Discussion Paper- **Work Integrated Learning: A Whole of Curriculum Approach**

**Abstract**— The School of Nursing and Midwifery at Edith Cowan University, Western Australia is currently developing an innovative work integrated learning masters to service the needs of students and industry. As this paper details, the program is aimed at Registered Nurses and Midwives to support and develop the skills to conceptualise and implement a work integrated program of study, the products of which are then used as recognised assessment items. Unlike many other work integrated learning initiatives, this curriculum is entirely work integrated learning based with early units of study providing students with the foundational skills and conceptual understanding required to implement a series of employment based projects and work based activities. Importantly, central to this program is the requirement for students to map their program of learning against essential and desirable criteria, congruent with an ability to frame an argument of competence, substantiated by quality evidence. During the course, students undertake a series of ‘traditionally taught’ units that are designed to support entry into clinical specialty practice areas. The largest proportion of units however, will support students to undertake project activities that address the needs of their employer, whilst also contributing to a portfolio of evidence required as part of the master’s award. The program’s philosophy is underpinned by a trilateral relationship between the student, industry and the University. The relationship developed through the implementation of the program enables capacity building, both for the student and for industry through the provision of advanced practitioners who align with the local and strategic goals of their organisation.

Keywords-Work-integrated learning, Work-based learning, Masters Degree, Professional Practice, Curriculum development – Nursing

**Introduction**

The need to be responsive to local issues has long been recognised as essential in designing successful curricula. This paper provides an overview of the application of an opportunity to attend to the needs of students, industry and the University in designing a work integrated learning (WIL) Master of Healthcare Studies curriculum for the School of Nursing and Midwifery (SNM) at Edith Cowan University (ECU). This curriculum has been designed initially to support the professional needs of Registered Nurses and Midwives, but has the capacity to include other health professional groups in the future. A whole of curriculum approach using WIL principles is unusual, with the only other similar programs offered at the University of Middlesex and University of Wolverhampton (UK). As this paper will detail, partly in response to the need to attend to local issues, the curriculum at ECU is unique.
The rationales for curriculum redesign

The development of a new curriculum is a significant task and requires compelling reasons to initiate. A range of independent reasons to consider the redevelopment of postgraduate courses offered by the School have been emerging over the past few years and can be broadly categorised into University, industry and student needs. From a University perspective, many of the Nursing and Midwifery postgraduate courses lacked viability due to small student enrolments. This was a consequence of the Schools commitment to work with the needs of the local healthcare industry by developing niche specialist courses, that whilst proving popular initially, soon had declining enrolments when the accumulation of need had been addressed. This has been further exacerbated by an increase in competition, both locally and from other Australian and international universities’ online offerings. However, given ECU’s strong relationships with local industry, to close specialist programs was not a satisfactory option for either party. Furthermore, the School’s staffing profile had altered with many of the skills of the recently recruited staff not being reflected in course offerings. As a consequence, the School initiated a review of its postgraduate offerings with the objective of developing a more sustainable model.

Coincidental with the School review mentioned above, a large metropolitan hospital approached the SNM with an invitation to submit a proposal for a collaborative arrangement in the delivery of a sustainable staff development strategy. Initially, this proposition centred on the general skills associated with the traditional, specialty nursing fields. As part of our discussions, however, it was agreed that there was potential in their setting to include capacity building and career development through the acquisition of skills such as critical enquiry, problem solving and leadership. It was further acknowledged that in order for staff development to be successful, the Registered Nurse or Midwife needed to make sense of their current and future needs and capacities[1].
In order to accomplish all of these staff development objectives, it became apparent that a course wide approach was necessary, not only to support a depth of professional reflection, but also to allow participants to extend their skills, knowledge and capacity within the contextual requirements of their practice. In the simplest form, it requires that participants apply learning to the specifics of their practice and with learning progression, in order to allow continued assessment of professional capacity, attendance to changing client and profession needs and pre-emption and support of professional learning. Our industry partner thought this level of capacity building an important goal of future staff development programs and supported ECU’s final curriculum proposal which included the opportunity for industry-based problems and projects to be the subject matter and product of student assessments.

As the literature has long acknowledged, the completion success of postgraduate students is seriously impacted upon by work and family obligations [2,3,4,5,6]. Nursing and Midwifery is certainly no exception to this with completion rates of as little as 40% being reported in the literature [7]. It was therefore important to develop a program of study that would support the student to achieve and complete their studies. There is extensive literature about the limiters and enablers that support student success with those most relevant to our student population being subject matter that is meaningful and compelling that also has an impact upon thought processes and career opportunities. Furthermore, convenience to study facilities and studies that are integrated into other aspects of living have been identified as important factors. The need to support and enable student success has been identified as a critical component of quality curriculum; thus, the curriculum redevelopment described here is not solely a good-will gesture to students, but also a clearly important imperative for the financial success of the program. The persuasive reasons for the ECU SNM to consider redevelopment of its postgraduate course offerings, namely, the provision of courses that are
appropriate for local industry and support the development of a sustainable and responsive workforce, the need for financially viable programs and the satisfaction and success of postgraduate nursing students, have significantly influenced the development of this WIL curriculum.

**Perceptions of the benefits of the ECU WIL curriculum**

Recent research findings, modern treatment options and current technologies render health services dynamic, such that continuous learning is required to enable health professionals to function at an advanced level [8]; moreover, policy drivers stress the value of knowledge that supports advancing practice [9]. Higher level academic skills are required to meet the expectation that registered practitioners will not only be clinically experienced and credible but also able to critically conceptualize practice and encourage innovation. These perspectives provides a platform for the further development of healthcare practice with an expansion of traditional roles and a requirement for on-going learning [10]. That being said, it is also known that healthcare employers are demanding more from their staff and education that takes staff away from practice is not seen as cost effective[2]. Here, WIL can be clearly appreciated as an approach to implement evidence and meet the learning needs of practitioners while also offering an efficient approach to achieve the goals of healthcare organisations while minimising time away from the workplace for the purpose of formal education[9].

There is much support for the inherent learning benefits of WIL programs where authors not only emphasise the importance of work to learning but also that learning arises out of challenges in the work area [11,12,13,14,15,16,17]. Many authors argue that as students control their learning and are able to effectively link learning to practice more readily in the workplace, traditional educational settings have little relevance. Moreover, the
ability to develop and enhance skills is more appropriate in the current work environment and underpins the interpersonal skills development which result in changes to practice [18, 19, 20, 21, 22].

Lester [23] argues that there is considerable scope for development of University WIL programs and hence should be viewed as mainstream activity. Traditional WIL curricula (e.g. theoreticum to prepare for practice) have focused on the prescription of learning outcomes dictated by education and/or industry staff based on the professional WIL model, the service learning model or the cooperative learning model [24, 25, 26]; however, to meet the needs of ECU postgraduate nursing students, clinical partners and their client groups, an innovative WIL program of study needed to be conceptualised. Following an extensive literature review on WIL programs worldwide, the WIL model created by Middlesex University in the United Kingdom, (which loosely reflects the cooperative learning model), informed the initial development of the ECU WIL model.

The ECU WIL curriculum promises to have particular merit in the context of the Western Australian higher education sector. Firstly, the Western Australian nursing higher education market is highly competitive, where students are primarily self-funded and time poor. Therefore, delivery of the ECU WIL Master of Healthcare Studies degree program is marketable based on its ability to meet the needs of Western Australian postgraduate nursing students while affording tangible benefits to industry partners and further strengthening ECU’s relationship and engagement with these organisations. Importantly, where past postgraduate nursing curricula were confined and potentially limited professional growth, the potential of the new ECU WIL program is dynamic and with the promise of longevity and sustainability due to its ability to address and meet the challenges for education of the continuously evolving health practitioner. The range of benefits for each of the ECU WIL parties are summarised as:
Engagement—the first of the ECU’s four strategic priorities [27] is apparent in that all parties benefit from authentic connection of learning to real life issues, problems and ideas [28] where students realise their learning is meaningful and valued, industry can measure the relationship between their needs and student learning outcomes, and University is able to refine teaching and research agendas based on authentic industry needs.

Professional Role Development—students experience a program of study that supports the mapping and achievement of professional development. Both industry and University partners support the student to understand performance abilities and obstacles involved in the realisation of professional capacity. Professional capacity moves beyond reflection upon the individual, to include the proactive assessment and access of available resources. This course promotes professional online networking with the aim that students engage in collaborative problem solving and advocate for change.

Sustained Strategic Outcomes – Industry benefits through achievement of prescribed strategic initiatives, both via the student’s products of learning and the staff development outcomes. As students undertake a series of projects or project components within a single employment environment, it is anticipated that industry partners will be able to achieve sustainable change that is not possible in WIL activities limited to single units of study.

The conceptualisation of the ECU WIL curriculum

Historically, postgraduate clinical Master’s degrees have catered for a large range of clinical specialties with units being content laden, staff intensive, yet resultant in low student enrolments. Niche clinical specialties could not be readily catered for using traditional
teaching models due to the expense of specialist staff and clinical learning resources. In order to maximize the efficiencies of ECU SNM’s postgraduate course offerings, it was decided to consider the potential of a novel WIL curriculum centred on the student’s nursing or midwifery practice, rather than a traditional didactic program in which the University dictates the confines of learning. In order to achieve this, it was important that the student be central to the learning process and take the responsibility for a trilateral agreement between the student, University and industry employer. It was conceptualised that as part of this agreement, the student co-ordinates meetings and agreements with their ‘Project Management Team’ which consists of an industry personal tutor, ECU course coordinator and other nominated persons. Students are allocated to their personal tutors based on their clinical and educational need and are required to manage this relationship as part of the development and implementation of their WIL program. Within the scope of the ECU WIL Master’s degree, each student designs their learning outcomes, learning methodology and assessment strategy for all WIL units. At this stage, the University equips the students with the necessary tools to enable them to plan their program, critically conceptualise and analyse practice through completion of an initial planning and role development unit. In this unit, the student reflects on their current role, determines their learning goals and develops a learning plan that enables achievement of their learning goals. Students also study a proportion of taught units which result in a coherent pathway of study, where chosen elective units provide impetus for achievement of the contracted student learning goals. This enables appropriate, meaningful and applicable learning to take place within the student’s specific area of practice and thus provides a program of study which is valuable to both clinicians and educators [10]. The definition of WIL in the context of the ECU model thus became “to work in a dynamic practice situation in which an experienced practitioner develops their own role while meeting
the strategic outcomes of the affiliated organisation and gaining academic credit for their learning”.

The ECU WIL model

The central spiral of the ECU WIL curriculum is the productive trilateral relationship between the student, University and industry (Fig. 1). The achievement of this relationship is evident through the products of student learning that address industry priorities and the course learning outcomes. The outer circles represent the enabling factors necessary to support the success of the student and the program, which in turn reflect the health care needs of the future. All WIL parties are in some way responsible for the achievement of the enabling factors; for instance, both the University and industry need to provide a suitable learning environment to enable the student to achieve these generic skills. Within the program structure, the student is required to reflect upon their plans and achievements to ensure that they meet the essential enabling skills such as scoping, critical reflection, project management, problem solving, evaluation of research and dissemination of new evidence through communication of outcomes.
The program planning is of paramount importance to this award, as it underpins the whole program of learning and ensures issues such as quality, academic standards and expectations of postgraduate students are addressed. The aims and outcomes of the award will ensure that student’s learning is intrinsically linked to their work area. Students will be expected to justify their WIL assessment choices to their employer, personal tutor and course coordinator, who ensure, in conjunction with the assessment board, that a coherent study pathway is planned and followed. A range of mechanisms are being devised to support students in the achievement of overall course learning outcomes, including the development of a course portfolio as well as local and extended learning communities.

As identified by Andre and Heartfield [29] a well developed portfolio is a useful approach to enable professionals to demonstrate and reflect upon their practice in a manner that supports individuals to predict, respond to and potentially influence professional and industry outcomes. The relationship between portfolios, self regulation and professional mobility is an imperative for students to become familiarised with the skills of self-assessment and development of quality evidence of performance outcomes, competence and capacity. The educational benefits of portfolios and learning communities to support collaborative and authentic learning are well understood [30,31,32]. It is a development priority of this program that the student be provided with a structured program, including assessment incentives, to support a sustained uptake of these initiatives. A further portfolio requirement is that the student assembles evidence to frame an argument of their achievements. Learning materials are currently under development at ECU to enable students to understand and accumulate quality portfolio evidence through the determination of quality evidence of performance, peer review, bench marking and authentication where the final portfolio associated with their learning course becomes a portfolio defence. As the course progresses, each student will have mapped their project activities across a matrix of depicted
course learning outcomes where the objective of the map is to ensure that the student demonstrate their full range of learning outcomes. At regular Project Team Management meetings, students will have justified how current and future project activities attend to the breadth of their learning outcomes when at the final portfolio defence, the student provides an overview of the means by which they have met their final learning outcomes. Within this defence, the student is required to articulate their generic achievements, provide supporting evidence and apply scoping and reflective approaches to explain their future career and/or project intentions.

Students in the ECU WIL course will also be given access to a course blog where students across the course will be encouraged to problem solve online, access other forms of professional social media to exchange ideas and use social media opportunities in a professional collaborative manner. The development and use of communities of practice has been long identified as valuable to engage students in collaborative learning and social action[33]. While ambitious, the course developers have identified the need to resource the inclusion of materials and incentives to support an online community of practice specifically for this course. It is anticipated that this form of collective learning will result in individuals and groups of students becoming more proactive and pursue enterprises in a manner they were unlikely to do in isolation from these online communities of practice.

**Conclusion**

In conclusion, the ECU WIL Master of Healthcare Studies curriculum has been conceptualised and developed with an aim to provide students with the opportunity to gain a postgraduate qualification through learning in the workplace. The program also aims to provide a flexible learning environment where the needs of both the student and employer are central to the development of the program of learning while continuing to focus on workplace
issues, protocols, policies and procedures, which promote direct benefits for both student and employer during the program of study. The program is primarily student focused and enables individual negotiation and development of learning outcomes for their award. This ensures that each student undertakes a unique program of study and provides individualisation of learning to meet employers’ strategic objectives and health improvement agendas. The course-based community practice blog, associated utilisation of social media to achieve professional outcomes and student portfolio are further examples of this innovative student centred approach to curricula design that will provide valuable career planning and position application resources. The program provides both accessibility and flexibility in education provision and is responsive to the diverse requirements in the vast geographical area of Western Australia.

References
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