Layering the Reflective Process: An Approach Used to Induct New Staff into Griffith's Practicum Model for Special Education

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During the 1990s, Griffith reshaped its competence building practicum model for preservice special educators. Reflection and mentoring were progressively inserted as critical elements of the process-based training approach. To better prepare graduates for the complex challenges faced by special educators in today's schools, new staff were engaged to assist with the practicum program. These staff were graduates from Griffith's BEd(SpEd) program. As teachers in Education Queensland, they then became teacher mentors within the practicum program. Ten years on, they found themselves immersed in multiple reflective cycles. As tutors and practicum supervisors, their role demanded that they guide preservice teachers through ongoing reflective activity. Also, as part of an induction process, these staff were invited to undertake their own reflective activity and personally document reflections in a diary. This diarised text material was subsequently analysed in terms of content and depth. For these new staff, preliminary analyses suggested that an emotional and cognitive dyad permeated their initial experiences at University and in practicum schools.

Background

Preservice training for special educators has been provided at Mount Gravatt Campus (Griffith University) for the past 25 years. During that time, key areas of specialisation have included hearing impairment, vision impairment, special needs, and intellectual and multiple disabilities. In general, specialist strands were founded on competency-based training models and particular lists of competency statements have guided practicum programs. For example, the intellectual and multiple disability strand adopted an internationally recognised training model established at the University of Oregon in the United States (Wilcox & Bellamy, 1982; Wilcox, McDonnell, Bellamy, & Friedman, 1984; Wilcox, Rose, et al., 1984). While this model emphasised the development of performance (doable and observable) and consequence (behaviour change) skills, cognitive (knowledge), affective (social-emotional), and exploratory (probing) attributes also were targeted (Houston, 1987). By and large, teaching performance in each area of specialisation was judged according to specific competency-referenced criteria.

In the early 1990s, self-reflection on professional experience at practicum and self-assessment of competence building was embedded into the overall training process in order to enhance the understanding and performance of developing preservice teachers. The process put in place across all strands was consistent with the Kolb learning cycle of

experiencing, observing, processing, generalising, and applying (Kolb, 1984). At that point in time, personal reflection was primarily viewed as a mechanism "to observe students carefully and to develop appropriate individualized instruction" (Yoo, 2001, p. 78). Hence, preservice teachers in special education were encouraged to become efficient observers and self critical professionals.

In 1997, all practicum-based courses in the primary, secondary, and special education programs at Griffith were revised to feature progressive themes with emphases across an observation-practice-reflection cycle. This new model was aimed to strengthen (a) links between theory and practice and (b) partnerships between the University and schools. To support this model of practice teaching, notions about reflective teaching were extended and the concept of teacher mentoring was introduced. Reflective teaching was equated with the acquisition of analytical skills concerned with teaching practice, teaching context, and teaching outcomes. Consequently, preservice teachers at Griffith were encouraged to use reflection to "analyse, discuss, evaluate and change their own practice" and to develop "their own 'theory' of educational practice" (Calderhead, 1993, p. 93). In addition, mentoring was inserted into the training process to support novice teachers in their journey to become reflective practitioners (Schön, 1988). At the organisational level, cooperating teachers were renamed teacher mentors. At the practice level, cooperating teachers and supervising lecturers began to support developing teachers as they worked their way through the observation-practice-reflection cycle. Mentoring across university and school settings became a boot-stapped activity, and was characterised by variations in strength of relationships (Zachary, 2000) and in elements of disclosure and coaching (Reiman & Thies-Sprinthall, 1998).

Accordingly, professional practice courses across the special education program were adjusted to meet new requirements. The introduction of the observation-practice-reflection training cycle with progressive themes and emphases led to a substantial resequencing of content across existing special education courses. The final result was a compact set of competency-based practicum courses (See Table 1), concerned with teaching individual students (PPSE1), teaching groups of students (PPSE2), and class coordination (PPSE3).

Table 1

Professional Practice Courses in the Special Education Program (Griffith University)

COURSE	THEME
Professional Practice in Special Education 1 (PPSE1)	Understanding and performing the elements of individual teaching.
Professional Practice in Special Education 2 (PPSE2)	Understanding and performing the elements of classroom teaching.
Professional Practice in Special Education 3 (PPSE3)	Understanding and performing as a team member and as the coordinator of educational programs.

In the new structure, all special educators were required to undertake a nonstranded course (PPSE1) prior to undertaking the two strand-specific courses (PPSE2 and 3). Essentially, PPSE1 was a new course focused on individualising the curriculum through

the individual education planning process (see Table 2). Course content emphasised competencies recommended by Sikorski, Niemiec, and Walberg (1996), while the reflective process was guided by the work of Tann (1993).

Table 2

Framework for Professional Practice in the Special Education 1

EMPHASIS	COMPONENTS
Discussion and Observations	• the individual education planning process in action across 5 phases: Information Gathering, IEP Meeting, Design, Implementation, & Evaluation.
Practices	• the teaching of group lessons focused on goals from students' IEPs[a],
	• the adaptation of group lessons to cater for individual abilities, needs, and learning style.
Reflection	• individual difference, teaching, and learning,
	• the individual education planning process.

[a] IEP denotes Individual Education Plan

Current context

PPSE1 has been evaluated by preservice teachers and supervising lecturers at the end of each offering and by teacher mentors on occasions. Course evaluations have typically resulted in progressive changes to competency content and training process over the last 7 years. Recently, two innovative changes were made to better prepare graduates for the complex challenges faced by special educators in today's schools.

The first change concerned the adoption of the 5Rs Reflective Writing Scale (Bain, Ballantyne, Mills, & Lester, 2002) in 2003. This locally developed instrument enables reflections to be categorised according to 5 types or components (see Table 3). For preservice special educators and within a mentoring framework, the scale has shown promise as a tool for improving reflective writing.

Table 3

5Rs Framework (Bain, Ballantyne, Mills, & Lester, 2002, p. 13)

SCALE COMPONENT	DEFINITION
Reporting	A descriptive account of a situation, incident, or issue
Responding	An emotional or personal response to the situation, incident, or issue
Relating	Drawing on relationship between current personal or theoretical understandings and the situation, incident, or issue
Reasoning	An exploration, interrogation or explanation of the situation, incident, or issue
Reconstructing	Drawing a conclusion and developing a future action plan based upon a reasoned understanding of the situation, incident, or issue

The second change concerned the engagement of two young staff members as PPSE1 tutors and practicum supervisors, employed because of their recent experiences and demonstrated expertise as teacher mentors in local schools. Since graduating from the Bachelor of Special Education program (Intellectual and Multiple Disability strand) in

the 1990s, they began working as special educators for Education Queensland. Over a span of 10 years, both have worked in special education units and special schools throughout the state, gaining valuable experience teaching a diverse range of students with special needs. Their combined roles included classroom teacher, support teacher, Advisory Visiting Teacher, and Head of Special Education Services. Active involvement in strategic school planning processes, curriculum developments, school behaviour management policies, and a range of action research projects added to their professional experience. While working in local schools, both staff members were valued teacher mentors for Griffith's preservice teachers (PPSE1 through to PPSE3). Both staff have continued their studies at Griffith: One staff member has completed a Masters (Learning Difficulties) and the other is completing a Masters (Early Childhood Intervention).

Research aims

This study was a response to the employment of these new staff members. This occasion marked the first time that sessional staff were employed as tutors and practicum supervisors for any PPSE course in the BEd(SpEd) program. It also marked the first time that BEdSpEd graduates had been employed as university staff. As a result, the PPSE1 team considered it important to monitor the induction of these new staff and track their adaptation to the new role in a familiar environment. With this broad aim in mind, reflection was identified as the most appropriate approach to explore the fresh experiences of these staff. Staff reflection on the induction process was likely to provide a deeper understanding of the personal processes that individuals may go through in early stages of university employment. Moreover, these understandings might provide pointers on how to improve the university induction process in general.

Method

During an initial orientation meeting, the PPSE1 team leader invited the new staff to keep personal diaries across the 13-week semester. From the leader's perspective, reflection was "a process through which we interpret (and reinterpret) the techniques of professional practice" (Bain et al., 2002, p. 7). Therefore, written reflections on engagement in course activity at university and schools would provide opportunity to document some important considerations. For example, comparisons between past and present practicum courses could be made and issues concerning the new tutoring and supervisory role could be explored. Moreover, personal diary keeping would provide a mechanism for sensitising new staff to the range of problems faced by their preservice teachers as these novices grappled with the observation-practice-reflection training cycle and with the application of the 5R's Reflective Writing Scale. Following a brief discussion on format, both staff readily agreed to generate a computerised, weekly diary entry.

Analyses

Two different analyses were conducted on 7 weeks of diary entries. These entries focused on PPSE1 team meetings and tutorial experiences at university and on staff orientation meetings at schools. A content analysis using Leximancer (Smith, 2002) was undertaken in order to identify the major terms used in the diarised text material. An

informal analysis using the 5Rs Reflective Writing Scale (Bain, et al., 2002) was completed by each staff member on her own and on her colleague's reflective diary in order to examine the depth of written reflection.

Content analysis (Leximancer)

Reflections from both diaries were combined and then prepared for text analysis using the software package Leximancer, which generates a nonselective exploration of samples of text. Leximancer computes the frequency with which each term is used, after discarding text items of no research relevance (such as "a" and "the"), and then computes the distance between each of the terms via computations equivalent to nonparametric factor analytic or cluster analytic procedures. As with other factor analytic procedures, there is no single solution, and the quality of particular solutions are judged in terms of their interpretability. The results of computations are displayed in two-dimensional spatial representation that can be explored through rotation to optimise the arrangement of terms and to explore the family of associations with any one term. The clusters of terms in each of the four quadrants can be interpreted as forming patterns of associations.

Depth analysis (5Rs Reflective Writing Scale)

Reflections in each diary were analysed using the 5Rs scale. This scale identifies 5 distinct components and a number of levels for each of these components (See Appendix). Depth of reflection was examined by determining the frequency and percentage distribution of reflections across the 5 scale components (viz., reporting, responding, relating, reasoning, and reconstructing). As each staff member used the 5Rs scale to analyse her own (self-rating) and her colleague's (peer rating) reflections, Spearman rank-order correlations also were applied to check the degree of association between frequency counts across scale components for the two staff members.

In an extension of the work of Bain et al. (2002), the two components Responding and Relating were considered to be grouped as emotionally-based reflections, while the latter two components, Reasoning and Reconstructing were considered to be cognitively-based reflections. The frequency and percentage of these groupings allowed for further analysis of the reflections.

Results

Content analysis (Leximancer)

Figure 1 presents the most interpretable arrangement of terms extracted from the two sets of reflections. The term reflection is central on the vertical diagonal, and overarches both the left- and right-side quadrants of the diagramatic representation. The left-side quadrants seem to link concrete terms (in italics) related to common university experiences with *students, tutorial, room, education*, and *meetings*. Moreover, these terms are also linked with emotional terms, *feeling, feel*, and *felt*. The right-side quadrants seem to link more cognitive terms related to the *school, teacher*, and the *teaching experience* with *role* issues, *process* issues, *student* issues, *questions*, and *time* and/or *years* issues.

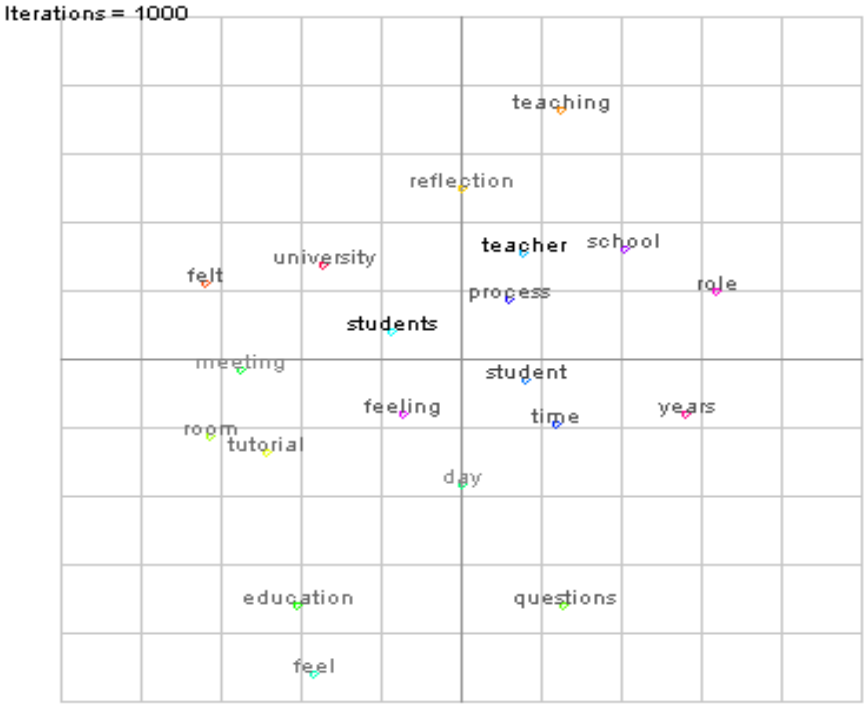

Figure 1.

Leximancer analysis of reflections of experiences of new staff.

Depth analysis (5 Rs Reflective Writing Scale)

The depth analysis of diarised reflections is presented in Table 4. The application of Spearman rank-order correlations confirmed that there was a significant agreement between self-ratings and peer-ratings of the assessment of each of the scale components for the two staff (rs = .99, $p < 0.001$). The scale component Reporting indicates the frequency of observations of factual material evident in the reflections. The factual material was similar in frequency, even though staff member B documented longer diary entries. This component was not considered in any further analysis. Bain et al. (2002) had clearly defined the middle R's as emotional, with *Responding* as emotional arousal to the current situation, while *Relating* is a reflection of the emotional bond to ones life experiences through the processes of internalising and engaging. The final Rs, were identified as cognitive, with *Reasoning* as an explanation of an issue, and *Reconstructing* as planning based on understanding, and a reasoned conclusion. An analysis of the frequencies and percentages of reflections in the emotional (*Responding* and *Relating*) versus cognitive *(Reasoning* and *Reconstructing*) scale components shows a dominance (around 80%) of emotionally-based reflections.

Table 4

Frequency of reflections in both diaries by scale components for two staff members

Scale Component	STAFF MEMBER A				STAFF MEMBER B			
	Self-rating	Percentages	Peer-rating	Percentages	Self-rating	Percentages	Peer-rating	Percentages
Reporting	(13)	NA	(11)	NA	(12)	NA	(14)	NA
Responding	19	82.4	21	84.8	28	78.4	32	81.8
Relating	9		7		12		13	
Reasoning	3	17.6	3	15.2	7	21.6	6	18.2
Reconstructing	3		2		4		4	
Total	**34**	**100**	**33**	**100**	**51**	**100**	**55**	**100**

Note. Shading indicates the emotionally-based group of reflective components.

Discussion

Results from these analyses provide grounds for some interesting commentary about a central finding, and about the methodologies used to analyse written reflections. The central finding is the strength of emotionally-based reflections of new staff. Collectively, findings pointed to the effectiveness of analysing such reflections with Leximancer complemented by analysis using the 5Rs structure.

Central finding

Upon examination of the results of the Leximancer analysis, the clusters of terms in each of the four quadrants display patterns of associations that both staff perceived to be valid representations of their experiences. The terms on the left side quadrants would seem to represent their new roles as staff within the university context implying a paradigm shift in roles, responsibilities, and relationships. Reflective entries from both staff discussed the new work environment, the new staffing team, and the preservice teachers. Reflections were characterised by use of many emotive words and phrases, driven by strong memories and feelings as though these individuals had never left the university setting. Confusion between roles of past student and now tutor was mixed with concern about abilities and knowledge base. Confidence and excitement preceded nervousness and self-doubt in meeting preservice teachers for the first time, at speaking in front of a group of adults for the first time, and in covering new course content for the first time. On three occasions, terms related to feelings (viz., *feeling, feel*, and *felt*) appear in the Leximancer analysis. The reflections on returning to university as staff members to face new responsibilities and challenges after ten years of absence were primarily reactive, emotive, and subjective.

In contrast, the clustering of terms on the right side quadrants represent experiences of returning to familiar school environments with the new role of university supervising lecturer. Reflections focused on the change in role of new staff and the change in relationships with practicum school colleagues. Despite the role change, both staff reflected on the success of explaining processes and answering questions throughout meetings, and on general confidence in the school environment. The terms identified through the Leximancer analysis were related to *schools, teachers, teaching, time, roles, questions*,

and *processes*, which indicated that the reflections were resolute, analytical, and objective by nature.

The term reflection is highlighted within the Leximancer analysis and was located centrally on the vertical diagonal, overarching the left and right sides of the diagrammatic representation. This result illustrated the frequent correlation of thoughts and discussions about reflection and the emphasis on the reflective process in the PPSE1 course. Combined with the 5Rs analysis, both analyses highlighted the strength of the emotional response in the early phase, particularly with campus-based activities, and a cognitive analytical response to school-based activities. This result also highlighted the importance of encouraging new staff to use reflection as a means of processing their new experiences, and through this process, to identify their needs. In the current research, the offer of support and mentoring from permanent staff in relation to campus-based activities would seem to be a useful response.

Reflections on the use of Leximancer analysis and the 5Rs

The Leximancer analysis provided an accurate diagrammatic representation of the terms extracted from both diaries. It highlighted the distinction between university and school, but also the common themes within the two contexts. The analysis shows that the new staff members were emotive in their language when discussing university, but cognitive and professional when dealing with schools. This dichotomy would seem to accurately represent the reflections of the new staff.

The use of the 5Rs Reflective Writing Scale strengthened and complemented the Leximancer analysis. Further analysis of the relative frequency of reflections in terms of the 5Rs categories provided further confirmation of the reflections in relation to the emotional-cognitive dyad. Future analysis of qualitative data, particularly those data with reflective emphases would seem to benefit from the use of an analysis using the 5Rs. The 5Rs served as a useful framework, not only as a guide for reflective writing, but as a tool for research and self-analysis.

Conclusion

All in all, the findings of this research on the reflections of new staff signal the relative dominance of the emotionality of on-campus experiences compared to the more comfortable and cognitive processes employed when reflecting about off-campus experiences. These results also have implications for the usefulness of reflective processes. As the university is increasingly employing sessional staff, including those with strong practitioner backgrounds, some new staff undertaking this role transition may need extra support and training. Induction programs for staff new to university roles may need to address not only procedural and cognitive aspects of role, but also to provide opportunities for mentoring and discussion of emotionally-based issues that may arise. This paper has highlighted the usefulness of asking staff to document reflections as a vehicle for processing their own experiences, and also as a vehicle for alerting supervising staff to the possible need for assistance and support. This research has also extended understandings about the 5Rs Reflective Writing Scale, and its usefulness in analysing reflective levels in relation to the emotional-cognitive dyad. This finding has implications for further research on the analysis of reflections.

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Appendix

The 5Rs Reflective Writing Scale (Bain, Ballantyne, Mills, & Lester, 2002, pp. 14–15)

Component 1. Reporting		
*The journal entry or reports **what** happened or **what** the issue or incident involves.*		
Level 1	A minimal description of the incident of issue is given.	☐
Level 2	A broad description of the incident of issue is given, with limited elaboration of potentially significant details.	☐
Level 3	The description provides sufficient detail to allow readers to draw their own conclusions about the incident or issue.	☐
Component 2. Responding		
*The journal entry **responds** to the incident or issue by making observations, expressing feelings, or asking questions.*		
Level 1	The entry draws attention to significant aspects of the incident of issue or expresses the writer's feelings in relation to the incident or issue.	☐
Level 2	As for level 1 but the entry also makes a judgment regarding the incident or issue, for example, "the lesson was pathetic", "the lesson went well".	☐
Level 3	As for level 1 or 2 but in addition the entry poses a question of identifies a problem.	☐
Component 3. Relating		
*The journal entry **relates** or makes a **connection** between the incident or issue and the writer's own skills, experience, learning, or understanding.*		
Level 1	The incident or issue is related to: • The writers own strengths, weaknesses or personal learning, or to • Professional matters (pedagogy, curriculum, assessment, etc), or to • Future practice.	☐
Level 2	As for level 1 but the entry includes a superficial rationale for or limited discussion of the connection.	☐
Level 3	As for level 2 but the rationale or discussion is expanded to include an insight or understanding arising from the connections made.	☐
Component 4. Reasoning		
*The journal entry **highlights in detail** significant factors underlying the incident or issue **and shows why** they are important to an understanding of the incident or issue.*		
Level 1	At least one relevant factor underlying the incident or issue is analysed in detail, giving consideration to such matters as: • Why it is important in the circumstances • How it impacted on the situation • What questions this raises for future teaching.	☐
Level 2	At for level 1 but the discussion considers or compares possible alternative explanations and/or considers the reasons for, or possible implications of, the conclusion.	☐
Level 3	As for level 2 but the discussion incorporates insights from a different perspective, for example, a personal perspective, a student perspective, a learning perspective, a theoretical perspective.	☐
Component 5. Reconstructing		
*The understanding developed through reasoning (component 4) is used to **reframe** or **reconstruct** future practice or professional understanding.*		
Level 1	The discussion leads to a conclusion or a plan for future action, based on a reasoned understanding of the incident or issue.	☐
Level 2	As for level 1 but the discussion also considers the reasons for, or possible implications of, the conclusion or plan.	☐
Level 3	As for level 2 but the discussion also considers the possible impacts of different circumstances, e.g., • 'What would happen if ..... ?' • 'Under what conditions would the plan not work?'	☐
Level 4	As for level 3 but the new understanding is integrated with the writers' personal approach to or theory of teaching.	☐