

LEARNING ABOUT LEARNING

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ABSTRACT

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This is a report of a study examining Graduate Diploma of Education students' approaches to learning in a professional skills unit. The unit was organised on the basis of adult learning principles with the students experiencing a wide variety of learning strategies, in order to be responsive to the needs of the students as prospective teachers. It aimed to develop students' skills and understandings about curriculum planning, and measurement and evaluation and their use of teaching strategies within curriculum frameworks.

Opportunities, in the form of ordered trees, questionnaires, journal keeping and self evaluations, were given to the students to evaluate their learning and its relation to their preferred learning styles. Students' responses were analysed to identify different approaches to professional learning as student teachers. The paper also reports upon the perceived effectiveness of the unit and the implications of the study for postgraduate teacher education.

LEARNING ABOUT LEARNING

Rationale

Today teacher educators are addressing issues related to effective ways of structuring postgraduate pre-service teacher education programs to help students attain the outcomes and desirable attributes expected of them by the profession. This has to be done responding to differences in their development path patterns (Butcher, 1995) and professional

learning. The responsiveness of teacher education programs can be enhanced if teacher educators understand how student teachers conceptualise and approach their professional learning and development.

Attention to the presage, process and product dimensions of learning process has provided a valuable framework for understanding the learning process (Biggs, 1987).

Universities are professionally accountable for the effectiveness of their teacher education programs. Institutions have long acknowledged limitations of time in the Graduate Diploma of Education teacher education programs. Some institutions have absorbed three semesters into one calendar year while others have formally adopted a two year postgraduate teacher education program. While changes are being made to the length, content and structure of such teacher education programs

attention needs to be given to ensuring that the individual program units and the course as a whole are based upon a valid understanding of the students and their professional development and learning.

This paper is concerned with gaining insights into a group of postgraduate teacher education students' expectations of a professional skills unit, their perceptions of the professional needs such a unit could meet and how they conceptualise their approach to the unit. The study also examined the effectiveness of the unit as perceived by students and staff.

Background to the study

51 secondary teacher education students were enrolled in a generic professional skills unit in the second semester and one in the first semester of their postgraduate diploma of education program. They were studying two curriculum units from a range of curriculum areas including Computing (n=4), English (n=12), Economics/Commerce (n=10), Geography (n=6), History (n=14), LOTE (n=5), Mathematics (n=6), Religious Education (n=21), Science (n=7), Technological and Applied Studies (n=3), and Visual Arts (n=8).

The professional skills unit was designed to students:

examine the appropriateness of different models of curriculum;

identify and analyse the impact of external influences on secondary curriculum;

apply process of curriculum development to different key learning areas;

select, use and justify a range of teaching strategies appropriate for the achievement of desired learning outcomes for groups and individuals;

evaluate pupil learning, teacher effectiveness and the curriculum;

involve student and parents in curriculum development, evaluation and reporting.

The content of the unit included the study of the nature of curriculum, curriculum issues, classroom management and teaching strategies, assessment and evaluation, role of parents and community in curriculum, and unit planning. Students were required to follow a reading schedule, keep a journal of their responses and learning associated

with work for each week of the unit, do a mid-semester exam and present a curriculum plan. This unit followed upon the first professional skills unit which was concerned with nature and role of the classroom teacher, communication, aims-objectives-outcomes, lesson planning, teaching strategies, assessment and classroom management. All but one of the 52 students had completed their first field experience unit and were currently involved in weekly field work involving teaching in each of their two curriculum areas.

Methodology

At the beginning of the unit staff discussed with students the benefits to themselves and the University of taking time during the semester to understand how they approach their learning about teaching. In the first and last teaching weeks of the semester the students completed a pre- and post-test task designed to assess their thinking about effective teaching and the nature of curriculum. This task consisted of three questions: beliefs about effective teaching, words associated with curriculum, graphical representation of the words associated with curriculum.

During weeks 6, 7 and 12 staff gave students the opportunity to comment upon how they were experiencing the unit and their perceptions of the teaching strategies which had been incorporated into the unit. Data about these areas were obtained through open discussion (weeks 6 and 7), graphic representations of their perceptions and needs (week 6), and questionnaire responses (week 12). The questionnaire was designed by staff and two students in light of feedback from the discussions in weeks 6 and 7. The two students were involved to validate staff interpretations of student perceptions and responses. At the end of

their course half of the students met informally with staff to discuss the Diploma of Education program in general and how it related to their professional needs and preferred approaches. The journals also provided data about students' perceptions of what they learnt from particular sessions or readings and how they responded to the different strategies used.

29 of the 52 completed both the pre and post test tasks and allowed comparison of the data through the inclusion of an identification number. These responses were compared to examine changes in students' beliefs, knowledge and understanding and shifts in their perceptions of their roles as teachers.

Results

The data were analysed with respect to:
approaches to studying professional units,
expectations and preferences of professional skills units,
responses to unit and strategies,
student learning outcomes.

Student approaches to studying professional units

An analysis of the students' graphic representations and questionnaire responses showed that their approaches reflected two contrasting types of goals, conceptual and practical, and two broad groups of

teaching/learning strategies (See Table 1). The first group of strategies provided a more structured environment for the student with directed, theoretical and listening type activities. The second group was less structured and more informal with independent, situation related and participative type activities. While these goals and strategies are conceptually distinct they are combined in the implementation of professional units and in student expectations and perceptions.

Table 1 Student approaches to professional study

Student expectations and preferences of professional skills units
Student expectations of the unit were grouped according to whether they emphasised particular goals or strategies or incorporated a balance between both (See Table 2). The students either preferred a balance between conceptual and practical or an emphasis on practical goals. Half of the students made no reference to strategies in their expectations and preferences for professional skills units. Two thirds of those who did respond preferred less structured or informal strategies related to practical situations and involving the students.

Table 2 Student expectations and preferences of professional skills units

Students were asked to indicate on a scale from 1 (little emphasis) to 5 (considerable emphasis) how much emphasis they would give to different activities in planning the same unit. Student responses (See Table 3) showed a preference for group and informal discussions and a balance between lectures, reading material and individual reflection.

Table 3: No of students and degrees of emphasis in planning the professional skills unit

Student responses to the unit and strategies employed

To gauge the students' experiences of the unit they were asked to record the value of the different parts of the unit (1- little value to 5 - considerable value) (See Table 4). There was a lack of congruence in the practical dimension between the students' expectations and

preferences and their experiences in this professional skills unit. The attention to professional issues seemed to meet the needs of the greater number of students.

Table 4: Students' perceptions of the value of different elements of the unit:

Student learning outcomes

The students' work during the semester was reviewed to see what professional learning and development had occurred amongst them as a total group of students. It was evident that they had developed a greater understanding of the "bigger picture" of the different factors which influence what occurs in the classroom. This was related to their work on curriculum models, external influences, changes in curriculum due to governmental decisions and external assessment practices, including the use of school certificate performance descriptors. While the area of issues in curriculum was not viewed as important or relevant by students at the beginning of the unit. A number of the students indicated their need towards the end of the unit to engage in more critical analysis of such issues. They were more aware of their role in being more proactive in this area.

The students gained a knowledge of what is involved in preparing for and gaining employment. Their unit plans showed how the students had mastered the skills of unit planning, writing comprehensive rationales, linking outcomes to appropriate teaching strategies and content. In some cases students had also incorporated appropriate forms of assessment. Many students presented units with a range of resources, varied teaching strategies and assessment tools based upon their understanding that individuals will learn differently and at different rates. They also gained an understanding of the importance of student/teacher evaluation.

Students had developed skills in identifying their preferred learning approaches through practical experience and reflective discussion about a range of teaching/learning strategies. This was accompanied by a more sensitive understanding of differences in student learning styles and needs in the classroom.

Many students reported that the whole graduate diploma course was only the beginning of a lifetime of learning about how to teach rather than being the answer to "How to be a teacher" that they originally expected. They were now aware of the complexity of teaching in terms of meeting student needs and of staff-staff and staff-student relationships. The unit provided them with knowledge and skills that would help them become reflective practitioners.

Orientations as teachers

For the 29 students who completed the pre- and post-test tasks regarding their beliefs about effective teaching and understanding of curriculum their responses were analysed to identify changes in their orientations as teachers. Two main orientations were used: teacher or student oriented and idealistic or realistic. Their responses were rated as high, medium or low according to the following guidelines:

Orientations

Teacher oriented

High - all statements concerned with teacher behaviour in terms of teaching focus.

Medium - mainly teacher focussed behaviour with one student focus.

Low - Teacher focus with some reference to student behaviour.

Student oriented

High - all statements concerned with student behaviour in terms of learning focus.

Medium - mainly student focus with no more than two statements concerned with teacher interaction.

Low - student focus with some reference to teacher behaviour.

Realism

High - statements that showed awareness of limitations and complex nature of teaching.

Medium - statements about the limitations and complex nature of teaching together with few generalised idealistic statements .

Low - statements that contained some ideas about the limitations and complex nature of teaching with some generalised idealistic statements.

Idealism

High - platitude statements about the nature of teaching.

Medium - focussed unsubstantive statements with one realistic comment.

Low - main focus on generalised unsubstantive statements with some comments about realistic experiences

Changes from pre- to post-test were mapped (See Figure 1). The majority of students showed a change from either more to less teacher oriented or to student oriented, the latter shift being more frequently observed. Only three of the students showed an increase in the level of teacher orientation. Three students showed a significant movement from teacher to student orientation, with two of these students also showing a shift from an idealistic to a realistic orientation. No students moved from a student to a teacher orientation.

Only low levels of realism were present though the majority of students moved to less idealistic or to a low level of realism. Five students did not show any change in these orientations as teachers. Three of these maintained a high level of teacher orientation and two maintained a low level of realism.

Students' professional knowledge

The language of the students was analysed to see if there were changes in the extent of their responses, the number of pedagogical domains referred to and the type of language used (vernacular or professional).

Nine of the students used vernacular language only in their pre-test task with six of these adopting professional language in their post-test. With other 19 students there was an increase in the extent of their professional language from pre- to post-test.

Implications

The implications of the study for graduate diploma of education teacher education programs are presented with respect to the presage and process dimensions related to their learning. The majority of the students came from a background of at least three years' curriculum study at University and some had continued into an occupation related to this background for several years. The students had already

developed a substantive knowledge in their own field but this knowledge had rarely been extended into the challenge of how to pass it onto others. Consequently a prominent goal in the minds of these students was simply to gain the skills and practical "know-how" needed to pass their own wealth of knowledge to others. Such a goal or expectation needs to be met in the course and particularly in a professional skills unit.

A key situational factor was time. The students were well aware of both their limited field experience opportunities compared to Bachelor of Education students and the constant reality that their training must occur in the constraints of one year. This created an urgency and pragmatic emphasis underlying their approach to what and how they wanted to learn and was associated with an interest in or enthusiasm for those areas which they perceived to be of pressing concern to them.

Hence their immediate needs took priority over longer term needs and issues.

In this context students have acknowledged their own professional learning:

Despite myself, I have learnt a lot.

(Student - unit evaluation)

Conclusion

This study has shown that student expectations, goals and preferred strategies emphasised practical goals or a balance between the conceptual and practical. They also preferred informal or less structured and situation related activities. Teacher educators, while appreciating the importance of conceptual issues, need to continually link this to the practical aspects of the study of teaching. They also need to challenge students' perceptions so that they realise that the roles of the teacher and teaching are more concerned with more than what happens in their own classroom. While being confident with the subject knowledge and concerned about the content and practice of teaching they need to focus attention upon other areas such as "the ethics of teaching, ..., interaction with families and the school community and with professionalism and professional development" (NSW Ministerial Advisory Council On Teacher Education and Quality of Teaching, 1994).

Bibliography

Biggs, J. (1987) Student approaches to learning and studying.

Melbourne: Australian Council for Educational Research.

Butcher, J. (1995) Teacher development path patterns in the management domain. Resources in Education ED377153.

NSW Ministerial Advisory Council On Teacher Education and Quality of Teaching (1994) Desirable attributes of beginning teachers.



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