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Transition into the Work World: An Assessment of Real World Outcomes

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Abstract

Educators worldwide are concerned with the achievement of program outcomes of their students, and evaluation of learning outcomes is an important part of all academic programs. A real test of how these learning outcomes are met can be demonstrated in the new graduates' transition into the work world. Here this issue is explored in the context of nursing. This study sought to 1) assess the achievement of program outcomes during the transition of the graduates in their first registered nursing role, and 2) to determine if there were differences between graduates who took a nursing co-op program (a career focused paid work experience with elective credit) in their course of study, and those who did not. Students from this ethnically diverse program of study were surveyed six months after graduation when they were in their first registered nursing role. Although there were no statistically significant differences seen between the co-ops and non-co-ops, there were some interesting differences between the groups that have implications for nursing education.

Index Terms – transition, nursing, preceptorship, cooperative education

key concern is for clinical practice competence. Setting learning outcomes and evaluating student achievement are important for academic programs. However, the real test of these outcomes is demonstrated in the graduates' transition into the nursing work world. This study was designed to look at how the graduates of a baccalaureate nursing program at the University of Hawai'i at Manoa's School of Nursing and Dental Hygiene transitioned into their first registered nurse (RN) position. The purpose of the study was to determine how well the new nursing graduates perceive their transition to their first RN position based on the baccalaureate nursing program outcomes with an expanded practice domain (Table I, Appendix A). This study thus sought to 1) assess the achievement of program outcomes with an expanded practice domain during the transition period of six months post graduation; and 2) determine if there are any differences between the baccalaureate graduates who participated in the nursing co-op program (hereafter known as co-ops) and those who did not (non-co-ops). This is an assessment by the graduates themselves utilizing the program outcomes with an expanded practice domain based on the program outcomes from *The Essentials of Baccalaureate Education for Professional Nursing Practice* (American

Association of Critical-care Nurses [AACN], 1998). Evaluating the new graduates' transition into their first RN position is one way to determine how well a nursing program is preparing its graduates to be providers in today's nursing work force. The significance of this study is in providing a test of how well the program outcomes are thought to be achieved by students and, this it can act as an indicator of the quality of the nursing program.

New Graduates' Transition into Nursing Roles

There is very limited recent literature on how new graduates transition into the staff nurse role. The transition from the student role into the practicing nurse is an issue highlighted in the 1970s by Kramer and Schmalenberg (1977) in their seminal work, *Path to Biculturalism*. It seems the transition is difficult, and the authors described the process new nurse graduates moved through as involving the phases of: *Honeymoon*, *Shock*, *Recovery* and *Resolution*. In order to ease this transition, nurse educators have sought to devise ways to better prepare students for the realities of the clinical setting. Benner's (1984) work on the novice-to-expert transition is another way to look at the process of how a beginning nurse can acquire different levels of clinical competency in nursing practice. According to this model, the trainee moves from *novice* (student), to *advanced beginner*, and then on to become *competent*, *proficient* and *expert*. One of the most widely published strategies for such development is the use of a preceptorship model (i.e., a one-to-one relationship with a staff nurse as preceptor), and/or concentrated clinical practice (Barrett & Myrick, 1998; Collins, Hilde & Shriver, 1993;

Itano, Warren & Ishida, 1987; McGregor, 1999). With this model, students generally feel more confident, competent, and experience more enjoyment in their clinical experience (Collins, et al., 1993; Ishida, Ako & Sekiguchi, 1998). Students are able to put what they learned together, and report it a good way to make contacts in their profession (Mills, Jenkins & Waltz, 2000).

Similar results have been reported with co-op programs generally. Co-op programs are paid career-related work experiences that occur while the student is still in college. Such programs use the mentoring preceptorship model with a similar goal to that of nurse training. The focus in co-op is to provide the student with real-life paid work experience in their field of study. However, co-op programs also seek to ease the transition of the new graduate into the work world by decreasing the reality shock in their first position, thus, making them productive sooner (Gardner & Koslowski, 1993). Gardner and Koslowski looked at the socialization process of the new graduate to the work environment of their new job. The co-ops reported greater knowledge of task and role, and they were more confident in their knowledge and skills, and to take proactive measures such as observation and trial and error to solve problems. In contrast, non-co-ops drew heavily on a supervisor, mentor, or co-worker for problem-solving. While the authors reported no statistically significant differences in stress, performance, turnover, and satisfaction, the co-ops scored higher on the adjustment scale than non-co-ops. In a review of research about outcomes in co-op, Fletcher (1989) noted co-ops compared favorably in terms of work competencies and attributes such as organizational skills to non-co-ops. It seems they were more likely to gain first jobs related to their major, took less time to find their first job, gained positions of higher responsibility, were promoted more frequently, and had higher salaries when looked at a single point in time from 1-5 years after graduation. The co-ops also rated themselves as having an enhanced self-concept, increased autonomy, and independence.

The nursing literature has focused primarily on the development and/or evaluation of preceptor programs, and their effects on students (see, e.g., Barrett & Myrick, 1998; Clayton, Broome & Ellis, 1989; Collins, Hilde & Shriver, 1993; Dobbs, 1988; Ferguson, 1996; Ishida, Ako & Sekiguchi, 1998; Itano, Warren & Ishida, 1987; McConnell & Dadich, 1999; Scheetz, 1989), and preceptors (Atkins & Williams, 1995; Dibert & Goldenberg, 1995; Ishida et al., 1998; Ohring & Hallberg, 2001; Stevenson, Doorley, Moddeman & Benson-Landau, 1995).

It seems there is a lack of current research literature on transitioning of new nursing graduates into their first job, and to what extent they think have achieve

program's outcomes in the real world – and this is the focus of this study.

Nursing Co-operative Education Program

The nursing co-op program that formed the context of this study is a two-semester paid career related experience of three credits (two credits in the summer and one in the fall semester). The program is an elective that students can apply for entry after completing the first adult health nursing course in the third semester of the six semester nursing curriculum. Students in the nursing program also have had at least one year of pre-requisite and core undergraduate courses before applying for the nursing program. Nursing students need to be in good standing within the nursing program to apply for the co-op program. This means maintaining their grade point average and having current health clearance, professional insurance, and cardiopulmonary resuscitation certification. The University's Cooperative Education Program is an administrative group that works closely with the Nursing Program to coordinate with interested participating clinical agencies, and facilitate the student application process. When students prepare their resumes, the Co-op Program is available for assistance. Applications with resumes are received by the Program, and clinical agencies with current co-op contract agreements with the university are eligible to participate in the Program. Clinical agencies provide a list of positions available at their agencies - students apply for the available positions, and indicate their first and second choices. The participating agencies are sent the first choice student applications in the initial round. If there are unfilled positions, a second round is done with unselected students who listed that agency as their second choice.

Selected students go through the regular hiring process at their selected agencies. The agencies orient their students and pair them with an RN preceptor for the experience. The nursing faculty and Cooperative Education Coordinator orient both student and preceptor to their roles, and commonly meet the nurse manager as well. Faculty make regular visits during the summer to assure the experience is educational, and resolve any conflicts or problems that arise. The faculty also holds four seminars with students during the summer to assist students in adapting to the work world. The students work a minimum of 360 hours with at least 240 hours to a maximum of 300 hours during the summer, and at least 60 hours in the fall semester. Several formal evaluations are done; one during the summer, one mid-summer and one at the end of summer, and these involve the student, faculty and RN preceptor. Students also determine what they will work on during the fall semester. A formal written evaluation is done by the student and RN preceptor at

the end of the fall semester. Faculty are on-call for problems or concerns, and the students evaluate how they think have fulfilled their fall objectives. The Cooperative Education Program staff may also be contacted to clarify program concerns and questions from students and preceptors. The Program staff helps track the hours worked by the students, and advise faculty of student completion at the end of the program.

Methodology

This was a cross-sectional, descriptive study, in which self-completion surveys were mailed to all nurses who graduated with a baccalaureate degree from 2003 to 2005. Participants were included in the study if they passed the National Council Licensure Examination for Registered Nurses examination (NCLEX) and were working as a staff nurse in their first RN position. Nurses who had an associate degree, and completed their bachelor's degree were excluded from the study. An exemption for human subjects was approved by the University's institutional review board.

Instruments

A survey instrument based on the program outcomes outlined in the *Essentials of Baccalaureate Education for Professional Nursing Practice* (AACN, 1998) and the categories for accreditations set by the National League for Nursing Accrediting Commission (NLNAC) (see Table I, Appendix A) was developed for this study. The respondents rated each survey item using a 5-point Likert scale with 1 being poor and 5 being excellent. In addition, respondents were asked to rate the top three courses, including the co-op course, that they felt helped them the most in terms of: 1) preparing for their first RN position; 2) developing their self-confidence as a nurse; and 3) transitioning into their RN position. Reliability and validity were not computed for these survey data because the instrument used was part of the baccalaureate program evaluation.

Procedures

The surveys, along with postage-paid envelopes, were mailed out to 137 graduate nurses six months after graduation. Surveys were color coded to differentiate between nurses who participated in the co-op program and those who did not. To improve the response rate, follow-up calls and a second mail out were done.

Data Analysis

Data were analyzed using the SPSS version 11.0 statistical software package. Descriptive and frequency statistics were used to analyze demographic

information and each item of the survey. A t-test of mean scores was conducted to compare co-ops with non-co-ops, and P values of ≤ 0.05 were considered statistically significant.

Results

Out of 137 surveys a total of 73 surveys were received, representing a 53% return rate. Of the 73 surveys, 41 were co-ops and 32 were non-co-ops.

A comparison of the demographic characteristics between the co-ops and non-co-ops is provided in Table 2 (Appendix B). All 73 graduates had a current RN license. The majority of the respondents were Filipinos (35.6%), followed by Japanese (23.3%), Caucasian (13.7%), Chinese (13.7%), Korean (5.5%), and Hawaiians (2.7%). Seventy-eight percent were between the ages of 20-30 years old, and 74% worked in an acute care setting.

Objective 1: Self-assessment of achievement of program outcomes with an expanded practice domain (see Table 1 in Appendix A).

On the whole both groups rated themselves above average (mean 3.9) for the 14 items. Their mean scores ranged from 3.46 to 4.39 (on a five point scale), and there were no statistically significant differences for program outcomes between the co-ops and non-co-ops.

Objective 2: Differences between co-ops and non-co-ops.

Though the sample had a slightly larger number of co-ops (41) than non-co-ops (32), the groups were similar in terms of demographic data – and this showed that the majority of both groups were aged under 30 years (80% & 75% respectively, Table 2 - Appendix B), approximately the same proportion had prior health care experience (54% & 56% respectively), and both groups had worked an average of over three months as a staff nurse when surveyed (3.2 & 3.5 months respectively). They were comparable in terms of ethnicity with 12% and 15% Caucasians, 76% and 81% Asians, 5% and 0% Pacific Islanders, and 7% and 3% Other. The groups, however, differed with respect to their place of employment as a RN. Ninety-two percent of the co-ops worked in acute care type settings compared with 65.5% for the non-co-ops – the remainder (i.e., 34.5%) worked in non-acute community settings (compared with 8% for co-ops).

There were no statistically significant differences seen between the two groups for the survey items about program outcomes (see Table 3 in Appendix C). The co-ops rated themselves higher in terms of communicating with others, determining clinical priorities, caring for groups of patients, using/employing technical skills, seeking help appropriately, and having an easier transition from student to staff nurse. Non-co-ops rated themselves higher in terms of their ability to make clinical

decisions, care for clients in a culturally competent manner, working with ancillary personnel, and collaborating with other professionals. The non-co-ops felt the program prepared them for their first RN position better than the co-ops – the latter who rated their ease of transition from student to RN higher.

In the second section of the survey, graduates were asked to rank the clinical nursing courses in the program they felt helped them for three areas. Co-ops and non-co-ops were compared, and the co-ops ranked the co-op course highest in terms of preparing them for their first RN position (95%), developing their self-confidence (87.8%), and transitioning into their RN position (85.4%) (see Figure 1 in Appendix D). The non-co-ops choices were more diverse, with the highest ranked course Adult Health II at 28%, and with 25% selecting developing self-confidence as a nurse, and 25% transitioning into their RN position.

Discussion

It seems that participating in the nursing co-op program in this study did not result in any statistically significant differences between co-ops and non-co-ops in terms their perceptions about meeting the program objectives, or easing their transition into the staff nurse role. There may be several reasons for the similarity between the two groups. Over the last few years, a concentrated clinical experience was added in the last semester capstone course, and this may have minimized the difference between the groups. Another reason is that co-op placements were overwhelmingly conducted in the area of acute care, whereas a greater proportion of non-co-ops worked in non-acute positions. Though not significant, the non-co-ops rated their program preparation higher than the co-ops, and this may be why they did not enroll in the co-op program. In addition, there were very few non-acute positions available in the co-op program.

The researchers did not control for the length of employment when the graduates completed the survey. It is possible that this variation in the number of months of RN employment affected the results as a whole, but probably both groups equally. In retrospect, it may have been a better to survey the graduates once they had six months of RN work experience so they were not in the early phases of adjustment, and when their transition was fresh in their minds.

The value of the co-op course is demonstrated in the second part of the survey in which the co-ops overwhelmingly (85-95%) ranked the co-op nursing course first in all three areas: preparing them for the RN role, increasing their self-confidence as an RN, and transitioning into the RN role.

As noted above, the available co-op positions have been predominately in acute care settings. Hence it

seems acute care agencies are interested in attracting new graduates, and use the co-op program as a recruitment strategy. One can thus assume the program primarily attracted students interested in acute care positions after graduation. The research findings reported here support this proposition, with 92% of the co-ops in this sample working in acute care agencies after graduation compared with 65.5% of the non-co-ops.

Limitations

There were several limitations of the study including the lack of prior testing of the instrument for reliability and validity. Another limitation was not controlling for the length of employment. Though the surveys were mailed out 6-7 months after graduation, some graduates had changed addresses, and had to be located through family, peers, or email. The date for mailing the surveys was based on the period it normally took for graduates to take the NCLEX exam, secure RN staff positions, and be working a few months. However, not all graduates followed this pattern. Some graduates chose to go on trips or delay employment or the taking of their licensure exams for personal reasons, perhaps a factor explaining variation in employment duration between the groups. Another limitation was that the study used a convenience sample in that the survey was mailed out to all eligible graduates that met the criteria (graduates of the program who were recently licensed and in their first RN position), meaning the results cannot be directly generalized to other settings.

Recommendations for Future Research

Recommendations for future study include controlling the length of RN employment ideally at six months, and gathering more qualitative data on the transition needs for new graduates - given that the performance expectations and acuity in the workplace have steadily increased over the years. Repeating the study with a larger sample size especially the non-co-ops is another recommendation. Finally, surveying the employers of the new graduates would provide a different perspective and enhance the validity to the study findings.

Conclusion

While the nursing graduates in this study, both co-ops and non-co-ops, felt they fared equally well in terms of their transition from student to staff nurse, the co-ops ranked the co-op program number one in terms of preparing them for their first RN position, and in developing their self-confidence, and helping them transition to their RN position. Participation in the co-op program also seemed to have had an effect on the choice of employment setting.

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Appendix A

Table 1. Baccalaureate program outcomes and transition to work outcomes for registered nurses at the University of Hawai'i, Manoa

Baccalaureate program outcomes	Survey of transition to work
<i>Provider of Care</i>	<i>Provider of Care</i>
1. Engage in Professional Nursing practice as a generalist for individuals, families, groups and community in a variety of settings	1. Able to care for groups of patients/clients
2. Use critical thinking skills as a basis for making judgments for generalist nursing practice	2. Able to do technical skills
3. Provide culturally competent nursing care.	1. Able to problem solve clinical situations
	2. Able to make clinical decisions
	3. Able to determine clinical priorities
	1. Able to care for clients in a culturally competent manner
<i>Coordinator of Care</i>	<i>Coordinator of Care</i>
1. Use beginning leadership and management skills to coordinate the delivery of quality nursing care.	1. Able to work with ancillary nursing personnel
2. Collaborate with individuals, groups, communities, colleagues, and interdisciplinary health members to coordinate the delivery of care.	2. Able to communicate with others
	3. Able to organize care to patients
	1. Able to collaborate with other professionals.
<i>Member of the Profession</i>	<i>Member of the Profession</i>
1. Demonstrate accountability for generalist legal scope of practice, professional standards of practice and professional code of ethics.	1. Able to seek help appropriately
	2. Able to be accountable for own actions/practice

Appendix B

Table 2. Comparison of demographic data between co-operative education (co-ops) and non-co-operative education graduates (non-co-op) for register nurses at the University of Hawai'i, Manoa(n=73)

Demographic data	Co-ops	Non-Co-ops
Under 30 years	80	75
Prior health care experience	54	56
Average time worked as a registered nurse (months)	3.5 months	3.2 months
Proportion of work time spent in acute care employment as a registered nurse (%)	92	65.5
Proportion of work time spent on-acute care employment as a registered nurse (%)	8	34.5
Ethnicity (%):		
Asian	76	81
Caucasian	12	15
Pacific Islander	5	0
Other	7	3

Appendix C

Table 3. Responses to survey of program outcomes for registered nurses at the University of Hawai'i, Manoa(n=73)

Program outcome	Participants	Mean (standard deviation)
Problem solve clinical situations	Co-ops	3.61 (.703)
	Non-co-ops	3.63 (.492)
Communicate with others	Co-ops	4.15 (.527)
	Non-co-ops	4.09 (.689)
Make clinical decisions	Co-ops	3.56 (.634)
	Non-co-ops	3.72 (.523)
Determine clinical priorities	Co-ops	3.73 (.708)
	Non-co-ops	3.63 (.554)
Collaborate with other professionals	Co-ops	3.88 (.748)
	Non-co-ops	4.00 (.718)
Care for groups of patients/clients	Co-ops	3.95 (.545)
	Non-co-ops	3.91 (.818)
Organize my care to patients	Co-ops	3.76 (.663)
	Non-co-ops	3.75 (.718)
Do technical skills	Co-ops	3.78 (.613)
	Non-co-ops	3.56 (.669)
Seek help appropriately	Co-ops	4.39 (.628)
	Non-co-ops	4.31 (.644)
Be accountable for my actions/practice	Co-ops	4.29 (.602)
	Non-co-ops	4.28 (.634)
Care for clients in culturally competent manner	Co-ops	4.17 (.667)
	Non-co-ops	4.34 (.653)
Work with ancillary nursing personnel	Co-ops	4.02 (.651)
	Non-co-ops	4.16 (.653)
I felt the BS program prepared me for my first RN job	Co-ops	3.98 (.821)
	Non-co-ops	4.00 (.926)

Notes: Responses were on a 5 point Likert with 1 = poor outcome, 5 = excellent outcome; differences between co-ops and non-co-ops were not statistically significant ($P > .05$)

Appendix D

Figure 1. First Ranked Course by Co-ops and Non-co-ops for registered nurses at the University of Hawai'i, Manoa (n=73)

