Enabling and Encouraging Student Teachers' Reflective Capabilities through Programme Saturation

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Abstract

The practice reported on in this study is that of programme saturation. This is defined as employing a number of actions and activities in a programme of study to aid students learning one or more concepts. While the main reason for engaging in the practice of programme saturation was to enable student teachers' learning specifically, it enabled and encouraged their reflective capabilities. The five saturation activities and the reflective capabilities they engendered are outlined and discussed. The discussion includes literary and empirical data. Teacher educators are encouraged to utilise programme saturation not only as a means of enabling and encouraging student teachers' reflective capabilities, but as an opportunity to provide authentic learning experiences, to demonstrate various aspects of reflective teaching, and to open dialogue about reflective pedagogy.

Keywords*:* Saturation; Teacher Education; Reflective Teaching; Student Teachers; Social learning theory

The concept of saturation is not normally associated with teacher education programmes, but rather, subjects such as physics, business and chemistry. These disciplines provide unique definitions for saturation. For example, in photography, it is used to denote the intensity of a colour expressed as the degree to which it differs from white and in chemistry, it is the extent to which a chemical is dissolved or absorbed compared with the maximum possibility. While there are differing definitions, the common feature is that they all indicate a state or process of providing a large number of products or pouring in a large quantity of liquid that cannot be absorbed or added (Encyclopedia.com, 2018). There are positive outcomes to saturation. For example, when this occurs in business this means the company has grown in its sales or services in a particular market (Investopdia.com, 2018). The lack of association between teacher education and the idea of saturation is highlighted by the paucity of literature which connects the ideas. A search of the terms Teacher Education and saturation on the ERIC database returned only 2 articles. Both referenced data saturation and not programme saturation. This scarcity of literature suggests the unique nature of the practice being reported in this paper and indicates that this paper contributes to filling a gap in the literature.

Saturation, as used throughout this paper, refers to employing a number of actions and activities in a programme of study to aid students learning about and to become reflective teachers; a perennial and worldwide topic. See, for example, the work of Ghaye and Ghaye (1998) United Kingdom, Cole (1997), Canada; Hatton and Smith

(1995), Australia; Zeichner and Liston (1996), United States; Day (1999) United Kingdom; Farrell (2001), Singapore and Hyrkas, Tarkka and Ilmonen (2001) Finland. It is by engaging in reflective practice that the practice of teaching is improved. This is because a reflective teacher is involved in examining, framing, attempting to solve dilemmas of classrooms and schools, and asking questions about assumptions and values he/she brings to teaching. It also involves attending to the institutional and cultural context in which they teach, taking part in curriculum development and being involved in school change (Zeichner & Liston, 1996). Reflective teaching also demands that teachers employ and develop their cognitive skills as a means of improving their practice. They should be able to recall, consider and evaluate their teaching experiences as a means of improving those in the future (Farrell, 2001). Reflective teachers need to develop and use self-directed critical thinking and ongoing critical inquiry in their practice, initiated by them and not administratively decreed. This results in the development of contextualised knowledge (Cole, 1997; Hyrkas et al., 2001). Reflective teaching demands that teachers use and develop their effective skills as a means of improving their practice. They use their intuition, initiative, values and experience during teaching, and exercise judgement about the use of various teaching and research skills (Minott 2009).

Referring specifically to the concerns of this paper, saturation activities include: The idea of reflection being prominently featured in the philosophical statement which guides the programmes; lecturers talking about and modelling elements of reflective teaching; developing and implementing a reflective approach to student observational practicum

and debriefing exercise; reflective teaching being a core curriculum module in the programmes and implementing teaching activities which utilised elements of reflective teaching. These actions and activities will be discussed later in this paper.

For the developers of teacher education programmes in which I was involved, the main reason for engaging in the practice of programme saturation was to enable student teachers' learning—learning which could be displayed not only in changes to their cognitive and affective skills, but as a product of their interaction with the study environment (Jarvis, 1996; Merriam and Caffarella, 1999). For the student teachers in the programmes, the actions and activities used to saturate the programme, those they observed, and in which they participated, constitute their learning environment. Merriam and Caffarella (1999) noted that this way of thinking about learning is linked to social learning theory which posits that in addition to the behavioural and cognitive aspects associated with learning, people also learn by observing what takes place in their environment. It is my contention that by saturating teacher education programmes with actions and activities central to the development of student teachers as reflective practitioners enabled and encouraged their reflective capabilities, which include developing cognitive and affective skills, taking initiatives, using intuition, and examining and utilising personal values and assumptions they held about teaching (Minott, 2009).

The practical application of programme saturation

As indicated in the foregoing discussion, the following actions and activities related to reflective teaching were used to saturate the programmes in which I was involved: the

idea of reflection being prominently featured in the philosophical statement which guides the programmes; lecturers talking about and modelling elements of reflective teaching; developing and implementing a reflective approach to student observational practicum and debriefing exercise; reflective teaching being a core curriculum module in the programmes and teaching activities utilizing elements of reflective teaching. I use these saturation activities as a template for this section of this paper and to display how the saturation process enabled and encouraged student teachers' reflective capabilities.

Saturation activity 1: The idea of reflection is prominently featured in the philosophical statement which guides the programmes.

The philosophical statement which guided the programmes at the College states, 'The Department of Teacher Education is committed to the preparation of caring, critical, and reflective professionals who are academically strong, pedagogically skilled, and responsive to the needs of our diverse society (University of the Cayman Islands' Teacher Education Department Practicum handbook page 2). The inclusion of the phrase 'reflective professionals' helps student teachers to 'grasp' the idea that, in addition to other qualities, such as being caring and critical, reflection and reflective teaching occupy a prominent place in the programmes. This 'grasping' or learning occurs when they read the statement in the college brochure, when it is referenced and quoted by members of the faculty at various times, when it is featured prominently on websites and on the physical notice boards in the department, and when members of faculty use the statement as a guide to justify the production and utilisation of reflective strategies and activities. This action of prominently featuring the idea of reflection in the

philosophical statement which guides the programmes became a part of the department's hidden curriculum, from which the student learned. This so because Jerald (2006) notes that, among many things, the hidden curriculum indirectly conveys through written words and actions: attitudes, knowledge, and behaviours that are learned by students.

Saturation activity 2:   Lecturers talk about and model elements of reflective teaching.

The Association of Teacher Educators (USA) (2003) identifies modelling of teaching and ideas that student teachers are expected to grasp, as the number one standard expected of accomplished teacher educators. The point was made that effective modelling of desired practices (by teacher educators) is central to successful teacher education programmes at all levels.

A student teacher had this to say about my talking about and modelling elements of reflective teaching in the modules that I taught.

> 'Dr. Minott took pride in clarifying points and bringing messages across in every context; this, I thought, was extremely important to cement all lessons taught. The course was taught effectively and reflectively.… Yes, there were always relevant examples used and points that were easily understood. Multiple methods of delivery [were used] for the presentation of lectures which made them again easy going… '(Student's response to module evaluation form)

While this student helps to verify that the course was taught utilising elements of reflective teaching— the actual quotation, and the fact that the student thought about, and was able to articulate this in writing— is an indicator of the utilisation of reflective capabilities and a display of what was learned. Primarily, the student had developed or reinforced the ability to observe, think critically, analyse and formulate a cohesive response to various questions. These are indicative of the ability to reflect (Minott, 2009).

Saturation activity 3: Developing and implementing a reflective approach to student observational practicum and debriefing exercise.

Observations of the teaching of student teachers are integral aspects of most teacher education programmes worldwide. Usually, this involves student teachers observing a mentor teacher and the student teacher being observed by a mentor teacher and/or the university teacher educator. This process can take a number of forms: peer observations and the use of digital video recordings. I employed a reflective approach to this exercise with student teachers in the programmes at my former college (Minott, 2012). The approach combined elements of reflective teaching—in particular, reflection-on-action—with student teachers' practicum debriefing tutorials. The philosophical underpinning for this exercise is a combination of the idea of reflection-on-action (Schön 1983) and the thought that reflective teaching must involve not just the questioning of teaching techniques but the teacher's goals, values, beliefs, assumptions about teaching and the teaching context (Zeichner & Liston 1996). The approach encouraged

student teachers to reflect on their actions and those of their mentor teacher observed during practicum exercise in schools.

Four questions were employed during debriefing sessions:

1. What is your feeling regarding observation?
2. Has the observation caused any changes in your beliefs, values and assumptions about teaching?
3. What have you learnt about teaching?
4. What have you learnt about 'self' as a teacher?

An analysis of students' observation debriefing transcripts points to the fact that the reflective approach to observational practicum and debriefing resulted in students not focusing only on observing the techniques and methods of teaching, or on the daily issues teachers face in their practice (as important as those are), but also on considering 'self as teacher' in relation to the teaching practice experience (Minott, 2012). This idea is demonstrated in the following student teacher's response:

'I enjoy teaching; I know I can do it because I have fun lessons. It is important for me to get more information. I know I can teach but I need to learn more about the topics I will teach before I go into the classroom.' (Kerry)

'I have a passion for teaching. I am consumed with my students' welfare. Teaching gives me a sense of self-worth. I am working on my patience though. I think I show

students how I care. I am also self-confident and know when to "put my foot down.

'(Tory)

This consideration of 'self' as a teacher is an integral aspect of being and becoming a

reflective practitioner and is critical to teachers' professional growth.

Saturation activity 4: Reflective teaching is a core curriculum module in the

programme

Reflective teaching has a worldwide appeal, and a module in reflective teaching is now

a common practice in most universities or colleges of teacher education. The main aim

of the module at the college was to help student teachers to develop an understanding

of the elements of reflective teaching and to be able to apply these to their own

teaching. The success of this can be seen in the detailed comments of two student

teachers:

'At this time in the programme, I am on my way to being a more reflective

teacher/individual. I have learnt to view [situations] from a critical standpoint,

having a level of openness, self-awareness and knowledge of self and a

willingness to see things from another's perspective. I have become more aware of

self, the social context in which I teach, the students and basically all the various

tangents that extend from the nucleus of education. I have learnt to question the

effectiveness of any method of teaching I employ and to take into consideration

the different barriers that would cause me to be less reflective. I have adopted an

evaluative mind whereby I can question, use the knowledge I have gained

professionally as well as personally, and apply new concepts to the teaching

learning process. I can analyze my [teaching] strategies, the students' reactions and create a classroom that fosters effective learning and teaching.' (Rose, B.Ed. student final reflective paper).

'I have gathered immense information on reflective teaching and have really grown in this area. I am now a far more reflective person than I was a few months ago, prior to my engagement in this programme. I have grown in knowledge of self-experiences, passion, emotion, technical knowledge and practical knowledge. This module has turned the search light inwards and caused an examination of how I have allowed my experiences, teaching knowledge and emotions to impact whether positively or negatively on my tasks as a teacher. It has also deepened my understanding of why I react and solve problems in the classroom [the way I do] and provide alternative ways of dealing with issues in the classroom.' (Otto, B.Ed. student final reflective paper).

These quotations were written in what was the students' final year, i.e. their third year of the programme, reflect an advancement in their ability to self-reflect—which is a central aspect of the reflective teaching process.

Saturation activity 5: Teaching activities utilise elements of reflective teaching

Reflective Journalling and allowing students to reflect on personal beliefs about reflective teaching were facets of this saturation activity. Student teachers in the programmes were encouraged to keep a reflective journal, normally over the period of a school term. They were expected to record significant teaching episodes and

occurrences they experience in their local schools. Three questions were used to guide journal entries: 'What happened or occurred?' 'How did you feel about the happening or occurrence?' and more importantly, 'What did you learn from the episode or occurrence?'

Journals were evaluated using Valli (1997) typology of reflection: technical, deliberative, personalistic (reflection-in and on-action) and critical reflection. The underlying idea of using reflective journalling as a teaching tool is that engaging in the process encourages the improvement and development of reflective teaching and reflective practitioners. Reflecting on personal beliefs about reflective teaching was the other facet of this saturation activity. Student teachers involved in the module on reflective teaching were asked to provide answers to three questions at the beginning and at the end: What is your assessment of your own reflective thinking/teaching at this time? What are the moral principles that guide your judgments? What do you need to work on and develop in order to become a more reflective thinker/teacher? These activities accomplished two things: One, they encouraged students to reflect and articulate in writing their beliefs about reflective teaching. Two, it encouraged them to think about ways to improve their reflective capabilities.

Conclusion

Firstly, the saturation of the programmes influenced directly and indirectly what the students learned about being and becoming reflective practitioners. Among many things, it made them more self-aware, which is a critical aspect of reflective teaching.

Cole (1997) and Minott (2010) support this idea when they made the point that reflective teachers are self-aware and self-directed critical thinkers who are concerned with inquiry into personal practice. Secondly, while the use of the individual saturation actions and activities outlined in the foregoing discussion enabled and encouraged student teachers' reflective capabilities, it is their combined use which resulted in the total saturation of the programmes with the idea of reflection and reflective teaching. This is so because, by definition, to achieve saturation requires a process of providing a large number of products or pouring in a large quantity of liquid (Encyclopedia.com, 2018). Thirdly, while the practice of programme saturation enabled student teachers to develop their reflective capabilities, it goes further than this by providing the opportunity for teacher educators to offer authentic learning experiences, to demonstrate various aspects of reflective teaching, and to open dialogue about reflective pedagogy. These are aptly demonstrated via students' data highlighted throughout this paper. I would, therefore, encourage teacher educators to use programme saturation as a means of enabling and encouraging student teachers' reflective capabilities and ultimately their learning.

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