

## **Concurrent Session Four**

**Friday 29 September**

### **1001 - Addressing challenges in teaching biosciences in nursing education using the oxygen supply and demand framework**

**Heidi Ashcroft & Mary Gillespie**

#### Introduction

This presentation will discuss the results from a qualitative study that explored students' perceptions of the Oxygen Supply and Demand Framework's effectiveness in supporting development of undergraduate nursing student's bioscience knowledge, and application of that knowledge in nursing practice.

#### Background

Faculty at the Western Institute of Technology (WITT) recognised the challenges surrounding the teaching and learning of biosciences. During the redesign of WITT's integrated undergraduate nursing program, the faculty elected to use a physiologic concept map to support an integrated approach to bioscience teaching and learning. The Oxygen Supply and Demand Framework incorporates physiological concepts that influence oxygen supply and demand balance in acutely ill patients. The Framework supports integrative learning by making explicit the connections between respiratory, haematological, cardiovascular and neuroendocrine concepts and their relationship to end-organ perfusion and cellular oxygenation.

#### Results

The findings of this study reflect the use of the Oxygen Supply and Demand Framework as a positive influence on nursing students' development of bioscience knowledge and application of that knowledge in patient care and clinical decision-making. The Framework serves as a tool to assist teaching and learning of bioscience theory and, with consistent use across a nursing programme, offers promise in alleviating documented challenges surrounding the delivery of bioscience subjects.

Key words: Nursing education; concept based learning; clinical decision-making; bioscience; integrated curriculum.

### **1002 - ePortfolios in an undergraduate nursing programme: evaluation of implantation**

**Emma Collins**

#### Introduction

In 2015 the School of Nursing at Otago Polytechnic commenced using an ePortfolio platform called 'Pathbrite' for students to demonstrate evidence-based clinical practice. This move to an electronic portfolio was considerable for staff and students as it was a shift away from current methods of evidencing work. A research study was undertaken to evaluate the implementation of this platform.

#### Rationale

There is a growing body of evidence in support of ePortfolios. In general, they are more sustainable, practical and easy to maintain. Furthermore they support the current generation of learners who are adept to using electronic software to complete studies.

#### Methodology

The evaluation utilised a mixed method and sequential exploratory design. Students and staff were surveyed, along with focus groups, to obtain a significant amount of rich data in which to evaluate the implementation. The Technology Acceptance Model (Davis, 1989) was used to develop the questions within the survey, and the themes of this model were used in analysing the results.

#### Results

Results of the survey demonstrated that students were in favour of using ePortfolios, even when having previously used a paper portfolio. The focus groups reinforced these findings further and gave the researchers valuable information to consider in moving forward with the eportfolio platform.

#### Conclusions

It was concluded that the introduction of an ePortfolio platform was successful and staff and students mostly enjoyed using it.

#### Recommendations

Recommendations included more support to staff and students in the commencement of using ePortfolios and its ongoing use.

Key words: Nursing; education; electronic portfolios; clinical practice.

### **1003 - Interprofessional education: breaking down silos**

*Johanna Rhodes & Mary McMillan*

#### Introduction

The safe delivery of health care requires an effective interprofessional collaboration of professional roles. Traditional education of health professionals occurs in self-contained specialty educational silos. The assumptions of these training paradigms are that team skills are acquired during clinical placements. However, this does leave the development of these skills to serendipity.

#### Background

An interprofessional education (IPE) initiative began in 2014 with the Southern Institute of Technology, the University of Otago, and Southland Hospital. A qualitative action research project advanced this initiative with the implementation of solutions occurring as the initiative progressed. The purpose of the IPE sessions is to develop shared learning, active communication, team work dynamics, and collaborative assessment and treatment planning, whilst replicating the clinical environment for the purposes of learning without harm to patients. This simulated clinical milieu empowers the participants to become familiar with clinical situations, while instilling interprofessional values, respect, and perspectives.

#### Results

The IPE sessions have been refined based on observations, reflections, and evaluations of the IPE Team, and the effervescent evaluations from the nursing, dietician, and medical students. Additional to this, anecdotal evidence has emerged from the clinical areas revealing a noticeable improvement in communication between health disciplines.

#### Conclusion

We respectfully suggest that the breaking down of educational silos has the potential to transform traditional health care relationships, and improve patient outcomes. Further research is proposed to establish if this initiative has made a difference to team skills between health disciplines beyond the student's undergraduate education.

Key words: Interprofessional education; training paradigms; action research.

### **1004 - Developing skills and a collaborative culture in paediatric critical care**

*Lisa Sealey & Nerralie Shaw*

#### Introduction

At the beginning of the millennium two critical care areas at Sydney Children's Hospital were working in isolation. Registered Nurses (RN) in the Emergency Department (ED) were often involved in the rapid resuscitation of patients which required skills that were difficult for the ED nurse to acquire. Conversely, RN's from the Children's Intensive Care Unit (CICU) would provide support for the resuscitations in an environment they were unfamiliar with. It was conceived that creating a culture of collaboration between two nursing teams would enhance skill development in paediatric critical care.

#### Background

The Nurse Educators from both areas developed and piloted the ED - ICU rotation program in 2005. Specific learning objectives were aligned with the National Standards for Critical Care Nurse Education.

#### Results

More than ten years on, the ED-ICU rotation program is ingrained in the roster, resulting in a number of collaborative innovations in education, quality and safety. Innovations include combined simulation team training, ED representation on the ICU Access Nurse Study day, shared education for advanced skills development and collaborative quality projects such as the recently endorsed ED-CICU Handover Checklist with accompanying guideline document in 2016.

This paper outlines the benefits of a nursing rotation for staff between a paediatric emergency department and a paediatric intensive care unit and the subsequent impact on skill development and staff retention. The resulting progression of skill acquisition and development of a collaborative culture between units will also be outlined along with the vision for future combined Paediatric Critical Care post-graduate learning.

Key words: Resuscitation; clinical practice; staff rotation.

## **1005 - Why transition to a nursing career via a fast track option?**

**Isabel Jamieson**

### Rational/background

Fast track graduate entry (Master's) nursing programmes resulting in registration as a registered nurse, are new to New Zealand. The first programme was established in 2014 by the Christchurch Polytechnic Institute of Technology (CPIT) with the University of Canterbury. Given this, no published research exists in New Zealand about these students. A replicated quantitative exploratory descriptive study, using an existing validated tool (on-line survey) from Monash University was used to gather data from the first four cohorts of students to examine the characteristics of students and their motivation to change their career path.

### Results

Results to date suggest that the students are mostly mature people who are highly motivated to become nurses. They come from a variety of education backgrounds (i.e. theology, zoology, psychology) and work experience (i.e. paramedicine, speech language therapy and banking). They view nursing as a way to help others via a rewarding and challenging career which offers career stability. The fast track nature of the programme coupled with the post-grad level of study was considered attractive. Furthermore, the concept of "making my last degree count for something" was important for the students.

### Conclusions/ Recommendations

Fast track graduate entry (master's) nursing programmes offer study choice for students, with under graduate degrees, who may not have considered a career move to nursing otherwise. Graduates will add to the diversity of the nursing population. Understanding their characteristics will help to customise such programmes.

Key words: Graduate entry nursing programme; nursing education.

## **1006 - ePortfolios enforce transparency in supporting and assessing clinical competence of undergraduate nursing students.**

**Bev Mackay & Jane Anderson**

### Introduction

The focus of this presentation is on the introduction of an electronic portfolio (ePortfolio) into clinical courses in an undergraduate nursing programme, as well as discussion of some of the major findings of the associated research.

### Background

Following a curriculum review, clinical courses in an undergraduate nursing programme were changed to reflect Nursing Council competencies. An ePortfolio was introduced to assist students to develop and demonstrate these competencies and clinical nurse lecturers to support students and assess their competency. A combination of focus groups and questionnaires provided evidence of the outcomes of this change in practice.

### Results

The findings reflected what is already known in the literature about ePortfolios supporting a constructivist approach to student learning, ownership by the student, reflection on practice and scaffolding of student learning. The major lessons learned from the current research were around the transparency of processes enforced by the ePortfolio. This highlighted issues around clinical lecturer feedback, clinical lecturer expectations of students, engagement between students and clinical lecturers and understanding of competencies and assessment of students. Changes in practice were made to promote consistency, authenticity and to promote effective use of the ePortfolio as a tool to support clinical competency.

### Conclusion

The introduction of a clinical ePortfolio assists the development and assessment of clinical competency in undergraduate nursing students, also enforcing changes in clinical lecturers' practice in supporting and assessing clinical competency. This is a key point that other undergraduate nursing programmes may need to consider when introducing an ePortfolio.

Key words: Nursing, education; ePortfolio; clinical practice.

## **1101 - Embedding simulation into an undergraduate nursing curriculum using sequenced educational events**

**Karole Hogarth**

### Rationale

When simulations are incorporated within nursing curriculums, they act as stand-alone activities that are typically 'added to' the curriculum rather than being embedded. The evidence gained from this study suggest that to maximize the potential of simulations, facilitators should go beyond the single-event based tactic and explore ways to:

1. Develop a comprehensive approach, and
2. Explore ways of embedding these comprehensive approaches into the overall curriculum

### Methods

Forty-four second-year nursing students who completed two simulation sessions were asked to complete a post-simulation questionnaire (n=33) and write reflections on their simulation experience (n=44). Data was analysed using grounded theory coding.

### Results

By integrating simulation as a stand-alone event it may possibly impede the learning of our emerging mental health practitioners. If students are put directly into clinical practice without exposure to simulation, it can produce high levels of anxiety as they may not have the necessary basic mental health skills needed to succeed in their clinical facility.

### Conclusions/recommendations

Exposing students to simulation is an excellent immersive approach to learning. However, this needs to be done in the correct sequence of educational events for students to gain the most benefit. The model, which was developed in response to the findings of this study, offers a new way of understanding the importance of programme integration for mental health simulations.

Key words: Embedding Simulation; undergraduate nursing students; mental health.

## **1102 - Nurseportfolio: Where practice, education and regulation unite**

**Liz Manning, Jill Wilkinson & Kristina Hoepfner**

### Background

Electronic portfolios have been evolving in the New Zealand nursing profession for the last six years, and this year the College of Nurses Aotearoa took over the ePortfolio originally devised by Ngā Manukura o Āpōpō. This presentation outlines how the creative use of technology can lead change and transform and de-mystify the processes necessary for the regulation of the profession. The purpose of Nurseportfolio is to offer nurses an easy to access, clean and effective platform to create and submit a portfolio for assessment. It is commonly used for Nursing Council recertification audits, or more recently, to develop a Nurse Practitioner (NP) application portfolio. Nurses using Nurseportfolio can be assured that their electronic portfolios are accepted by the Nursing Council.

An example is of Massey University's NP students who are using Nurseportfolio. A tailored collection of pages was designed for the students which supports an application to the Nursing Council for NP registration while taking into account the education programme requirements. During the nine-month prescribing practicum that completes the clinical master's degree, the assignment work that students complete is included in their portfolio as evidence of their clinical competence. The highly structured collection is aligned with the guidelines for NP applicants and has de-mystified the previously daunting portfolio requirements, streamlined feedback and verification processes.

Along with the revised site, the College has new support material and template portfolios available for a smooth and easy start to creating and keeping portfolios up to date wherever there is access to the internet.

Key words: electronic portfolios; tailored collections; flexible approach; registration; regulation.

### **1103 - An educational intervention to decrease stigmatising attitudes of undergraduate nurses towards people with mental health issues**

**Helen Bingham**

#### Introduction

The purpose of this presentation is to share the findings of a study using an educational intervention designed and embedded into an undergraduate nursing curriculum in year one. The aim was to understand if there was a change in the undergraduate nurses' attitudes and beliefs towards those who experience mental health issues following experiences of face-to-face interaction with those who experience mental health issues.

#### Methodology

A before and after quantitative study was designed. Using Corrigan's Attribution questionnaire to collect data pre and post-clinical experience in an acute mental health unit

#### Conclusions

It was found that stigma continues to be an issue in nursing education. The results showed that face-to-face interaction can not only change stigmatising beliefs of the undergraduate nurse towards those with mental health issues in a positive way, but also influenced and developed critical thinking as a nurse.

#### Recommendations

Reducing stigma has the potential to improve nursing care for those that experience mental health issues across the clinical areas, not just in mental health as graduate nurses are employed in diverse roles.

Key words: Undergraduate; nursing education; mental health; attitudes; stigma.

### **1104 - An evaluation of an inaugural Child Health Acceleration Programme (CHAP)**

**Tracey Bruce & Kirsten Gunn**

#### Introduction

The purpose of this presentation is to report on an evaluation of the inaugural Child Health Acceleration Programme (CHAP) (June 2016-June 2017) obtained through a focus group interview with the participants. CHAP is a 12 month rotational programme through clinical areas in Child Health in one District Health Board (DHB), developed jointly between the DHB and Ara, Christchurch the local education provider. The main aims of CHAP are to further develop critical thinking, assessment skills, clinical reasoning, and leadership in Registered Nurses (RN's) working in child health. This is to enhance working relationships, across nursing and other health professions to potentially accelerate career progression, in addition to being attractive for recruitment and retention of RN's.

#### Background

A cohort of three RN's, each from different clinical areas within Child Health, were selected from six applicants for the first year. In addition to the clinical rotations of four months duration, the applicants were supported through Health Workforce Funding to undertake two level 8 papers in Child Health Nursing. An evaluation will be undertaken to explore the RNs' experiences of undertaking CHAP, including the influences of CHAP on their professional practice, the impact of studying concurrently whilst on CHAP, and possible benefits for Children and their families/Whanau.

#### Results

A literature review was undertaken to identify what key areas to explore in the focus group interview. All RN's (n=3) who participated in CHAP were invited to join the focus group for the evaluation on completion of the programme in June 2017. The focus group will be facilitated by a third party (an experienced RN in a Senior Education role in the DHB) to remove any bias and to encourage the RN's to speak openly and honestly as the facilitator was not involved in CHAP in any other way.

#### Conclusion

It is the intention of the authors to present the findings of the focus group interview.

Key words: Child Health; Education; Evaluation.

## **1105 - Transitioning from an old curriculum to a new curriculum: integrating the Clinical Reasoning Cycle and 'fit for purpose' avatars.**

**Deborah Sims & Kate Stimpson**

### Background

The purpose of this presentation is to share a project which commenced in 2016 in year two of a Bachelor of Nursing (BN) programme. A new curriculum gave staff the opportunity to acknowledge what had been done before, as well as look to the future. The course was designed to assist students to integrate simulated learning activities, the Clinical Reasoning Cycle (CRC) (Levett-Jones et al (2010) and clinical components of the curriculum using 'fit for purpose' avatars. This presentation will discuss the challenges, benefits to date and explain how several projects came together to support student learning.

In 2015 a new undergraduate nursing curriculum was introduced, this gave staff the opportunity to develop an integrated approach to linking the theoretical and practice components of the curriculum. Staff teaching in the new level six course were given the opportunity to redesign the previous course. Staff acknowledged what worked well in the previous curriculum and then looked to contemporary educational practices to inform student learning. Two main educational approaches were identified to underpin the new course:

1. To enhance the use of technology
2. To strengthen students' opportunity to integrate clinical reasoning in the theoretical and practice components.

### Results

The introduction of 'fit for purpose' avatars reflecting bicultural and multicultural families/whanau and introduction of the CRC has attempted to create an integrated approach. The avatars form a platform for learning, linking eLearning, tutorials and simulation labs. The CRC is integrated into students' portfolio work undertaken while out on an eight week practicum.

### Conclusion

The team are in the second year of the new course and plan to further develop the avatars. As technology enhancements have become more accessible to all staff and students, staff throughout the BN are now utilising the avatar "family/whanau" and Clinical Reasoning Cycle to assist students to develop critical thinking skills.

Key words: Clinical Reasoning Cycle; avatars; course design; critical thinking.

## **1106 - Demographics and trends in career choice of undergraduate nursing students: a ten-year longitudinal study**

**Joanne Agnew**

### Introduction

Each year since 2006, the University of Auckland Faculty of Medical and Health Sciences Tracking Project have collected information on career intention, debt and income sources from healthcare students at entry and exit, from their respective programmes. This paper describes the demographics and career choices for the first time in this cohort, and identifies changes in demographics and trends of interest for future career choices from entry to exit.

### Methods

Convenience samples of cohorts were recruited from years 2006 to 2016 with data collected in first year (n = 1057) and final year (n = 818) of the Bachelor of Nursing programme (BNURS). Demographics were analysed, students who answered both the entry and exit survey (n = 564) were paired for further analysis of changes in career interest during the programme.

### Results

Students at entry had the strongest interest for emergency care and child health, with little interest for academic/research and older person's health. By exit, the strongest interest was in child health and surgery (general), while disinterest for academic/research and for older person's health remained. Between entry and exit, there were clear, consistent decreases in some interest for mental health, decreased strong interest for child health and emergency care, while there was an increased strong interest for primary health care.

### Conclusion

This is the first longitudinal study of a large number of New Zealand undergraduate nursing students. Results from this project both confirm and expand on our understanding of student demographics and career interests.