Reflection

A number of obstacles stand in the way of RTE programs. Firstly, RTE programs appear to lack focus. Reflection is informed by multiple philosophies. Consequently, the concept has a variety of meanings. However, RTE programs often fail to make a firm commitment to a specific notion of reflection. Instead, reflection is used in a generic sense. This has been identified as a major shortcoming of RTE programs (Feiman-Nemser, 1990). Researchers have reported that when RTE programs lack a clear conceptual focus, their success are severely restricted (Francis, 1995; O'Donoghue & Brooker, 1996).

Secondly, contexts play an important role in promoting reflection. These include institutional (Dobbins, 1996), interpersonal (Stanulis, 1994), and curricular (Zeichner & Liston, 1987) contexts. Without supportive contexts, reflection fails to support student teachers' professional development. Interpersonal contexts, especially supervisors' understandings of reflection, appear to be particularly important. When supervisors lack clear understandings of reflection, reflection is little more than an espoused ideal (O'Donoghue & Brooker, 1996). However, when supervisors hold clear conceptions of reflection, reflective practice benefits the teachers' professional development (Lee & Loughran, 2000).

Finally, reflection in itself is meaningless unless it promotes the student teachers' professional development. In short, it is the means to an end, rather than an end in itself. Researchers use reflections to attempt to transform student teachers' perspectives of teaching and learning. However, such reconstructions have been particularly difficult to achieve (Gore & Zeichner, 1991; Clift, Houston & Pugach, 1990). Very often, student teachers exit reflective programs with their views intact. Hence, one major focus of recent research has been on the transformation of practice.

METHODOLOGY

The Informants

There were six informants in the study, three of whom were males. All of them taught Mathematics during the practicum, either as their major or minor subject. The informants volunteered their participation after the aims of the study were explained to them. Two of them taught in the same school and shared the same set of supervisors.

Data Collection and Analysis

There were three major sources of data in this study. During the practicum, each informant was observed a total of 13 times. Each of these lessons was observed, and field notes were taken. The post-lesson conferences were also observed. Additionally, these supervisory conferences were also audio taped. Finally, interviews were conducted with the informants as well as their supervisors. These interviews were also audio taped. All the taped conferences and interviews were then transcribed verbatim.

Spradley's (1980) ethnographic analysis procedures anchored the data analysis process. After the verbatim transcripts were coded, domains were created. The structure within the domains were then revealed through taxonomies. Relationships between the domains were analysed through componential analysis. Finally, the underlying themes in the data were identified. Care was taken to ensure that assertions remained grounded in the data.

FINDINGS

Three major findings are presented in this paper. They encompass the conceptual, contextual, and knowledge development aspects that are raised in the RTE literature. These findings show how the rhetoric of reflective practice compares to the realities in the Malaysian setting.

Conceptual Fuzziness

While explicit mechanisms are in place to promote reflective practice in the Malaysian practicum, the guidebook is non-committal and general in its treatment of the concept. References to reflection are restricted to general guidelines that offer little in a conceptual sense. These broad guidelines come in the form of suggested indicators of reflection. Some of the indicators refer to the student teachers' ability to

- (i) *continuously evaluate their own strengths and weaknesses*
- (ii) *establish cause-effect relationships for actions which have been taken*
- (iii) *predict / anticipate effects / consequences of an action*
- (iv) *plan follow-up action to enhance personal qualities*
- (v) *link experiences and situations to make inferences / summaries in constructing professional knowledge of teaching*

(BPG, 1996, p. 27)

Apart from these broad statements, there were no discussions or explanations in the guidebook linking reflection to student teachers' construction of their professional knowledge. Indeed, there was no elaboration of teachers' professional knowledge itself. Thus, the practicum's reflective emphasis is not sufficiently highlighted in the guidebook. This is a serious omission as the guidebook is the practicum program's

official document. This was particularly true where the conceptual orientations of the practicum were concerned.

The Practicum Model was developed by a panel of senior lecturers. The panel was aware of the conceptual diversity surrounding reflection. However, to avoid being overly prescriptive, it opted to give supervisors some leeway in choosing their own conceptions of reflection to guide their practice, as explained by the Chairman:

.... the idea is not to be over prescriptive. So, whichever model of reflection you are alluding to is up to you like they say, "water finds its own level". Whichever you're comfortable with, how do you want to classify you read about all these models of reflection we do not want to tie the teachers too much, and the lecturers.

While this approach to reflection was flexible, it also assumed that supervisors were familiar with the voluminous literature on reflective practice. There were few indications that this assumption held out in practice. None of the supervisors expressed clear and reasoned views of reflection. On the contrary, they held common-sense interpretations of reflection. Consequently, a generic understanding of reflection prevailed in the practicum among the supervisors and student teachers, something that some researchers have serious reservations about:

.... (reflection) is often treated as a generic disposition and rarely studied in relation to particular substantive issues I think reflection has also become a buzzword, which doesn't always move our thinking forward study it in relation to particular issues of teaching and learning, not as a general disposition (Feiman-Nemser, personal communication, February 8, 1999).

At the college level, the centralised, top-down linear implementation process used to adopt and implement reflection also left little room for curriculum deliberations. The Panel Chairman himself bemoaned this lack of deliberations:

This is really one thing that we lack in our system when we draw our curriculum. In the US, they have what they call curriculum deliberations. So, whatever deliberations (that) go on in drawing the curriculum are also given to the people who are going to implement. So, they understand the basic philosophy behind, the basic arguments behind the curriculum.

This lack of deliberations at the college seriously undermined the supervisors' understanding of the philosophy and arguments behind our adoption of the reflective paradigm. Without that understanding, a commitment to reflective practice was not evident. In all the 34 interviews with the supervisors, no one made any specific reference to reflection, the Practicum Model or any of the other concepts depicted in the model. Given the centrality of reflection and these concepts in the practicum as well as the importance of the model in guiding reflective practice, the supervisors' silence revealed their vague conceptions of reflection.

A direct consequence of this conceptual fuzziness was their lack of understanding regarding their own roles in promoting reflective practice. Their lack of awareness of the Practicum Model and its implications led to supervisory practices that were largely inconsistent with the reflective-constructivist emphasis of the Practicum Model. A panel member involved in conceptualising the model speculated on the reasons for supervisors' lack of understanding:

But the question is, do all lecturers understand this? I don't think so (laughs) I don't think so! I've seen that during practicum briefing, this thing is not being explained Were you explained all these while you were in college? Nobody explains!

Thus, although reflection was a key concept underlying the Practicum Model, it appears that supervisors have not fully understood either the concept or its implementation. This situation has arisen because reflection has not been given the curricular emphasis it deserves. Program documents failed to identify and promote its conceptual roots. The implementation process at the college has also failed to develop a deeper understanding of the concept due to a general lack of curricular deliberations.

Professional Isolation

Student teachers' reflections were practically ignored by their supervisors. Thus, they practiced reflection without professional support. Although the informants wrote about a range of issues that were problematic to them in their weekly journals, none of these issues were taken up for discussions in the post conferences. The post lesson written reflections were similarly ignored.

Even when student teachers tried to initiate discussions with their supervisors regarding their written reflections, these attempts were ignored:

No need reflections, you do the reflections on your own! Ha, you see, your own when you teach, your own views of your teaching. Reflections, it's your own reflections – after you have taught, are you satisfied? Which aspects do you think was the best, was outstanding? (Lecturer)

There was generally little reflective discourse in the post conferences. Many of the post conferences were used to dispense teaching advice or to point out student teachers' shortcomings. From these shortcomings, supervisors would offer the student teachers teaching alternatives. There was a clear preference for telling student teachers how to act, especially in relation to classroom problems. Supervisors did not engage student teachers in inquiring about their classroom teaching experiences. Thus, there were very few reflective discussions.

Even when there were incidents worthy of reflection, the supervisors did not see an active role for themselves in the student teachers' reflections. When one of the student teachers was surprised by a weak pupil's exceedingly good piece of writing, her supervisor shared her excitement, encouraging her to reflect on the incident:

*Lecturer : Very touching! Write this in your reflections! (laughs)
Really very touching. When we see these, we're happy.*

Student teacher : Yes, really! (laughs) Very unexpected. (laughs)

Lecturer : This is really very good for your reflections.

It is pertinent to note that while the supervisor encouraged the student teacher to write about the incident in her reflections, he did not reflect *with* the student teacher over the meaning of that incident or experience. Instead, he effectively distanced

himself from the student teacher's reflections.

This was a typical response seen in this study. Supervisors often encouraged student teachers to reflect. Unfortunately, they did not conceive of an active role for themselves beyond advocating reflections. They were bystanders in the reflective process. This attitude made the reflective process a very individual and isolated practice for the student teachers.

Reflection and Knowledge Development

Being novices, the student teachers were often unable to make sense of their experiences. By distancing themselves from student teachers' reflections, supervisors neglected their roles as facilitators of reflection. Instead, they focused almost exclusively on evaluating the student teachers' reflections. This left the student teachers in a lurch:

.... she should guide me, then when I write my reflections, it will be easier for me. I won't be moving around on my own, unable to think of other things otherwise, I am like stuck here (Student teacher)

Although this student teacher had expressed her need for guidance in her reflections, her supervisor's views were very different:

What she writes is all correct because mostly they are what I tell her I say them, she writes lah. Sometimes, when we discuss, she listens, then she writes them down Lydia has fewer (reflections), she has less mistakes.

This mistaken association between reflection and incompetence resulted in supervisors' neglect of the student teachers' reflective practice. Collaborative reconstructions of their classroom experiences were very rare. Another student teacher's reflections on teaching 2-digit number multiplications, both on her own and with her co-operating teacher, had been futile and left her frustrated with her own learning:

.... co-operating teacher? Er, nothing to say (quiet) The other day, I brought it to him then, he said, "You give more lots more exercises lah". He said that, he said, er, "Your explanation, must make it clear". He can only say general things. Explain clearly, give more exercises I also know that, right? What about strategies, simpler methods, easiest ways, he does not, he did not give me.

These frustrations, which were also experienced by other student teachers, reveal supervisors' views of themselves as evaluators rather than mentors where reflective practice was concerned. In the ensuing focus on evaluating reflection, much of the needed emphasis on the reflective process was lost. This incident also raises questions over supervisors' pedagogical expertise. As seen in the excerpt above, in the absence of expertise, there can be little pedagogical discourse.

DISCUSSIONS

The findings in the preceding section show that reflection has failed to adequately promote the development of student teachers' professional knowledge. At

the core of this failure lies the supervisors' inadequate understanding of reflective practice – the concept as well as its content and processes. This paper suggests that four attributes are crucial to our practice of reflection. The following section illustrates how the attribute framework can help in operationalizing reflection.

Reflection and Examination of Practice

Reflection involves a process of personal theorising and knowledge development. This comes from a deep examination of the practice of teaching. To reflectively examine teaching, one must first clearly identify the professional knowledge aspects that inform teaching. In short, reflection and knowledge construction can only occur within established knowledge frameworks.

Shulman's (1987) knowledge base is widely regarded as the basis of teachers' knowledge. However, there have been more recent developments. In particular, researchers from interpretive paradigms have successfully argued that personal practical knowledge is an aspect of teachers' knowledge (Doyle, 1990). Similarly, teachers' beliefs have now been considered a part of the expanded knowledge base of teaching (Richardson, 1996).

Reflection on practice necessarily involves interpretations of the situation. However, the mere consideration of a teaching event cannot enhance student teachers' situational understanding of their own practice. What is crucial to the knowledge development process is the interpretation of a particular event in relation to some aspect of the professional knowledge base identified above.

To illustrate, the student teachers in this study often reflected upon the level of noise in their classrooms. Supervisors held a technical, problem-solving focus to these reflections and often offered teaching tips to resolve the "problem". There were no efforts to link the event to different aspects of the knowledge base. For instance, the pupils' lack of attentiveness could be, and often were, due to a variety of factors. These included incompetent management routines, incompatible teaching and learning strategies, pupil excitement levels, even unrealistic expectations on the part of the teacher.

Hence, by anchoring the event onto the knowledge base, the reflections might potentially involve the student teachers' reconstructions of their general or pedagogical content knowledge, their assumptions about pupils, their understandings of pupils as learners, or their values as teachers. Unfortunately, rather than examine their practice situations in such a holistic manner, student teachers were encouraged to focus on parts of their experience that caused them problems. They then identified actions that addressed those problems. In the process, reflective practice tended to be narrow rather than holistic.

Elliot (1993) has argued against the process of abstracting parts from the whole, which represents the Platonist perspective where "*good practice consists of consciously applying theory*" (p. 16). The student teachers' reflective practices were thus more in line with such rationalist assumptions rather than the hermeneutic perspective, which emphasizes a holistic examination of practice, as advocated in the Practicum Model.

Reflection and Reflexivity

In the cases studied, the rationalist-driven, problem-solving reflections focused on external problems and situations rather than the student teachers' self-referenced thoughts. Consequently, the knowledge aspects in those reflections were seen in very technical and impersonal terms. Teaching was seen as a technology, and the student teachers' own values or beliefs were rarely an important consideration as they reflected

upon their teaching. Teaching knowledge is partly tacit in nature because in teaching,

There are actions, recognitions, and judgements, which we know how to carry out spontaneously; we do not have to think about them prior to or during our performance ... (Schon, 1983, p. 54)

The surfacing of such personally-held tacit knowledge is an important emphasis in the Practicum Model, as student teachers are expected to theorise from their classroom experiences:

.... bringing your tacit theories,(turning) tacit knowledge into propositional which is "aha!", I use this. It is something which is there all the time. Just comes,(it) just comes to the fore. And this comes from the subconscious into your consciousness and to application(Panel Chairman)

Reflection and theorising develop professional knowledge of teaching when student teachers reconsider how their tacitly informed actions, recognitions, or judgements are intertwined with the external situation they face. It is when student teachers' reflections are grounded in, and involves a reassessment of, their own tacit knowing-in-action that these personal theories, values, assumptions, or beliefs are revisited, revised and transformed into new knowledge. In other words, reflections must have such a reflexive element, and not be exclusively directed at external problems in a detached manner. Supervisors must strive to promote such reflexivity.

Reflection and Social Constructions

In this study, supervisors saw student teachers as having acquired the necessary theories in the college and were in the practicum to learn how to apply the formal theories they had learnt into their classrooms. These views of learning to teach, which are based on a theory into practice perspective are not fully compatible with the reflective paradigm in teacher education.

From the reflective perspective, theory and practice should come alive through a process of theorising from experience. This theory *from* practice view has been an important thrust in professional education (Munby & Russell, 1996; Schon, 1983). Reflection should thus facilitate theorising, from which knowledge can be developed from learning to teach experiences.

In this study, there were very few occasions when student teachers were encouraged to theorise from their personal experiences. As a result, the knowledge construction aspects of reflection were not realised in the practicum. In fact, student teachers were seldom seen as active learners out to construct their own knowledge. Many of their attempts to make sense of their experiences were not supported. Their fledgling, individual efforts at theorising were largely ignored.

Reflection cannot be the student teacher's lone effort if it is to empower them to construct knowledge. In the constructivist view, knowledge is socially constructed and negotiated with more knowledgeable others. In the practicum, the supervisor-student relationships are crucial contexts for reflection, professional learning, and knowledge development. Hence, social co-construction of knowledge is a crucial element of the reflective process.

However, these social constructivist underpinnings of the model were not apparent in practice. Student teachers' reflective practices in the practicum were quite clearly individualistic, with supervisors not involving themselves very much in the

student teachers' reflections. This resulted in professionally isolated practice. As a result, the student teachers' reflective practice did not contribute much to their professional knowledge development.

Reflection and Transformation of Practice

Student teachers' reflections must be aimed at transforming their teaching. Reflective practice is but the means to an end. It must lead to either transformation of practice or of self as teacher (Grimmett, Erickson, MacKinnon, & Riecken, 1990). For this to happen, all the three attributes discussed earlier must be present: teaching events should be linked to the professional knowledge base from which they spring, student teachers must view and analyse their teaching in a holistic and reflexive manner, and they must be supported in their reflections.

Observations of student teachers' reflective practice in this study reveal that their reflections were often focused on problematic events per se. These events were seldom framed in terms of their knowledge implications. In the rush to secure workable solutions, there was also a tendency to neglect more reflexive analyses on the situation. Collaborative reflections and social co-constructions of knowledge were practically absent. As a result, student teachers' reflections did not result in any significant transformations of their thinking or practice.

For reflection to be meaningful, supervisors must attempt to achieve some transformation in student teachers' thinking or practice. This can be done by bringing the three earlier attributes together. Unless supervisors can help student teachers establish linkages between their experiences and the professional knowledge base, raise their reflexive awareness, and engage actively in collaborative reflections, reflective practice is unlikely to achieve any of its highly publicised claims.

CONCLUSION

The findings in this study do not differ much from previous studies that report low levels of reflection among student teachers (Lee, Chin, Ong, Saadiah, & Beh, 1998; Toh, 2001; Wong, Choong, Loh, Tan, & Salmiyah, 2000). However, this study offers quite different insights into why this is so and how we might try to improve reflective outcomes for student teachers.

A lack of time or insufficient training as well as a lack of seriousness have all been cited as reasons for student teachers' dismal reflections. However, the root of the problem appears to be conceptual rather than structural or personal. Since the concept of reflection is not adequately clarified in the guidebook, the dominant understanding of reflection that emerged to guide supervisory practice was the problem-solving view of reflection. This was a very technical view of reflection that rested on rationalist assumptions. Consequently, student teachers viewed reflection from a utilitarian perspective, using it to quickly identify solutions to classroom problems.

While such reflections are not entirely undesirable, reflective practice that is solely guided by this view of reflection tends to serve very limited purposes. There is much more that reflective practice promises to teacher educators. It appears that reflection has neither been well understood nor well accepted by the supervisors. The Practicum Model is a good springboard from which to promote reflective practice. Sadly, the skeletal information in the guidebook hinders its use as a conceptual model to guide reflective practice in the Malaysian context.

The lack of attention given to the model's philosophical and conceptual framework in the practicum guidebook is the key to supervisors' inadequate

understanding of reflection. Hence, they failed to appreciate the thrust of the Practicum Model as well as develop an awareness of their roles in promoting reflective practice in the practicum. Thus, there is a need for greater elaboration of the conceptual issues. The attribute framework can be used to operationalize reflection and offers supervisors a framework upon which to put reflection into practice.

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