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# **Graduate outcomes: A generative curriculum model for international students**

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The move into a competitive, international market place is rapidly changing the function and character of higher education in Australia. Increased competition for funding, globalisation, new technologies and quality assurance processes have resulted in expanded operational models that include recruiting and catering for students from a wide range of social, cultural and academic backgrounds. The mandating and mapping of graduate outcomes in Australian universities further demonstrate the high stakes nature of higher education, with the demands of administrative and regulatory bodies and marketing discourses exerting a powerful influence over academics' and students' understanding of the role of higher education in the 21<sup>st</sup> century. This paper discusses and evaluates the effectiveness of a generative curriculum model as it was implemented at one Australian university to address the learning needs and expectations of a diverse group of international students studying in masters programs and facilitate the development of graduate outcomes. The findings discuss the challenges and benefits of the generative curriculum model in terms of the additional demands placed on teachers and the significance of students' increased sense of autonomy and agency.

**Keywords:** Generative curriculum, graduate outcomes, internationalisation

## **Introduction**

Globalisation is a broad concept that acknowledges the increased flow of information and resources between and across geographical and political borders (Knight, 1997). Innovations in information and communication technologies in particular have played a significant role in facilitating and promoting communication and trade across the globe, and has resulted in a corresponding increase in human mobility and cultural complexity.

The internationalization of higher education in Australia represents one response to social, cultural, political and economic pressures related to the phenomenon of globalisation. Altbach and Knight's (2007) broad definition of internationalization as "the policies and practices undertaken by academic systems and institutions – and even individuals – to cope with the global academic environment" (p. 290) is useful for the purpose of this paper and the research context under discussion. In terms of policy, the Australian university in which this research project took place declares in its strategic plan the intention to "[E]xpand international research linkages and partnerships, particularly throughout the Asia-Pacific region"

(<http://www.cdu.edu.au/about/strategic-plan>). Consequently, with regard to practice, there has been an corresponding need for appropriate pedagogical responses to ensure that research and study partnerships are not undermined by social inequities, cultural misunderstandings or pedagogical incongruity. The focus on pedagogy signifies the shifting institutional conditions that inform approaches to, teaching and learning and Soderqvist's (2002) definition of internationalisation suggests that pedagogical change need to be supported by institutional structures:

A change process from a national higher education institution to an international higher education institution leading to the inclusion of an international dimension in all aspects of its holistic management in order to enhance the quality of teaching and learning and to achieve the desired competences. (p. 29)

This paper begins by discussing the significance of competencies and graduate outcomes in view of the phenomenon of globalisation. Connections are then explored between Australian universities' most common set of graduate outcomes and the aims and processes that inform the development of a generative curriculum model. The reason for focusing on graduate outcomes instead of unit or course outcomes is to establish a more generic framework for evaluating the effectiveness of a generative curriculum in postgraduate research contexts. Furthermore, in the spirit of internationalisation, graduate outcomes signify the attainment of skills and qualities that enable graduates to thrive as productive, effective and ethically engaged global citizens (Oliver, 2011).

Next is a description and evaluation of the pedagogical issues and outcomes of a series of study workshops, which were based on a generative curriculum model and implemented by a small group of researchers. The aim of the workshops, which will be referred to as MMR workshops in this paper, was to support international masters students studying at an Australian university. Central to the provision of the MMR workshops was the need to provide an inclusive program of study: one designed to promote more active student participation in the school's research culture, and inculcate a greater sense of academic autonomy and personal responsibility for learning. International students, who were subject to the requirements of study visa time lines, and who were assumed to be unfamiliar with the academic research culture of Western higher education institutions, were encouraged to attend the MMR workshops. The MMR workshops not only aimed to support students' achievement of quality learning outcomes, but were also intended to improve their study experiences by connecting them with like-minded students as part of a community of practice (Wenger 1998). It was hoped that the combination of a collaborative learning environment and the application of a flexible, generative curriculum workshop model would promote a positive self-image through the development of a mutual sense of purpose, belonging and individual agency.

After describing and discussing the nature of the generative curriculum principles used for this project, the methods for data collection are explained. This is followed by a discussion of the findings, which focus on the dominant issues of efficiency, sustainability, and the development of students' sense of academic autonomy and agency.

## **Background**

### **Globalisation, internationalisation and graduate outcomes**

In order to attract international students, Australian universities must establish a strong international reputation. Furthermore, the high stakes nature of higher education in a global economy means that marketing and ‘branding’ campaigns are important for enabling Australian universities to separate themselves from the general education sector and advertise their capacity for providing their graduates with a competitive edge in the global market place. Currently quality assurance processes in Australia are supported by a national policy for regulated qualifications referred to as the Australian Qualifications Framework (AQF), which is delivered through the Australian Government Department of Education in consultation with the Department of Industry and states and territories. In addition, the Tertiary Education Quality and Standards Agency (TEQSA), which is an independent national regulation and quality assurance agency for the higher education sector, is responsible for ensuring that Australian higher education providers adhere to national standards of quality.

For educators, internationalisation and the corresponding demand for quality assurance is a double-edged sword. On the one hand, the development of inclusive pedagogies is central to internationalisation at the individual and institutional level (Knight, 1997; 2004) as an increased number of international students requires a shift to more relevant and inclusive pedagogies. In addition courses need to engage with global issues and promote ongoing dialogue that challenges and enhances the intercultural understandings and skills of both students and staff. On the other hand, regulatory quality assurance processes in Australia, designed to ensure that higher education courses maintain high standards and produce outcomes that are attuned to industry needs (Oliver, 2011, p. 10), require evidence of graduate outcomes, despite research evidence (Barrie, 2007) that suggests academics vary in their understanding of the nature and application of graduate outcomes and how they relate to coursework. Oliver’s review of graduate outcomes in the Australian higher education sector identifies the following generic areas targeted by graduate outcome statements:

- written and oral communication
- critical and analytical thinking
- problem-solving
- information literacy
- learning and working independently
- learning and working collaboratively and
- ethical and inclusive engagement with communities, cultures and nations (2011, p.2)

These graduate outcomes will serve as the analytical framework for evaluating the effectiveness of a generative curriculum in postgraduate research contexts.

### **A generative curriculum model**

This section explores the affordances and possibilities of a generative curriculum model implemented as a support mechanism for international students enrolled in a masters degree

at one Australian university. Curriculum development is not a neutral process but one that privileges the knowledge practices of a particular social group as decisions about how and what to teach communicates and endorses the dominant cultural values, beliefs and practices of the academic community and consequently shapes students' identities and world views. Students of non-western cultural and linguistic backgrounds not only face difficulties associated with English language acquisition, they also bring with them to the learning context different learning styles and habits, as well as what is often misleadingly interpreted by Western educators as 'a general unassertive predisposition' (Hawkins & Bransgrove, 1998, p. 65). Such predispositions are often a defensive response to a lack of familiarity or confidence with cultural and linguistic rules for communication. International students may experience difficulty understanding Australian accents, humour and colloquialisms. They may be reluctant to expose linguistic weaknesses in front of more competent English speakers, and different expectations of teacher and student roles may further undermine their confidence. These are some of the factors that contribute to international students' feelings of marginalisation, isolation or disempowerment.

In order to provide student cohorts with educational experiences that are more relevant to their social, cultural and academic needs, and to engage them positively and actively in the processes and practices of education, it is recommended that students and educators do not consider curriculum documents to be rigid contracts, but instead to view them as a starting point for generating student engagement in the further development and negotiation of curriculum content that is more culturally sensitive and relevant to their learning needs (Ball & Pence, 2000).

MMR is an educational program and praxis-based pedagogy that engages positively with students' cultural backgrounds and pedagogical expectations. The program empowers students by developing their capacity to engage in dialogue with peers and identify learning content relevant to their needs. The MMR generative curriculum model is based on Freire's (1995) concept of generative themes. Freire emphasised the importance of pursuing topics that learners identify as being relevant to their needs and interests as a group. The recognition and articulation of themes or topics of mutual concern creates a shared space, a shared culture and a shared language for learning and interaction and promotes greater social cohesion and participation in learning. With Freire's principles in mind, the aim of the MMR workshops is to support students' achievement of quality learning outcomes and improve their study experiences by connecting participants with a community of practice: the shared goals of the community of practice being the development of skills required to meet the demands of masters programs. Greater responsibility in decision making and more open dialogue was used to move lecturer/facilitators and student participants towards greater cultural synthesis through the negotiation of shared goals.

In cultural synthesis – and only in cultural synthesis – it is possible to resolve the contradiction between the world view of the leaders and that of the people, to the enrichment of both. Cultural synthesis does not deny the differences between the two views; indeed, it is based on these differences. It does deny the *invasion* of one by the other, but affirms the undeniable *support* each gives to the other.  
(Freire, 1995, p. 162)

The MMR workshops are informed by research undertaken in Canada (Pence, Kuehne, Greenwood-Church & Opekokew, 1993; Ball & Pence, 2000, 2001) and Burma (Aung, 2009). In Canada, researchers invited Indigenous communities to engage in conversations about

curriculum content for training Early Childhood educators. Dialogue with First Nation communities in Canada was used to moderate teacher educators' mono-cultural pedagogical practices and perspectives and to generate more relevant and engaging pedagogies. In Burma, Aung (2009) undertook a participatory action learning project as an approach to generative curriculum development. In this project, parents in the community were invited to work with professionals to identify parenting issues and develop a culturally relevant parenting education programme. White (2008) adds to the conversation on a generative approach to curricula development by explaining that one of the key benefits of a generative curriculum is the ability to add to or challenge the limited perspectives articulated in text books or teaching materials selected by teachers. White's (2008) research on archival education in Mexico demonstrates how a generative curriculum model can be used to address a possible void in multicultural issues when designing coursework and provide a counter narrative to the hegemonic paradigms of official historical discourses (White, 2008).

In the MMR project, the lecturers prepared a workshop program but also invited students to determine the topic of each subsequent session. This allowed students to review or repeat learning processes or request support for developing more peripheral knowledges or skills. At times the more structured and linear approach favoured by workshop facilitators was undermined by the unpredictability of students' requests but divergences from the preplanned program enabled facilitators to develop a greater awareness of students' strengths and weaknesses.

### **Research design**

All international masters students studying in masters degrees in the School of Education at one Australian University were invited to attend the supplementary MMR workshops provided for students and to participate in the research. Of the eight international students who agreed to participate in the supplementary workshop and associated research project, three male participants in the masters by research program came from Cambodia and five female participants enrolled in a masters by course work and exegesis program came from various countries in the Asia-Pacific region. In addition, four staff members teaching in related masters degrees participated in the study.

Student data was collected directly after each MMR workshop when students were asked to access and complete an online questionnaire, which asked questions on the following issues: the usefulness of the MMR workshop; what the student learnt; which activity they considered to be most useful; and whether there were any activities they didn't like or could be done better. At the end of the semester, open-ended interviews with participants were recorded and transcribed. Four staff members teaching into the masters programs were also interviewed during the semester to ascertain their understanding of the aims of the MMR workshops, their perceptions of students' attitude to research, and ways to ensure the MMR workshops are relevant to research coursework. All data sets were numerically coded, with each participant provided a four digit code which became their identifier.

For the purpose of this paper, thematic analysis focused on the student data sets only and the generic graduate outcomes (Oliver, 2011) listed earlier in this paper provided the conceptual framework for thematic analysis.

### **Findings and discussion**

*Written and oral communication; information literacy*

Understandably, students' request for support during the MMR workshops were driven by the demands of their masters coursework with the result that much of the content delivered in the MMR workshops focused predominantly on the development of graduate skills related to written communication skills and information literacy. This was reflected in students' comments:

(#7709) ... I think it's basically because of my educational background. We have not been very used to search articles on the Internet. I have always been to the library and just text book readings. I have never used online articles or online search for any of my assignments or exams in my masters back in my country, so maybe that's why I am not used to the online learning system.

(#9001) ... Anyway, and – yeah at the session I know what my writing problem is. Because I know I'm not very good at writing. Yeah and how to organise a paragraph.

#### *Critical and analytical thinking*

Students did not request help with the development of critical and analytical thinking skills, suggesting that they did not understand the importance of these skills for developing insights into how the literature they use to guide their study might encourage them to position their research within a dominant epistemological framework and 'read' their research data in a particular way. Nevertheless, by the end of the MMR sessions, there was evidence in some students' comments that they had developed a deeper understanding of the purpose of critical thinking skills and had developed strategies for textual analysis and a more critical approach to their literature review:

(#7709) Making the mind map of the searched material gives a better means to analysis the literature... But without making a mind map we cannot have a balanced approach towards all the issues, which I will try now onwards.

(#6507) Yeah, so there's several things that I have learned from the project. The first one is the way we write the article. So we know how to, you know, present our argument in a logical way. And also learn how to analyse critique, you know, critique in our general articles and stuff like that. ... Because not all the teachers have, you know, the same ideas and the same perspectives. Even, you know, between the teachers and the student sometime they have different perspective and we valued that kind of, you know, critiquing. Because we'd give you a lot of different perspective from different angle so it, you know, encouraged us to be more analytical, you know, to the argument, to the criticism.

(#9001) Because I found it quite painful because I was not trained like this before. Yeah, and during this course in this course I have to do that a lot. Because it's part of the master of education. You have to think critically. Yeah, I was on the way. Slowly --

#### *Problem solving; learning and working independently*

The skills of problem-solving and learning and working independently are closely intertwined in students' confidence and sense of efficacy. Student #5226's comments below also explain how expectations of increased student independence can cause a sense of isolation and intensify study pressures:

(#3319) I will tell them that here the researcher needs to be very independent. It's not like in the academic culture in my country. ... And that way when you come here, when you are totally independent, you feel disoriented, you feel like you may not go the right direction, because we don't know which direction is good.

(#5226) Because studying in Australia it is more independent – you know like we don't have a lot of guidance ... Desperate I mean is sometimes when doing a research it feels like we are so isolated. And it's stressful and yeah, like I told you, desperate. So we need some more guidance, some more assistance with the process otherwise we'll just – most of the students will just leave it behind. ... there are a lot of new things that I have come across, unlike in my country. I used to do a small research project and it was commented by my teacher that it's well done but when I went back and took another look at it, it was nothing, it was just like kid writing ... So like I told you, doing research here is totally new experience and without MMR and other support I wouldn't have enough courage, I wouldn't have enough confidence to further the degree ...

#### *Learning and working collaboratively*

To minimise research students' experience of isolation and study stress, the MMR workshops emphasised the importance of active learning and working collaboratively. In terms of graduate attributes, participants' ethical and inclusive engagement with communities, cultures and nations (Oliver, 2011) is demonstrated through more positive references to working and thinking independently:

(#9078) Like I am more confident with the use of - like I can use online now. I can just sit there and search for the material and I know what I have to do. ... I was a student before now I'm moving along that line and becoming a researcher.

#### *Ethical and inclusive engagement with communities, cultures and nations*

The generative curriculum approach also promoted increased engagement between participants from different cultural backgrounds who used MMR as a vehicle for sharing academic cultures and developing an understanding of alternative pedagogical approaches to teaching and learning. Participants #5226, #3319, and #7709, for example, note cultural-pedagogical differences between educational institutions in Australia and overseas. Allowing a place for such conversation is crucial for shifting deficit understandings of international students' academic practices. In addition, participants #9078 and #6507 acknowledge how the sharing of diverse cultural and pedagogical backgrounds constitutes a valuable learning experience, demonstrating at the same time ethical and inclusive engagement with communities, cultures and nations.

(#5226) ... doing research here is totally new experience

(#3319) Because, sometimes, if the teachers plan by themselves they don't know what students expect and then do not answer to them ...

(#7709) I am from an exam oriented background and didn't know how to do writings of assignments ... the learning culture here at ... is entirely different from back home.

(#9078) Teaching style is different ... – and students are from different countries so you're exchanging, you're sharing your views. So you get a lot of information.

(#6507) And the one that really stand out is when – you know, the one that really connect with the actual project I'm doing so – like people sitting around discussion, you know, one particular topic related to my project or some other student's project and we can learn from that, you a lot of ...

The willingness to listen to and learn from others represents ethical and inclusive engagement with communities, cultures and nations at multiple levels as lecturers/facilitators of MMR workshops also developed critical insights with regard to assumptions about the international students' learning backgrounds. Open dialogue and inclusive dialogue also facilitated student

engagement (refer to #6507 and #3319 below) and shifted the power relationship between staff and students (refer to #7709)

(#6507) The discussion part is the most useful. We got to share idea and comments and learning from the instructors/researchers.

(#3319) We also have fun talking to one another too.

(#7709) ... when I came to the MMR sessions I was of the mind that you guys are doing it for us so you will be looking for **our** priorities and **our** difficulties.

### *Issues and possibilities*

The MMR program offers a form of ‘just in time’ study skills support. This has been interpreted by some students as a skills focus throughout the program. After reviewing student data, it is clear that greater emphasis should be placed on the collaborative nature of the generative curriculum model element in order to enhance students’ sense of agency and responsibility for learning.

The MMR workshops made extra demands on student and staff time and workload. This is an important point from the student perspective as they found making time to attend the workshops very difficult due to timetabling issues and family and work commitments. From a staff perspective, MMR was introduced with very little information provided to other lecturers involved in the masters degrees but not directly involved in the workshops. There were also major difficulties gaining ethics approval, which delayed the start of the MMR sessions, and one member of the team left the university before the commencement of the workshops. Graduate outcomes were also not considered in the original design of MMR. Although the mapping of evidence of graduate outcomes remains an important and valid activity, the need for a more systematic approach to mapping graduate outcomes in the context of MMR workshops might undermine the principles of the generative curriculum model, which emphasises the need for liberatory and empowering spaces in education: spaces that resist the ongoing commodification of educational processes and outcomes.

Although written and oral communication, digital/information literacy and critical thinking skills are regularly assessed through coursework, other graduate outcomes such as civic and ethical engagement, independent and collaborative learning, creative and reflective thinking (Oliver, 2011, p. 4) are not. The MMR workshops provide an important opportunity to raise students’ awareness of these skills and encourage teaching staff to develop more collaborative, student centered teaching and learning environments.

Internationalization is a process that needs to be integrated and sustainable at the institutional level to ensure that teachers and students receive the necessary support in terms of workload management. Currently, this program operates as an ‘add-on’ to current masters coursework. Such a fragmented approach is referred to by Knight as an ‘activity approach to internationalisation’ (Knight, 1997, p. 6). Nevertheless, some MMR participants were able to articulate clear connections between their masters coursework and the MMR workshops and there is evidence in the data that valuing and engaging pragmatically with the international dimensions of teaching and learning within higher education fosters a more genuinely inclusive academic culture than “simply pretending everyone is the same” (p.6)

## **Conclusion**

This paper has integrated the concepts of globalisation, internationalisation, graduate outcomes and generative curricula in order to contextualise and explain the political and pedagogical challenges and constraints that impact on the development of generative curriculum workshops for international students. Integrating the MMR into all masters coursework is the key to ensuring the program represents a truly inclusive space for lecturers and students. The use of graduate attributes as themes for data analysis suggests that generative curriculum models can be mutually beneficial in terms of improving intercultural understanding and extending understandings of diverse pedagogical cultures and expectations and also supporting students' ongoing development of graduate attributes.

Overall, however, the findings throw up some interesting problems. The interviews and surveys indicate that all MMR workshop participants felt they benefited from the MMR workshops, but this benefit was not necessarily reflected in their subsequent behaviours. For example, in one group, student participants wanted to learn about time management and techniques that would help them read the large volume of English language reading more efficiently. These students, however, seemed to be working so hard and taking so much time to do the reading (and writing) that they did make time to regularly attend the workshop to learn more strategic study techniques. In the other group, student participants enjoyed the sessions on methodology yet it appears that none of them made major changes to their methodology of their proposals as a result of what they claim to have learnt. These results suggest that academics and researchers involved in the MMR workshops still have a lot to learn about the academic expectations and practices of international students.

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