

A MENTOR ASSISTED PROGRAM OF STUDY (MAPS) FOR SPREADSHEET APPLICATIONS IN FIRST YEAR ACCOUNTING: A DESCRIPTIVE STUDY

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Abstract

The purpose of this paper is to examine the perceptions of students involved in a mentoring program. The approach involved the provision of supplemental instruction conducted in the form of a mentoring program designed to address spreadsheet applications for first year accounting tasks. Surveys were conducted over the semester and at the conclusion of the semester to obtain the mentees and mentors satisfaction with the mentoring program. Responses to surveys conducted during semester showed a high level of satisfaction with the progress from the MAPS intervention. Overall the mentees rated the MAPS intervention as being slightly beneficial to their learning and knowledge regarding the use of spreadsheet applications for accounting tasks. The practical implications from this study are that the supplemental instruction conducted in the form of a student mentoring program has the potential to influence student satisfaction with the learning process.

Keywords: first year accounting, student mentoring program, supplemental instruction

INTRODUCTION

There is a need in Australian universities to find alternative ways to enhance the learning experience in an effort to keep students from leaving the higher education sector. One possible way to address this is to implement a mentoring program as an intervention to supplement the traditional teaching method employed in the higher education sector. Australian universities are struggling to deal with reduced student numbers and attrition rates which have a negative impact upon the financial funding available for them to operate (French, 2011; Nayak & Venkatraman, 2010; Wilcoxson, Wynder & Laing, 2009; Blanc, Debuhr & Martin, 1983). The reduction in the number of international students enrolling in Australian universities may be traced to the adverse affects of the global financial crisis and its impact upon the currency exchange rates against the Australian dollar (Ross, 2011; Laing, 2011). As the universities have no control over currency exchange rates the focus has been directed to addressing attrition. A number of approaches have been implemented, such as student councilor services, student advisory services, on-line support systems, greater emphasis on student feedback, and mentoring services (Einfalt & Turley, 2009; Raciti, 2010). Of these mentoring at least within the university environment has received minimal attention in the literature. This is most likely due to mentoring having been more closely aligned with the concept of coaching within the business environment where mentoring is a popular strategy in the training and development field as a means of attracting, retaining and developing staff (Rolfe, 2011).

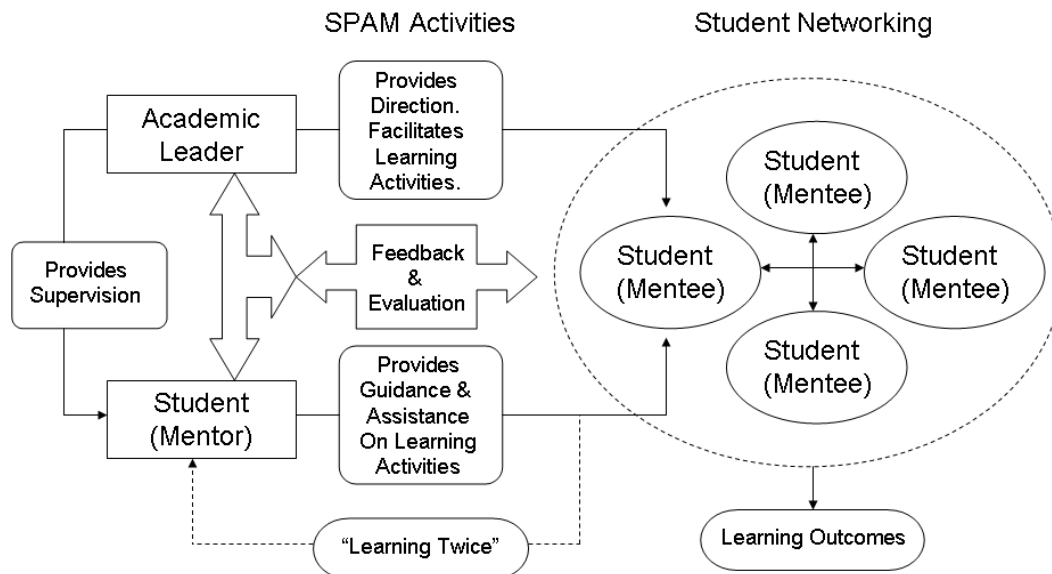
The difference between coaching and mentoring is generally not apparent in the literature where both terms tend to be used as if they were synonymous with each other (Fowler, Gudmundsson & O’Gorman, 2007). However, this is not the case and to support this position the following definitions are applied in this paper. Coaching was defined by Robbins (1991) as “a confidential process through which two or more professional colleagues work together to reflect on current practices: expand, refine, and build new skills; share ideas; teach one another or solve problems in the workplace.”(as cited by Slater & Simmons, 2001, 68). This definition specifically places the concept of coaching in the realm of activities between two people in a workplace setting where the outcomes are focused on learning relevant to the particular industry. Subsequently, coaching can be thought of as one person helping another person to learn how to do things more effectively. In that sense coaching may be viewed as a part of mentoring. Fundamental to both coaching and mentoring is the intention to create relationships that have the goal of imparting knowledge from one person to another. Mentoring at least in this paper is deemed to be broader in the sense that it involves leading the other person to the discovery of new skills or knowledge. This implies that the mentor is expected to take the lead role in facilitating or teaching the mentee. Mentoring is viewed as a teaching and learning process that takes place between the mentee and the mentor, involving the transmission of knowledge. From this perspective, the mentoring in the university setting is more closely aligned with that of supplemental instruction.

LITERATURE REVIEW

Supplemental instruction is a unique form of student academic assistance designed to help students master a course content while developing effective learning and study strategies applicable to that course (Arendale, 1997). Supplemental instruction sessions are basically facilitated by a student mentor, who leads or assists in the sessions and undertakes discussion to help students understand the content. A supplemental instruction program is generally administered by an academic staff member, who, among other duties, trains and supervises the day-to-day work of the student mentors and is responsible for evaluating the effectiveness of the program each semester (Ramirez, 1997).

Supplemental instruction is more concerned with assisting students to learn the course content and thus develop their competency skills (Blanc, DeBuhr & Martin, 1983: 81). Supplemental instruction is the basis for assisting students with improving their academic performance (Malam, Bryngfors & Morner, 2011). In this regard the notion of designing and implementing a mentoring program is consistent with the intention of addressing the learning requirements of the students. Mentoring pedagogy bears a strong resemblance to the practices advocated for supplemental instruction.

The seminal paper by Kirkham and Ringelstein (2008) provides a model for the application of a mentoring program within the higher education pedagogy. The model provides a conceptual framework for the development and analysis of a mentoring program that can be applied to any discipline within the higher educational paradigm. Kirkham and Ringelstein (2008) used the term Student Peer-Assisted Mentoring to refer to the mentoring model, which is presented in Figure 1 below. A number of aspects in the model provide a basis for the mentor assisted program of study developed in this paper. The method employed in this paper follows the model by having an academic leader who supervises the student mentors as they provide guidance and instruction to the mentees. The process is more fully addressed in the discussion in the method section of the paper.



Source: Kirkham & Ringelstein, 2008

Figure 1 Conceptual Framework for a Mentoring Program

The Kirkham and Ringelstein (2008) model provides the necessary theoretical justification of the relationship between supplemental instruction (Blanc, DeBuhr & Martin, 1983; Malam, Bryngfors & Morner, 2011) and also experiential learning. The mentor assisted program of study that is presented in this paper employs the supplemental instruction approach as identified by Kirkham and Ringelstein (2008) which is viewed as being instrumental in mentoring programs (Arendale, 1997). The mentor assisted program of study in this paper specifically relates to spreadsheet applications in a first year accounting curriculum.

The literature is replete with discussion concerning the performance of students who participate in interventions or the pedagogical justification for supplemental instruction. However, the perception or satisfaction has not been adequately investigated in prior research. This study is intended to address the gap in the literature by testing the level of satisfaction expressed by students involved in a mentoring intervention.

Overview of the program

The focus of the mentoring program reported in this paper was on student's learning to use a spreadsheet software program to complete accounting tasks. During the semester, students were exposed to the various applications of spreadsheets for solving accounting tasks. This was done to expand on the learning by providing an alternative approach to undertaking the various tasks. The transfer of knowledge gained from performing the task on paper had to be translated into the formulation of the spreadsheet. The problem to be addressed by the mentoring program was to provide the supplemental instruction for those students who were either unfamiliar with spreadsheets or had difficulty in acquiring adequate knowledge of the tasks prior to undertaking the transition to a spreadsheet. The program was not promoted as being remedial nor intended for any particular demographic group of students.

The MAPS involved academics overseeing the involvement of senior (second year level) students who acted as mentors to the first year students during the semester. The number of student mentors was also a limiting factor on the number of mentees that could be accommodated for supervision purposes. The student mentors were provided with a basic introduction to the mentoring process and the necessary materials such as guide manuals to

assist them to adjust to the role as a mentor. The mentor group was limited to twenty first year students with two student peer mentors under the supervision of one academic. This was done to accommodate the control and leadership that was considered necessary to maintain a consistent level and standard of mentoring. The mentoring took place on a weekly basis at a predetermined time in a computer lab setting during the semester. The student mentees were required to commence work on the specific task assigned for that week and to interact with the mentors and the academic supervisor. This process involved identifying the difficulties being experienced by the student mentees which could then be addressed by either examining the particular task step by step or providing an explanation and projecting the spreadsheet on to the main screen for them to follow. Where a student mentee was unable to follow or maintain the pace at which the explanation and instruction was occurring, one of the mentors would attend to the student on an individual basis. Student mentees were instructed and encouraged to ask questions and to clarify whenever they did not understand a particular part of the procedure relevant to the task. The goal of the MAPS was to impart the requisite knowledge and skill to the student mentees such that they would feel confident in their understanding of both the accounting task and the use of the spreadsheet software package to address the task. For the student mentors, the intended goal was to reinforce their knowledge and skills such that they would acquire a deeper learning.

METHOD

Participants

The participants in this study were twenty undergraduate students undertaking the first year accounting course at the University of the Sunshine Coast. The student mentees volunteered to participate in response to an announcement that MAPS was being conducted. In that respect they were not chosen but were self-selected. For the purpose of this study self-selected participants were considered a better representation than a random selection given that the study was concerned with measuring the level of satisfaction with the MAPS intervention (Braver & Bay, 1992). The student participants consisted of 7 (35%) males and 13 (65%) females, the average GPA for the group was 5.5, and the average age was 22.

Instrument

During the semester, the student mentees were asked for their feedback in terms of a progress review. The progress review required the student mentee to reflect on his or her learning and level of understanding that they felt they had gained with regards to; spreadsheet usage, spreadsheet application to accounting tasks, sufficient explanation of the method or technique used to solve or complete the task. Psychologists have long used self monitoring (a form of reflection) as a tool to encourage behavioural change (Mace & Kratochwill, 1988). The survey simply required a yes or no response and was neither intrusive nor complicated. The concept of incorporating this type of reflection is based upon the concept that reflection can be a vital component in the learning process. Having students deliberately reflect upon their progress in the mentoring program is more likely to build deeper learning (Kirkham & Ringelstein, 2008).

At the end of semester the student mentees were asked to complete a short survey questionnaire. The completion was voluntary and there was no recording of names or any form of identification and again was designed to avoid being intrusive. The questions were aimed at deriving feedback on the experience gained from the mentoring program of study. For these questions, a Likert scale was used to elicit the level of responses (Hassan & Shrigley, 1984; Schibeci, 1982). The questions were: 1) Did you find the mentoring program helpful in developing your understanding of the accounting tasks? – [1 Not at all ... 3 Slightly

... 5 Very much so]; 2) Did you find the mentoring program helpful in learning the usage of the spreadsheet? – [1 Not at all ... 3 Slightly ... 5 Very much so]; 3) Do you believe that you have gained knowledge to solve accounting tasks from your experience from the mentoring program? – [1 Not at all ... 3 Slightly ... 5 Very much so].

RESULTS

The student responses to the progress review survey are summarised in Table 1 below. The progress reviews were undertaken at three separate times during semester.

Table 1 Student mentee positive responses to progress review surveys

	Week 3 n = 20 “Yes”	Week 6 n = 15 “Yes”	Week 9 n = 17 “Yes”
Spreadsheet usage	13 = 65%	11 = 73%	13 = 76%
Spreadsheet application to accounting tasks	12 = 60%	11 = 73%	14 = 82%
Sufficient explanation of the method or technique used to solve or complete the task	13 = 65%	12 = 80%	12 = 71%

The results indicate that the majority of the student mentees perceived the mentoring program as being useful to their learning during the semester. These results are given further justification from the responses to the survey conducted at the end of the semester, which are reported in Table 2.

Table 2 Mean responses from student mentee survey

	Average n = 17
Did you find the mentoring program helpful in developing your understanding of the accounting tasks?	3.05
Did you find the mentoring program helpful in learning the usage of the spreadsheet?	3.18
Do you believe that you have gained knowledge to solve accounting tasks from your experience from the mentoring program?	2.94

The average rating for the questions indicate that the student mentees considered the mentoring program as being slightly beneficial to them in all three areas. This positive view being expressed by the students is consistent with the expectations as indicated in the literature. However as the prior literature did not explicitly test the student attitudes to the mentoring intervention there is no benchmark against which this can be compared.

CONCLUSION

From the results presented in this study there is evidence that the students who attended the mentoring program perceived their progress during the mentoring intervention as being of benefit to them. As indicated in Table 1 the positive responses to the questions concerning the application of the spreadsheet for use in the accounting course was considered to be an indicator that that the MAPS approach was a useful intervention. The study has provided

empirical evidence to support the claim that mentoring can be a useful intervention and can contribute to improving the student experience in higher education.

One observation is that the increased satisfaction in the improved ratings reported in Table 1 for week 9 may be a reflection of the increased involvement of the student mentors in the mentoring sessions prior to the survey. The mentors had gained greater experience and were more aware of the needs of the individual students by that stage of the semester.

Whilst this study has made a contribution to the testing of student attitude to mentoring there are some limitations. Firstly, a longitudinal study of student attitudes to the mentoring intervention may provide greater support for these findings thus overcoming the limitations associated with a small sample. Secondly, the instrument may benefit from further development and possible addition of more questions to overcome the very narrow focus that it currently has. Future research may also seek to apply the model used in this study to examine possible causal relationships between mentoring and student persistence in courses other than the one in which the mentoring program was conducted in. The findings of this study provide a basis for future research to make comparisons as well as determine alternative directions for the application of mentoring as an intervention in the higher education sector. There is reason to believe that some useful insights may be gained from investigating the impact on the mentors involved in a mentoring intervention.

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