

**REFLECTION: JOURNALS AND REFLECTIVE QUESTIONS
A STRATEGY FOR PROFESSIONAL LEARNING**

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‘Reflection: Journals and reflective questions: A strategy for professional learning’.

Abstract

Reflective journals have been used widely in teacher education programs to promote reflective thinking (Freidus, 1998; Carter & Francis, 2000; Yost, Senter & Forlenzo-Bailey, 2000). Smyth (1992) advocated that posing a series of questions to be answered in written journals could enhance reflective thinking. It was for this reason that reflective responses to directed questions were introduced in 2002 and subsequently in 2003 in the Bachelor of Education 4th year primary internship program at the University of Western Sydney, Australia. The internship program provides a sustained ten-week period of time in a school that affords student teachers the opportunity to examine their practice in an authentic setting of teaching. The purpose of the study undertaken with these students in the internship program was to examine what evidence of the students professional learning was provided by the internship reflective journal. A framework of professional learning described by Dietz (1998) was used as the foundation for the analysis of the student’s professional learning. This paper describes the process undertaken to assist internship students to understand the reflection process and their responses to reflective questions. These responses are analysed in relation to the internship students professional learning using the Professional Learning Cycle described by Dietz.

Introduction

In the Internship at the University of Western Sydney the student teachers are given the title of Associate Teachers to distinguish them from students undertaking a practicum. This title acknowledges the change in the role of the student teacher in that they are unsupervised in the classroom and take on the full responsibility of a teacher. The supervising teacher in the internship is called the colleague teacher, which acknowledges their changed role in that they have become a mentor to the internship student.

The purpose of the study was to examine what evidence the internship reflective journal provided of the associate teacher’s professional learning and if there was this evidence whether it followed categories of learning, which Dietz describes as the Professional Learning Cycle. The Professional Learning Cycle is discussed and any learning by the associate teachers is analysed in relation to the four levels of development categorised by Dietz.

Scribner, (1998) reveals that beginning teachers “need to be autonomous learners with a deep commitment to continued professional growth and development (p.4)”. How then do these inexperienced teachers continue their professional learning and what factors can contribute to and enhance this learning? This study aimed to investigate the practice of reflection as a powerful and effective means to promote student teacher professional learning.

The Literature

Professional Learning: An Historical Background

Any discussion about professional learning needs to be prefaced with a definition of learning. However, the act of defining learning is a complex task. Smith (1982) points to the complexity of defining learning as

It has been suggested that the term learning defies precise definition because it is put to multiple uses. Learning is used to refer to (1) the acquisition and mastery of what is already known about something, (2) the extension and clarification of meaning of one's experience, or (3) an organized, intentional process of testing ideas relevant to problems (Smith, 1982, p.34).

From the many definitions of learning (Dewey, 1933; Boyd, Apps and Associates, 1980; Kolb, 1984; & Brookfield, 1986; Mezirow & Associates, 1990 & Boud, 1993) Knowles, Holton 111 and Swanson (1998) have summarized key components of definitions of learning. These components included change; learning as a process; natural growth; development fulfillment of potential; personal involvement; self initiated learner evaluated, independent learning

It was not until after World War 1 that theory of adult learning became apparent. Lindeman (1926) strongly influenced by the work of John Dewey laid the cornerstones for a theory of adult learning. Lindeman advocated, "adult education is a process through which learners become aware of significant experience. Recognition of significance leads to evaluation" (1926, p.1691). Some of Lindeman's key assumptions regarding adult learning were identified as adults are motivated to learn as they experience needs and interests that learning will satisfy; experience is the richest source for adults' learning and adults have a deep need to be self directing. From the time that Lindeman stated that adults learn through experience many others have recognised the value and contribution that experience has on influencing adult learning.

In 1967 the term andragogy was introduced by a Yugoslavian adult educator, Savicevic who differentiated adult learning or andragogy, from children's learning, or pedagogy. The andragogical model of learning is based a number of assumptions including: the need to know, the learner's self-concept, the role of the learners' experiences, readiness to learn and orientation to learning. Savicevic's model provided a conceptual framework of adult learning that was not previously evident.

Bandura (1970) and Vygotsky (1978) emphasised the importance of the learner's social context to learning. They believed that learning occurs through observation and modelling. Mezirow's (1990) transformation theory described learning as the process of learning through critical self-reflection. He stated that learning is the process of using a prior experience to understand a new or revised interpretation of that experience in order to guide future action. Kolb, (1984); Boud, (1993) and Dietz, (1998) identified learning as a cyclic model. These three models of learning will be discussed in this paper to examine learning through experience and through reflection.

My understanding of professional learning is grounded in Dewey's philosophy (1938, 1966) that we learn from experience and reflection on that experience. Dewey (1966) has described the act of learning as "one of continual reorganising, reconstructing [and] transforming experience" (p.50). This paper relates learning to a person's experiences and the sense that is made of that experience for future action.

Identifying the Professional Learning Cycle

From the review of the literature undertaken on adult learning three models of learning have been identified which describe learning as a cycle. (Kolb, 1984; Boud, 1993 & Dietz, 1998). Kolb's well-known model of experiential learning consisted of a four-stage cycle. He argued that learning starts with the learner's experience. This experience is then reflected upon and the learner tries to make sense of the reflection and forms generalisations about the

experience. A learner in the fourth stage of Kolb's model tries to apply these generalisations to new situations. Likewise, Boud (1993) proposed a three-stage model of learning. The stages included the preparation for the experience, the experience, and then reflection on the experience. Dietz (1998) describes the professional learning cycle as the "translation of learning theory into cycles of professional development" (p. 129), which provides the means to make the connections between theory and practice. Each of these models identifies reflection as a significant part of the learning cycle.

This research aimed to identify whether reflective questions promoted professional learning. As an analysis tool, Dietz's levels of learning were used to validate if professional learning by the associate teachers could be identified and translated into these levels of learning. Dietz explains the professional learning cycle as consisting of four levels. Key characteristics are indicative of each of the levels she has identified. Although Dietz specifically discussed the learning cycle as it related to learners (teachers) it would seem that it could be applied to the associate teachers in the internship program as they have taken on the role of a full-time teacher. Dietz does, however, make the point that learners move through the learning cycle at different rates depending on the learner's prior knowledge and set of previously acquired skills.

In the first level of exploration identified by Dietz, key characteristics are described as 'learning the territory', inquiring about a specific focus in the learner's teaching, assessing information, observing students and listening to others. The learner then moves to the next level, that Dietz described as organisation. At this level the learner starts to make sense of things in the workplace such as practising routines, putting procedures in place, recognising pedagogy and learning theories in their day-to-day practice of teaching. It is at this level that the teacher-learner begins to place things in sequence and starts to make sense of the teaching/working environment. In the third level described by Dietz learners begin to make the connections between one teaching situation and another. It is in this level of learning that the learner begins to move out of the constraints of a plan and modifies and alters plans to accommodate student needs. Reflection is the fourth level of professional learning described by Dietz. At this level the learner makes informed decisions based on the ability to reflect on their practice and respond to issues emerging from this reflection. Teaching responses are made based on these reflections.

To examine if professional learning could be identified through the internship reflective journal a review of the literature pertaining to reflection, in general, and specifically to reflective journals was undertaken.

Reflection and Journals

Dewey (1933) is viewed as the originator of the concept of reflection in the twentieth century. Dewey believed that reflection was a deliberate cognitive process, which addressed problem solving before a solution was reached.

Reflection has continued to be a popular area for research for the last seventy years. Schon (1987) identified three types of reflection; reflection-on-action, reflection-in-action and reflection-for-action. Smyth (1992) commented on the relationship between reflection and knowledge and developed a four stage sequential model of reflection to describe, inform, confront and reconstruct experiences. Lieberman and Miller (2000) assert that through reflection educators gain personal and professional knowledge. Fenwick (2000) from a constructivist viewpoint argues that a "learner is believed to construct through reflection, a

personal understanding of relevant structures of meaning derived from his or her action in the world” (p.248).

Over the last five years the practicum and internship have received attention by researchers. This attention, informed by educational theories, is an attempt to understand the learning conditions in which student and beginning teachers gain the maximum benefit of professional learning. Ryan, Toohey & Hughes (1996) identified as crucial to the optimum learning condition for student and beginning teachers was the opportunity to reflect on or to examine their experiences. Grossman and Williston (2001) also were interested in investigating how undergraduate students are prepared to use reflection to guide their current and future understanding of their teaching and learning. They believed that through their studies reflection enabled students to develop a deeper understanding about children, teaching and themselves and this reflection, in effect, contributed to professional learning (p. 236).

Journals have been widely used in teacher education as a strategy to promote reflection (Freidus, 1998; Carter & Francis, 2000 & Yost, Sentner & Forlenza-Bailey, 2000). Friedus (1998) in her research on reflection states that “...students learn to look for patterns and connections within and among the educational experiences they have found meaningful for themselves and their students” (p.56). Martinez (1993) also argues that teacher education needs to engender critical reflective professionals who learn to construct and shape the complex patterns and factors that influence and impact upon their teaching practice.

In a study undertaken at the University of Western Sydney, Macarthur in 1995, 35 students responded to a questionnaire on the impact of reflective journal writing. Sinclair & Woodward, (1997) stated in their findings from this study that forty percent of the “students answering the questionnaire reported that journal writing affected their own learning most commonly by encouraging reflection upon that learning and their experiences and developing their ability to think more critically” (p.53). This study also found that students reported “an increased awareness... of their own learning or of their own strengths and weaknesses” (p.53). Sinclair and Woodward concluded from this study that reflective journals promote professional development of student teachers, enables student teachers to make links between theory and practice and encourages them to evaluate their teaching performance.

Ducharme and Ducharme pointed to the fact that little research had been conducted on the outcomes achieved through reflective journal writing. Sinclair and Woodward (1997) supported this view when they noted “the effect of reflection and reflective journal writing upon the development of student teachers as reflective practitioners is [not] clear” (p.51).

Given that there is little research documented in the literature to support the view that reflective journals can promote professional learning this study at the University of Western Sydney, Penrith is both timely and significant. This research adds to this field through the analysis of the reflective journals as a strategy that promotes professional learning.

The Internship In Teacher Education

The internship is a model of transition from professional education to fulltime work and is found in a number of professions, including teaching and medicine. Internships have been introduced worldwide into teacher education programs to prepare “beginning teachers to the realities of the school and classroom” (Johnson, Ratsoy, Holdaway & Friesen, 1993, p.297). The internship is seen as the bridge between university training and admission into qualified and paid employment. The internship provides an opportunity for associate teachers to

critically assess their teaching and reflect on their practice over an extended period of time. This extended period of time in a school situation and the opportunity to teach unsupervised provides the associate teacher with teaching experiences not available in 'normal' practice teaching situations. One of the greatest benefits of the internship is the opportunity it provides for associate teachers to practice sustained and continuous responsibility for students in their care.

Hatton and Harman (1995) provide a comprehensive account of internship models worldwide. Models of internships in Canada and the United States have involved time periods from ten weeks up to a year, reduced teaching loads and mentor support. Most of these programs have been supported with Master's level coursework. In Australia and the United Kingdom the internship has been aligned to practicum or field experience in initial teacher education. A changed role of the teacher and associate teacher is usually acknowledged in these programs, particularly emphasizing the assistance and support provided by the teacher. In many Australian institutions, including the University of Western Sydney, the internship was developed to enable students to upgrade from a three-year degree to a Bachelor's degree or four year degree.

Hatton and Harman (1995) describe the key features of an internship program as an extended placement in the workplace prior to full-time teaching. Internship programs provide a variety of teaching skills such as program planning and implementation, classroom management, professional learning and curriculum development Associate teachers are nurtured through a close mentoring association with a more experienced teacher. Associate teachers are afforded the responsibility of undertaking teaching without the presence of another teacher in the classroom while at the same time being supported in their transition into full-time teaching by the close association they have with their colleague teacher.

In a 'Statement of Principles of Internship' (1999), the New South Wales Department of Education and Training refers to the internship as "an in-school placement of a student teacher who:

- is undergoing full-time further study in teacher education at a university
- has completed content and methodology courses which meet the employer's minimum requirements for teaching
- has demonstrated successful teaching practices in a developmental field experiences leading to the internship
- is approved to teach a class without the presence of a supervising teacher".

Reflective practice becomes an important component of the associate teachers learning as they begin to take on the full role of the teacher without the constant supervision and feedback provided by a supervising teacher.

The Internship and Reflective Practice at the University of Western Sydney

The internship at the University of Western Sydney is part of the Bachelor of Education Primary Program and the internship is conducted in the fourth year of this program. The in-school component of the internship occupies the third term of the school year. The colleague teacher is relieved from teaching for three days per week to take part in negotiated educational projects within their school. Associate teachers experience a modified introduction to teaching designed around reflection on the characteristics of teaching via action research, reflective questions and reflections on teaching practices.

The Reflective Process in the B.Ed Primary Internship at the University of Western Sydney
In the Bachelor of Education Primary Internship Program at the University of Western Sydney reflection is seen as a critical catalyst to the cultivation of professional learning.

There are four stages in the process:

- **Stage 1 Semester one**
Preliminary meetings of associate teachers prior to placement in schools.
Initial focus questions posed.
- **Stage 2 Semester 1**
Week 5 meeting with Associate and Colleague Teachers
- **Stage 3 Term 3 of the school year**
Week 3 of the internship period in school
Revisiting the focus questions and reflective dialogue with the associate and colleague teacher
- **Stage 4 Term 3 of the school year**
Week 8 of the Internship period in schools
Reflective discussion in a collegial environment

Method

A qualitative paradigm was used in this study, which extended over a twelve-month period. Specifically, within the qualitative paradigm an interpretive methodology was used. “Interpretivists see the goal of theorising as providing understanding of direct lived experience... The interpretivist attempts to capture the core of these meanings” (Glesne & Peshkin, 1992, p.19). Interpretivist methodology brings understanding to lived experience. This study aimed to make meaning of Dietz’s levels of learning and how these levels of learning could be interpreted into the lived experience of the associate teachers in their internship.

Participants

Ten of the thirteen associate teachers who were in their fourth year of the 2002 B. Ed Primary internship gave their consent for their reflective journal and verbal responses to be part of this study. There were nine female and one male participant with ages ranging from twenty two to thirty five years. The associate teachers were identified by pseudonyms to protect their confidentiality in the study.

Data Collection

The core of this study was to examine associate teacher reflections through reflective questions. The data for the research was drawn from three sources; responses to focus questions, specific reflective questions in journal responses correlated to Dietz levels of learning and shared group reflective discussion.

1. The focus questions were introduced as a strategy to engage associate teachers in thinking critically about their hopes and dreams for their desire to complete the internship. They were:
What are your expectations of the internship program?
What do hope to achieve from the internship?
How will you know if you have attained your outcomes?

These focus questions were chosen, as they were questions that associate teachers needed to reflect upon in order for them to understand their feelings and reasons for undertaking the internship. The focus questions were also used to promote reflection at a later stage in the internship program to gauge any changes in thinking about the internship. The focus questions provided a critical tool for what could be described as

a preconception of the internship and later the realities of the “real” classroom environment.

2. The specific reflective questions posed by Dietz (1998) were selected for associate teachers to respond to in their journals as they provided the scaffolding for the analysis of the associate teachers’ responses in terms of Dietz’s professional learning cycle. The reflective responses to the questions were a compulsory component of the internship program but were not assessed because the associate teachers expressed personal feelings, emotions, beliefs and values in their responses.

Specific Reflective Questions

What are you currently observing in your teaching that is related to your interests as an educator?
What would you like to know more about or be able to do differently in your professional practice?
What are your theories about what the purpose of education will be in the twenty first century?
From my perspective the primary indicators of student learning are...?
My personal theory on how students learn is ...
At our school I am most proud of...
What new questions have emerged for you in regard to your teaching?
What have you learned about yourself as a learner?

3. During the internship the associate teachers revisited the focus questions and reflected on their practice. This stage also encouraged the associate teacher to reflect on and evaluate their lessons in detail to give insights and greater understanding to their teaching practice. Links between actions and outcomes were encouraged. It was during this phase that discussions were held between the colleague teacher and the associate teacher. During the discussions the associate teachers were asked to engage in professional dialogue with their colleague teacher about their progress and their ongoing professional learning. In this stage the associate teachers were supported in their attempts to be reflective by the guidance and assistance of their colleague teacher. Suggested areas for discussion at this meeting were recommended and included:
 - o the setting of specific goals by the Associate teacher and target dates for their achievement
 - o discussion of what had gone well to date in the internship
 - o discussion of areas that needed development and suggestions for how these could be achieved.
4. The shared group discussion was used as a strategy to foster reflection in a collegial and safe environment where the associate teachers shared their experiences and confirmed their practices with each other. There were no specific questions asked by the author at this meeting but rather the associate teachers and colleague teachers asked questions of the group. Questions were raised such as: What have you learnt from the internship?
What challenges have you met in the internship?
How have you reflected on your teaching practice during the internship?
What will you do differently when you begin teaching?

The act of reflection involved reviewing past events and reviewing set goals in order to improve professional learning and teaching practice. These meetings provided the opportunity for associate teachers to engage in discussions with their colleague teachers to inform their practice through critical reflection. The associate teachers were asked to challenge themselves if faced with difficult situations and reconstruct their practice based on discussions with their

colleague teacher. Associate teachers and colleague teachers gained insights into the issues confronted through their reflections. As a result of these meetings the associate teachers were able to modify their practice in light of their reflections.

Close to the end of the internship the associate teachers and colleague teachers shared their thinking about their practice in schools. There was shared responsibility between the University, colleague and associate teacher in a supportive environment for this focus group meeting and reflective discussion. In this collegial environment, shared group reflection was fostered. Overlapping experiences, confirmation of practices, reinforcement and gains in confidence were typical outcomes of this meeting.

Analysis and discussion of the data

The data was analysed using the following four strategies:

1. Professional Learning Cycle

The Professional Learning Cycle identified by Dietz was used as a framework for learning, was translated into a table by the author to illustrate the words and phrases that described each level of development in the professional learning cycle (Table 1).

Dietz described four levels of professional learning. This four level model of learning prescribed by Dietz illustrates the levels and the specific indicators typical of each level. It is a model of continuous learning as teachers strengthen their understandings of their teaching. Within each level she has identified words that describe each level. These words and phrases are depicted in Table 1.

Table 1

Words and phrases identified by Dietz as typical of Levels of Professional Learning

Dietz's Levels of Learning	Words that describe each level of learning
Exploration	Exploring ideas
	Inquiring about a specific focus
	"Learning the territory"
	Assessing information
	Observing students
	Listening to others
Organisation	Practising routines
	Putting in place procedures
	Recognising pedagogy and links to practice
	Placing events in sequence
Connection	Making connections between one teaching situation and another
	Interpreting, modifying, and altering plans to accommodate student needs
Reflection	Making informed decisions based on reflection
	Teaching responses are based on reflection

2. Responses to the focus questions

Each participant's focus question responses were read and key phrases and words in the responses were recorded for each of the questions. The associate teachers' responses could be grouped into themes for each of the questions. The responses from the associate teachers were collated with the number of similar responses identified and tallied (Table 2).

Table 2**Associate teachers' responses to the focus questions**

What are your expectations of the internship?	What do you hope to achieve from the internship?	How will you know you have attained your outcomes?
Learn school organization, routines and administration (6)	Improve classroom confidence (5)	Reflective journal (2)
Learn to be flexible (1)	Implement more appropriate management (2)	Talking to colleague teacher/mentor (5)
Learn about pressures on teachers (1)	Improve content knowledge (1)	Response of students (4)
Learn to manage classrooms on my own (4)	Adapt teaching practices to needs (2)	Ability to manage time (1)
Develop teaching practice (2)	Improve teaching skills and strategies (5)	Compare myself to other teachers (1)
Work collaboratively with colleague (2)	Balance personal and teaching life (1)	Personal reflection (3)
Develop personally (1)	Meet students', staff and parents' needs (2)	Observing feelings of self esteem and personal satisfaction (2)
Develop skills in assessment (1)	Develop research project for future career (2)	Evaluating the meeting of set outcomes (1)
Behaviour management (2)	Perform as inspirer for students, staff and parents (1)	
Relationships with staff and students (2)	Develop programming and assessing skills (1)	
Program development (3)		
Meet students' needs (1)		
Interactions with children (1)		

The focus questions revealed that the levels of professional learning by the associate teachers at the early stage of their internship were centred on exploration and organisation. Within the Level of Exploration (described by Dietz) the associate teachers were inquiring about a specific focus such as learning about managing their classrooms. The associate teachers in their responses to the first focus question on their expectations of the internship indicated that they wanted to learn about school organization, routines, administration and learn to manage their classroom on their own. Improved classroom confidence, teaching skills and strategies were commented on by the associate teachers as the areas they hoped they would achieve during their internship. The associate teachers indicated that they would know they had attained their outcomes through reflection, through talking with their colleague teacher and through the responses they received from their students.

Initially, I was trying to locate particular words as identified by Dietz in the text of the associate teachers' journal responses. This task of trying to locate specific words proved unsuccessful. What did prove successful, however, was the identification of statements in the responses that illustrated the meaning more fully than the singular word/s identified by Dietz. The words and phrases used by the associate teachers did not correspond exactly to the words identified by Dietz. In my analysis I have interpreted the associate teachers words to show the meaning intended by Dietz. The associate teachers' statements typical of the Dietz's levels of professional learning are depicted in Table 3.

3. Associate teacher journal statements that conceptualised Dietz’s specific levels of development

From the associate teachers’ journal responses, statements were identified that conceptualised the words and phrases identified in table 1 that described a specific level of development in the professional learning cycle (Table 3).

Table 3

A summary of associate teacher journal responses to the specific reflective questions that conceptualised the words and phrases identified in Table 2 in the professional learning cycle.

Dietz’s Levels of Learning	Associate teacher statements that describe these levels of learning
Exploration	
Inquiring about a specific focus	“I hope to achieve a feeling of confidence in managing a classroom on a day to day basis”
	“I expect I will learn a lot more about classroom management”
	“I also hope to acquire more classroom management techniques”
“Learning the territory”	“To learn how to be a teacher in all aspects of school life such as correct procedures and adapting to school routines”

Organisation	
Practising routines	“To gain experience in all aspects of teaching, daily planning and organisation...and school organisation”
	“Help me to learn about how the school functions”

Connection	
Interpreting, Modifying, and altering plans to accommodate student needs	“To implement and improve different teaching strategies in my teaching practices and see how they affect students and therefore how I will adapt my teaching practices”.
	“I hope to hone my teaching skills...that best caters for the individual needs of my students”

Reflection	“I will personally reflect on my actions. I will evaluate my own achievement through the input from my colleague teacher. However, I believe that my own reflections...of the students and the learning experiences will give me the most insight”
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4. Synthesis of Associate Teachers responses to the specific reflective questions

From the journal responses from each of the associate teachers a general list of statements was collated from the whole cohort to reveal aspects of professional learning that occurred during the internship (Table 4). Table 4 indicates the areas that the associate teachers discussed most frequently in their journals. These areas have been applied to the levels of learning identified by Dietz.

Table 4

Summary of areas most frequently discussed in the associate teachers responses in relation to the specific reflective questions and the Levels of Learning identified by Dietz.

Dietz's Levels of Learning and words that describe each level	Summary of areas most frequently discussed in associates' responses (The number of associate teacher responses are indicated in brackets)
EXPLORATION	
• Exploring ideas	
• Inquiring about a specific focus	Learning about managing their classroom (3 associates)
• "Learning the territory"	Learning about routines, school organisation and administration (6 associates)
• Assessing information	
• Observing students	
• Listening to others	
ORGANISATION	
• Practising routines	Learn about school organisation and put into practise (6 associates)
• Putting in place procedures	Implement more appropriate classroom management techniques (4 associates)
• Recognising pedagogy and links to practice	
• Placing events in sequence	
CONNECTION	
• Making connections between one teaching situation and another	
• Interpreting, Modifying, and altering plans to accommodate student needs	Adapting teaching practices to meet needs of students (4 associates)
REFLECTION	
• Making informed decisions based on reflection	Evaluating meeting the needs of students and responding to student needs (5 associates)
• Teaching responses are based on reflection	

The associate teachers indicated in their journal responses that they wanted to know more about classroom management and managing the classroom without supervision and assistance of their teacher. They were particularly concerned about developing skills to build their confidence in this area. The associate teachers also had expectations that they would learn more about program development.

Their responses indicated that they were also 'learning the territory' as would be expected in the early stages of their internship. The associate teachers were 'learning the territory' by investigating school organisation, class routines and procedures. They indicated eagerness in their journal writing to learn more about these areas.

The associate teachers level of learning related to organization was also frequently written about in their journals. Their journal responses indicated that they wanted to practise both the routines of the classroom and the wider school community. The associate teachers typically discussed learning routines related to teaching, daily planning, school organization and functioning of the school. They were also putting into place procedures for the management of their classrooms. So, not only were they exploring how these organisational matters were structured but also they wanted to learn how to implement these practices and procedures.

The associate teachers also discussed the Level of Connection in the specific reflective questions. The journal statements indicated that they were aware of individual needs of students and they showed understandings through their reflections of the need to adapt their teaching practices to the needs of their students. The level of learning defined by Dietz as 'connection' saw the associate teachers move from the routinised aspect of learning to teach to their focus of making connections with the way they taught. They discussed in their journals the impact their teaching had on student learning and the outcomes achieved through their teaching. Journal responses also explained that the associate teachers were becoming more adept during their internship at catering for individual student differences by identifying appropriate teaching strategies for these students and modifying their teaching practices to best suit the needs of their students. A large progression is seen in this level of learning as associate teachers move beyond the routinised procedures they had previously been focused on such as managing their classrooms to interpreting, modifying and altering plans to accommodate their individual student's learning needs.

All of the associate teachers provided in depth responses to the questions they were asked to reflect upon during all stages of the internship. Their writings in their journal responses to the specific reflective questions revealed their values about education and learning. In particular, the associate teachers wrote about their own learning and the learning of their students. The responses were open and honest and revealed much about their inner feelings and thoughts and the beliefs they held about their teaching. They reflected upon teaching events and examined ways to improve on their teaching to better meet student needs.

Some of the indicators described in the levels of learning by Dietz were not evident in the associate teachers journal responses. However, this is not to say that another cohort of associate teachers would not discuss these other indicators in their reflective responses.

Summary of the Findings

This study has revealed that reflection implemented through a variety of strategies can provide evidence of professional learning. A synthesis of each of the strategies used, that is, focus questions, specific reflective questions and journal responses and shared group discussion revealed that the associate teachers followed to some extent a pattern of learning during their internship.

Dietz's four levels of learning provided a useful scaffold for identifying the learning that was evident by the associate teachers during their internship. During the early stages of the internship the associate teachers' learning was focused on the levels Dietz described as exploration and organization. Initially, the associate teachers were concerned about learning how to manage their classrooms. One of the greatest areas of concern for the associate teachers was to learn how to manage their classroom on their own without the presence of their colleague teacher. For many of the associate teachers managing a classroom and improving their classroom confidence was one of their greatest challenges. They were also keen to learn about school and classroom routines and procedures.

Once the routinised aspects such as administration, procedures and developing classroom management skills were developed and learnt by the associate teachers their reflections revealed that their learning became more focused on their teaching and their students. The associate teachers became more adaptable in the ways they responded to interpreting and

modifying their teaching plans and lessons to accommodate individual student needs. From the associate teachers reflections it was shown that they started to make connections between what and how they taught. More importantly, they began to see how their teaching impacted on their students' learning.

Reflection was seen as pivotal to the associate teachers' learning. Reflection was viewed as a strategy to assist them in raising their awareness of their learning. They felt that by talking to their colleague teacher and working collaboratively with them they would come to a fuller understanding of their learning, their students' learning and their teaching. By being able to identify and cater for individual student learning needs the associate teachers revealed in their journals that throughout the internship they were continually reflecting on their teaching practice and modifying their practice to achieve improved student outcomes.

Conclusion

Research on teachers' learning can assist in our understanding of those practices which can inform teachers' knowledge and how this learning impacts on classroom practice and student learning. This study has highlighted the need for teacher education programs to focus on student teacher learning in the field in specific areas such as concentrating on routinised procedures in the initial stages of teaching practice, management of classrooms and behaviour management techniques and at a later stage developing skills that cater for individual student needs.

The study has also highlighted the need to monitor student progress and learning in relation to the sequence that learning occurs, that is, from the routinised procedures to the more complex tasks and skills associated with teaching. For the internship program at the University of Western Sydney this study has emphasised the need to articulate and make the associate teachers and colleague teachers aware that learning is achieved in stages, as outlined in this paper.

This research has found that a critical feature of the internship is the encouragement of reflective practice. Associate teacher reflective skills in this internship were achieved through a variety of reflective practices. In this study, responses from associate teachers in their journals showed that professional learning was made more explicit by enabling associate teachers to take time to think and reflect on their practice. Reflection enabled them to confront issues, look for solutions and solve problems. As this and other research has shown, with appropriate support and the development of reflective practice beginning teachers can expand their understanding of critical reflection. The internship is one example of a different approach taken in teacher education to provide the additional support necessary for teachers as they make their transition from pre-service teacher to beginning teacher.

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