

Engaging student teachers in meaningful reflective practice

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Abstract

This paper examines the use of peer-videoing in the classroom as a tool to promote reflective practice among student teachers. Twenty pre-service teachers from a variety of subject disciplines participating in a Post-Graduate Diploma in Education programme in an Irish university participated in the study. The practice of encouraging student teachers working in the same school to participate in structured video analysis avoids the impact of external observers whose role is largely evaluative and endorses a collaborative model that promotes dialogue and shared learning. This practice promotes a culture of observation and critical dialogue in a profession which has traditionally been characterised by isolation, while at the same time fostering and validating the voice and experience of the student teacher. Locating the discussion within the framework of the theoretical literature on reflective practice, the purpose of this paper is to contribute to the international debate over best practice in supporting, encouraging and scaffolding reflective practice. It comments on the implications of reflective dialogue for the modernisation of teacher education and offers guidelines on how best to scaffold and promote reflectivity.

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1. Introduction

The theory–practice divide is a dominant theme in the literature on reflective practice (Schon, 1983; van Manen, 1995). While teachers are often ‘aware’ of the origins and evolution of the term reflective practice and the importance of *appearing* to engage in reflection, they do not see its application to their real life teaching experience (Craig, 1994; Cruickshank, 1987). Multiple opportunities and formats for reflection therefore need to be explored in order to build teachers’ capacity for critical reflection (Bean & Stevens, 2002). In addition to the more

traditional modes of fostering reflection such as journaling and writing, the power of video as a tool for enhancing student teachers’ reflective and analytical powers is now widely acknowledged (Copeland & Decker, 1996; Whitehead & Fitzgerald, 2007). Perry and Talley (2001, p. 26) identify video as ‘a powerful tool for bringing the complexities of the classroom into focus and supporting pre-service teachers in connecting knowledge and practice.’ Video as an analytical tool allows for a series of ‘concrete examples’ of the teaching and learning environment which enables teachers to view a wider spectrum of practice and empowers them to recognise and critically evaluate good practice (Loughran, 2002, p. 40). While in-person observation offers considerable scope for the development of

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student teachers' reflective capacity, because of its real-time nature, it does not allow for student teachers themselves to view their own practice, nor does it allow for replay to deconstruct practice. Video is a much more versatile medium which captures the immediacy of a real classroom and which allows students to view examples of authentic learning experiences (Newhouse, Lane & Brown, 2007). The peer-video model, the basis of this study, allowed for student teachers working in the same school to video each other while on teaching placement and participate in the analysis of their work in a university-based tutorial. The peer-based element of this study located 'ownership' over the various critical stages of the videoing process firmly with the student teacher and reduced the perceived power dimension often associated with the presence of an external observer.

2. Reflective practice and teacher education

Reflective practice is widely recognised as a central tenet of the teaching and learning process (Brookfield, 1995, 2005; Zeichner & Liston, 1987). Its resonance with teaching is attributable to the fact that it encapsulates the complex, analytical and inquiring nature of teaching at a time when the profession is under attack by a range of discourses emanating from the new managerialist perspective and the competency-driven agenda associated with performativity (Thrupp & Wilmott, 2003). The development of a discourse on reflective practice owes much to the scholarship of Dewey and Schon, both of whom advocated that learning was contingent upon the integration of experience with reflection and of theory with practice (Humphreys & Susak, 2000). Dewey (1933) emphasised the importance of active and deliberate engagement with problematic situations, underpinned by an awareness of one's own ideas and attitudes. For Dewey, open-mindedness, a sense of responsibility and wholeheartedness or dedication were central to the potential development of a reflective practitioner. Schon stressed even further the relationship between reflection and experience, differentiating between 'reflection-in-action' and 'reflection-on-action'. The former refers to the importance of teachers being aware of their decisions as they work, while the latter refers to the importance of reflecting back on and critiquing one's practice. Both testify to the centrality of experiential learning

and both foreground practitioner knowledge (Schon, 1983, 1987, 1991).

Different models and structures in teacher education programmes impact on the degree to which the idea of reflective practice can be approached as a habit that can be developed over time. In the case of this study, the ability to promote reflection was limited by the duration of a consecutive teacher education programme which begins in September and ends in May. A further challenge was to encourage student teachers to look beyond their own subject specialism, a tradition that arises from the balkanised nature of the curriculum in secondary schools in Ireland, whereby the focus is on the teaching of specific subject disciplines, while frequently ignoring the potential of cross-curricular activity to enhance student learning. These challenges had to be negotiated within the context of the reality of schools and the reality of the teaching day, both of which limit opportunities for reflection (Day, 1993). The principal objective of this research study was therefore to provide a realistic and meaningful model that scaffolded reflection over time and promoted a culture of shared learning. Scaffolding in this context was understood as enabling student teachers to achieve a level of reflection beyond their current ability level (Lepper, Drake, & O'Donnell-Johnson, 1997; Schon, 1983; Vygotsky, 1978). The peer-based component of this particular model was considered critical in scaffolding the reflective process. The value of peer-based learning and peer-based assessment is widely acknowledged (Davies, 2006; Stefani, 1998).

3. A synergy of perspectives

Convinced both of the importance of reflective practice to the teaching and learning environment and of the apparent gap between the reality of the classroom and the theory of reflective practice, it was decided to experiment with the development of a community of practice model within which student teachers would critically evaluate the teaching practice of their fellow students. The focus on schools as communities of practices and as learning organisations has recently received considerable critical examination and application (Hodkinson & Hodkinson, 2003; Wenger, 1998). The rationale underpinning the concept of a community of practice has particular relevance for educational settings because it recognises the variety of perspectives and activities that prevail in such settings. The

three core elements identified by Wenger (1998) as central to the community of practice model, i.e. joint enterprise, mutuality and trust, provide a framework for in-school collaborative activity that can counteract many of the reductive tendencies associated with the performance-driven skills and competencies model. A community of practice within this setting was understood in terms of the values, practices and beliefs that emerge from working in collaboration (Eckert & McConnell-Ginet, 1992). The significance of the community of practice model was that it fostered and legitimated a collegial and supportive environment in which it was 'safe to speak the truth and ask hard questions' (Wenger, McDermott & Snyder, 2002, p. 37).

4. Methodology

Twenty student teachers involved in a 1-year teacher education programme (Post-Graduate Diploma in Education) were selected to participate in this study. Students were allocated to two tutorial groups, 10 students in each group. The tutorial was selected as the nucleus of this study, as it was felt that it represented the most appropriate mechanism for fostering a community of practice in which student teachers could transform the challenges confronting them in the practicum into professional knowledge (Sim, 2006). The sample was chosen on the basis of three criteria: the ability to satisfy the pair model (whereby pairs of student teachers were located in the same school on teaching practice); subject specialism (teaching subject); and school type (co-education/single sex, etc.). This ensured that a range of subject areas and a diversity of school-type, with specific reference to forms of governance and socio-economic classification, were represented in the chosen sample. The use of the peer video technique was chosen because it located the focus within the student body and recognised the fact that student teachers bring to the classroom their own experiences and identities as learners. Specifically, the model entailed student teachers engaging in peer videoing of class teaching in real time and the subsequent analysis of their teaching in a tutorial structure. The fact that the model was student-led and student-centred provided a more democratic, collaborative and egalitarian environment within which to engage in the process of video recording and analysis. The strength of this model was that it was firmly grounded on the principles of mutuality, trust and reciprocity. While there was no

way of guaranteeing the level of trust and collaboration that developed between the different student pairs, the fact that each member of the pair was engaged both in videoing and being videoed allowed for a greater understanding of and empathy with the tensions and challenges of the process.

The tutorial took the following format: Two video clips from the same school were shown in each tutorial session. Each student teacher provided a lesson plan for the videoed lesson and a brief introduction in relation to the contextual factors pertaining to the lesson being observed. Students had pre-selected a particular aspect of the class to show to the group, usually lasting about ten minutes. Before showing the clip, the student teacher provided a rationale for the chosen segment. The remaining students were seated in a circle with the tutor (facilitator) also seated as part of the circle.

The facilitator's role was simply to maximise the opportunity provided by the model to encourage debate and foster reflection in a safe and collegial environment. The facilitator thus posed questions throughout the session, rather than providing commentary or contributing to the discussion, reinforcing the view that reflection is not about answers and solutions, but about questions and uncertainty. The videoed class was not graded and the study played no evaluative role in the overall course. On a number of occasions across the two tutorials, because of issues that arose in the tutorial setting, students were directed towards key readings. Through their engagement with relevant literature in the field, students deepened their understanding of the reflective process by examining the experience of other teachers, both novice and experienced, reflecting on particular aspects of their practice. However, while engagement with 'theory' was considered important in the developmental process, it followed on from issues that arose within the practicum and was not examined in isolation.

Students' capacity for reflection was scaffolded throughout the year using a framework that broadly consisted of a series of written prompts (see Fig. 1). The model moved with increasing complexity from core issues relating to methodology and management towards more critically engaging concepts such as the impact of individual contexts on practice. Initially, students focused on techniques and classroom skills and gravitated largely towards identifying the positive aspects of their fellow student's practice. While both facilitators

- Lens 1: Methodology; Management; Most Positive Aspect of Lesson
- Lens 2: Methodology; Management; Most Positive Aspect of Lesson; Suggest One Alternative to the Approach Used
- Lens 3: Methodology; Management; Most Positive Aspect of Lesson; Comment on the Quality of Student Engagement in the Classroom
- Lens 4: Methodology; Management; Comment on the Link between the Methodology and the Achievement of the Objectives
- Lens 5: Methodology; Management; Critique the Impact of the Particular Contextual Factors (eg socioeconomic groupings, ethnicity, gender) on the impact of the lesson

Fig. 1. Model for scaffolding reflection: Lens 1: methodology; management; most positive aspect of the lesson. Lens 2: methodology; management; most positive aspect of the lesson; suggest one alternative to the approach used. Lens 3: methodology; management; most positive aspect of the lesson; comment on the quality of student engagement in the classroom. Lens 4: methodology; management; comment on the link between the methodology and the achievement of the objectives. Lens 5: methodology; management; critique the impact of the particular contextual factors (e.g. socioeconomic groupings, ethnicity, gender) on the impact of the lesson.

recognised the group's reluctance to engage in deeper critical reflection and specifically in criticism of their peers' work, it was felt that this initial tentative phase was central to the development of a positive learning community. Gradually, with the aid of further, deeper prompts, students moved towards more meaningful reflection and deconstructed the practice of their peers in a more critical and analytical way. Both facilitators monitored the degree of the students' critical readiness and met this with additional critical inquiry prompts. Careful attention was paid by the facilitators throughout the process to ensure that students were guided in their reflection. Typically, each tutorial began with a review of the nature and extent of the previous analysis session. In this context, students themselves recalled the main issue discussed in the previous tutorial and identified the key issues for reflection and critical comment that emerged. Under the guidance of the facilitator, students then explored additional aspects of practice that could be critiqued. In this way students were directed towards the next lens in the reflective scaffold.

Focus group discussions were held at the end of the academic year to explore students' experiences of participation in the study. These discussions were audio-recorded and transcribed *verbatim* prior to analysis. Students were allocated pseudonyms in order to ensure confidentiality and the dialectical features of the interview data were preserved in line with best practice in reporting qualitative data

research (MacNaghten & Myers 2004; Rapley 2004). In general, the methodology used was found to be effective. The limitations often associated with using focus groups were overcome by the community of practice that had developed among the students over the academic year and the shared sense of commitment and purpose that characterised the research process. The main limitations associated with the study emerged from the power inequality between the tutor and the student. The students' review of their participation in the research was discussed openly in the tutorial; hence, the presence of the tutor may have impacted on the candidness of the views expressed. While there is no evidence in the data to indicate that students self-censored their views, it is not possible to guarantee that this was always the case. An additional limitation arose from the fact that although students were aware that the videoed class did not form part of the assessment of the course, it was still viewed by the tutor who had a role in moderating the overall teaching practice grade.

5. Findings

Essentially, the views and perspectives of the respondents can be considered under two interconnected headings: The impact of peer-videoing on classroom practice and collaboration and the impact of peer-videoing on the development of reflective skills. The overall findings suggest that

students' engagement with the peer-videoing process helped them to develop their reflective skills, which in turn had an impact on their classroom practice, thus bridging to a significant degree the gap between reflection and practice.

6. The impact of peer-videoing on classroom practice and collaboration

One area where students registered a considerable impact on their practice was in their exposure to and implementation of a range of diverse teaching methodologies. This was the case irrespective of the subject specialism of each student and in many cases resulted in the transfer of teaching skills from one subject area to another. The power of the cross-curricular sample used in the study was such that students began to think outside of their own subject area, and realised that methodologies used in particular areas historically considered divergent from their own subject area were useful with some adaptation. When students commented on methodologies, they noted that seeing methodologies in operation was more useful to them than hearing a list of recommended strategies in a lecture format:

Michelle:

I used your envelope idea (from a Geography lesson) for my French class-actually with two of my classes and it worked very well-it was very useful...you see the ideas not just hear them, even from different subjects.

Frank:

I found this more helpful than some core lectures. I would nearly prefer to do this twice a week than have to spend so much time attending lectures. Watching others in action, you learn more, you get practical things. Teaching is a practical profession. The more you see the practice of it, the better.

Students also focussed on the importance of pedagogical skills in terms of the way they operated as practitioners in the classroom. In the earlier part of the study, students tended to focus on specific practices. Principally, these included voice, movement, appearance and particular idiosyncrasies:

Sinead:

It helped in the way you carried your voice and movement around the classroom-for me this was important...individual habits and then clothes struck me throughout. I remember on seeing my

own video all I could think of was I'll never wear that again!

7. The impact of peer-videoing on the development of reflective skills

As the year progressed, and students became more reflective, they critically engaged with particular aspects of their practice at a deeper level. They began to consider the impact of their practice on the pupils in their classrooms and this indicated a move away from an earlier focus on their own activity towards a greater awareness of the impact of their actions on pupil activity and response.

Susan:

She (Rose) didn't realise that she was saying maith thu (the Irish phrase for well done) so often.

Rose:

Yes. It was written in my reviews from my supervisor "good use of praise"...like saying maith thu all the time...As I was looking at the video I was just saying to the group it almost seems superficial, I say it so often...I was just wondering are the kids sitting there thinking I don't actually mean it?

Students contrasted their positive experience in the study with what they perceived to be a lack of engagement in schools with peer observation and a reluctance on the part of teachers, including identified mentors, to facilitate observation of their classroom practice. This would resonate with the practice that is common in Irish schools, particularly at secondary level, where teachers work largely in isolation and where professional development opportunities have been historically quite limited.

Keith:

Teachers don't want people in their class watching them teach...but they never had a chance to do something like this...maybe if they had had the chance they would see its value.

Jennifer:

I want to agree here, because I didn't get a chance to do any observation before I started teaching...I was literally told this is your class. My co-operating teacher (mentor) wasn't very cooperating in letting me watch her teach...she kept saying...we'll talk about it later.

Rachel:

I would have loved more observation—you're only there and you're thrown in teaching and I think it would have been really helpful to have observed other teachers at work...there is something you can really learn from watching other people doing it.

All of the students involved in the study pointed to this culture of isolation in schools, whereby teachers typically work on their own in classrooms with limited opportunities for collaboration. From the earliest point in their engagement with the study, they viewed the peer-video process and the community of practice model as a significant mechanism for diminishing to some degree this sense of isolation.

Susan:

It's consoling to see that what you do other people do...that it's not just yourself. You're wondering "Am I doing this right? Is it this way? Should I be doing this or should I be doing that? You see that it's the same across the board because you are very alone in a classroom.

Michelle:

Yes exactly because when I saw Stephanie they were giddy and you can have classes where they can be a bit more giddy. And I thought "oh it doesn't just happen to me." It is very reassuring and as you say consoling because classes are different every day.

Students made direct links between this and their future work as professionals and identified the video as a powerful mechanism for conducting self-review and dialogue with respect to classroom practice.

Stephanie:

I think that I might do it again in the future...it would be great if there was something like this after a few years to see how you are getting on and to develop your skills.

There was considerable evidence from the transcripts that students had already engaged in professional dialogue with each other outside of the context of the tutorial. It was also clear that the scaffolding of reflection had impacted on the quality of these critical discussions between students.

Rachel:

But the good thing is that I got to see Declan three times in three different classes and I really

liked it. When we finished we told each other what was good and bad and that was really useful because we got to know each other really well over the year and it was good because we were straight with each other.

Declan:

Yes, I suppose, we got used to running things by one another and as the year progressed, we tended to chat about our classes on a regular basis, even just over a coffee in the staff room, and I found this really helpful and a great source of support, a kind of sounding board that helped you work things out in your head.

Support for the manner in which students were led in their acquisition of the skills of a reflective practitioner emerged from the focus group analysis very strongly. All of the students identified the incremental nature of the level of critique expected as the study progressed as a significant contribution to the depth of analysis and their competence to engage in critical discourse related to their practice.

Susan:

The model for scaffolding reflection was good. It helped us think about what was happening in the lessons. I think that if we had been given this model on day one, we would have run a mile. The way the pointers were added in was good...now we have a good list of things to think about when we look at how we teach.

However, there were difficulties with some of the expectations for reflection that were associated with the different lenses. The issue of the quality of student engagement proved to generate much discussion and debate, which indicated the students' level of reflection in relation to this key issue. The high inference nature of this aspect of lens 3 highlighted the contested nature of many aspects of classroom practice as revealed in recent national and international debate in relation to teacher competencies that is evident in the literature related to teacher effectiveness.

In general, students were very positive about their involvement in the study and there was broad agreement that video analysis and specifically peer videoing should be a compulsory part of the Post-graduate Diploma in Education course.

Declan:

It was just unbelievably great. We felt that it should be a required element for everyone...we

were lucky to get the opportunity... we might not have thought so at the start but we were.

A significant strength of the particular model used in this study was that it was independent of assessment. Students were strongly of the view that any form of assessment of this particular activity would have negatively impacted on their engagement with the whole process, reducing the quality and value of the reflective dialogue.

Paul:

But one major caveat—not to be assessed on it

Stephanie:

Oh totally

Paul:

That would be a problem. Assessment—then it's a different ballgame

There were a number of issues that impacted on the quality of student experience in the study, principally at a practical and technical level. At a practical level, the principal challenges included added stress in relation to the preparation of the lesson and the impact of the video in the classroom on pupil and teacher engagement and behaviour. The technical and logistical issues included lack of time to set up equipment and occasions where the technology failed.

Frank:

I have to say I was a little preoccupied with the video and often found myself looking across at it to check the red light was on and it was indeed recording. I know that on Kate's first attempt the class didn't record and I wanted to be sure that it was working in my case.

Some student teachers noted that they felt under scrutiny as a result of a video in their classroom and hence performed differently. They also identified the fact that the pupils in their classes were often more subdued and hesitant in their interactions with the result that there was a sense of artificiality surrounding the lesson recorded.

Kate:

Like your class they were exceptionally good but I think at times the children felt a bit uncomfortable and Frank (student teacher) felt he was a little bit restricted and restrained in his class because he didn't react as strongly to misbehaviour as he would have normally done.

This is a very distinct limitation arising from the irregular use of video to record and analyse classroom activity that could be addressed by a more prolonged and extensive experience of the use of video in classrooms.

8. Conclusion

The findings of this study indicate clearly that the use of peer videoing in the classroom has a powerful function as a catalyst for reflection and critical dialogue among student teachers. Over the course of the study, students demonstrated tangible evidence of the development of reflective skills working in the context of a community of practice. The community of practice model was chosen because it had the potential to be student-led, democratic, developmental, inclusive and sustainable, each of which was considered essential to the fostering of a climate of reflective practice. It was seen as a viable paradigm around which student teachers could acquire the habit of genuine and critical reflection and develop as 'reflective enquiring professionals' (Whitehead & Fitzgerald, 2007, p. 5). It was also considered an appropriate model for encouraging student teachers to take ownership over their critical development, a key objective of the research. Despite the success of this study, however, a number of challenges emerged over the course of the year, which would have implications for the wider application of this research. Firstly, it must be recognised that despite the high levels of reflection witnessed across this sample of students, there remains, in the Irish education system in particular, few if any structural opportunities for continuous professional development which would allow for continued support for such work (Harford, 2008). Hence, the tendency of student teachers to revert to safer and more traditional teaching styles with limited reflection must be signposted (Zeichner & Gore, 1990). In particular, the absence of a national system of induction, whereby newly qualified teachers receive structured induction support, with designated time and support given over to reflective practice, is a critical stumbling block. Secondly, the use of video in the classroom presents teachers and teacher educators with a number of challenges of a practical and particularly of an ethical nature (Ellis, 2001; Hoban, 2000). In the Irish context, there is a lack of clarity and an absence of ethical guidelines around the use of video in the classroom, which increasingly impacts on the capacity of university education

departments to engage in this activity. In this study, the partner schools where students were on teaching practice were willing to work with the university education department to allow the potential of this model to be explored in the interest of fostering critical dialogue and reflective practice. It is unlikely that such co-operation would be available across the board to the university and therefore any development of this model would need to be supported by more robust policies and protocols. Finally, a key challenge for all teacher educators is to find a legitimate place for reflective practice in the culture of performativity that is increasingly becoming a part of the culture of schools and the professional discourse of the education sector generally (MacRuairc & Harford, 2007). This issue, we would argue, is the most critical issue facing teacher educators in their efforts to promote and sustain a culture of reflection.

Looking to the future, two principal areas for further research emerged from this study. Firstly, as identified by the student teachers who participated in the study, there is a need to explore the use of video in the continuous professional development of teachers. This links into a second related area for further research, the need to empower schools to use video as a means of engaging in critical dialogue and reflective practice. As this small-scale study illustrated, video analysis of regular classroom activity is a powerful medium for capturing the complexity and immediacy of the classroom. Used effectively, it empowers teachers working in communities of practice to examine and critically evaluate a wider spectrum of practice, ultimately leading to the development of a more open, dynamic, and effective teaching and learning environment.

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