A 'Breadth' of Fresh Air: Melbourne University's Curriculum meets Twenty-first Century needs

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Abstract

The University of Melbourne (UOM) introduced far reaching and controversial changes to its program in 2008, when the Melbourne Model was introduced incorporating New Generation degrees and interdisciplinary Breadth subjects now numbering in their hundreds. The success and popularity of these has varied, and this study was undertaken to investigate student expectations of Breadth and whether these had been met. According to the University of Melbourne (UOM) Handbook, "Breadth subjects allow you to gain knowledge and understanding across a broader range of disciplines, enabling you to develop insight, experience, and new ways of thinking in areas distinct from the main fields of study in your degree" (2015). This paper looks at a small sample of students and the range of Breadth subjects they have taken up to this point in time, including the second-year Breadth subject, Sport and Education in Australia from where the sample was drawn. The aim of the research was to determine whether student expectations matched those outlined by The University of Melbourne, and furthermore, whether these expectations were met and the desired outcomes achieved. The study and related research suggests that Breadth has been successful and has met many of the intended goals of the UOM. Student responses are predominantly positive, with expectations having been met if not surpassed.

Key Words: Breadth, Melbourne Model, Melbourne Curriculum, Bologna Model, Wellbeing, Liberal Arts, Cross curriculum

Introduction

In 2008 the Melbourne Model, now known as the Melbourne Curriculum, was introduced at the University of Melbourne. It was greeted with much fanfare but was also subject to much scrutiny and public controversy. As a result of its implementation the university's 96 undergraduate courses were replaced with six undergraduate degrees. According to the Vice Chancellor, Glyn Davis, the Melbourne Curriculum was designed to align itself "with the best of European and Asian practice and North American traditions" (Growing Esteem, Retrieved 18 September 2014).

The Melbourne Model was based on the Bologna Model, and numerous studies have examined this transformative process in tertiary education and the range of associated costs and benefits (Adelman, 2008; Cardoso, Portelo & Alexandre, 2008; Powell, Bernhard & Graf, 2012). Breadth subjects were a key component of this model and were designed to allow students to "gain knowledge and understanding across a broader range of disciplines, enabling [them] to develop insight, experience, and new ways of thinking" (UOM Handbook, (http://breadth.unimelb.edu.au.).

A literature review was undertaken to explain the Melbourne Model, and explore its precursor, the Bologna Model. It examined the influence of internationalization and globalization on higher education, cross-curriculum/interdisciplinary education in this context and the concept of student-centred learning which is integral to the process. It highlighted the strengths and weaknesses of the Bologna Model and its relevance to, and influence on the development of the Melbourne Model at the UOM. It allowed me to determine the gap in knowledge around which to structure my research.

While generalist degrees have long permitted students to study subjects from other faculties, the difference was that at the University of Melbourne in 2008, such subjects became compulsory. Seven years on and educators, the press and the public are yet to agree on the wisdom of this move. (Davies & Devlin, 2007; Gilmore & Marshall, 2014; McCalman & Soeterboek, 2008; Potts, 2012; Simons, 2011).

Methodology

I adopted a mixed methods approach which incorporates elements of both quantitative and qualitative methodologies. I chose a case study design in order to develop a holistic account of the phenomenon under investigation: Breadth. This case study is about establishing and testing assumptions of a specific sample of UOM students: What were your assumptions or expectations regarding Breadth, were these met or exceeded, and were they in keeping with the intentions and expectations of the UOM?

The Sample

The sample consisted of 43 students who were enrolled in the subject SEA in either first or second semester of 2013 and 2014. Enrolments in the subject are typically weighted on the side of males, 70:30, and included many overseas and international students, so while I was guaranteed a degree of homogeneity in terms of a relatively similar group of university-age, mixed gender students, there was also reasonable diversity within that group.

Participants were drawn from a range of faculties and were undertaking a range of New Generation degrees – Biomedicine, Commerce, Environments, Music and Science. Arts was the only omission, as SEA is regarded as an Arts subject and one of the stipulations for taking Breadth is that it must be a subject from studies outside the student's home faculty. This was the one key limitation this choice presented.

The Survey

The survey was the primary method of data collection and was created via Survey Monkey, an online platform which allowed me to customize questions and collect and analyse data in one simple program. It consisted of 30 questions in total and was launched in mid-2014. It was sent to four past cohorts of students, 300 in total, with a response rate of approximately twenty percent. It provided rich data allowing for some basic statistical analysis, and generated quantitative feedback upon which some hypotheses could be tested. However, the emphasis was on the content of individual responses. Results were a combination of quantitative data, using Likert Scale questions/responses, and qualitative data using open-ended questions which required more detailed and extensive written responses. The survey responses helped guide and inform the analysis and was crafted in such a way as to reiterate the aims of the UOM Curriculum Model, drawing directly on mission-statements from the UOM handbook and re-wording these to create questions or statements that would elicit meaningful responses, such as:

> Breadth allowed me to develop insight, experience and new ways of thinking in areas distinct from my main field of study.

Answered on a sliding scale from Strongly Disagree to Strongly Agree, these are examples that yielded qualitative data. The responses have been presented in the form of a graph, allowing for some basic, quasi-statistical quantitative analysis. There are then follow up questions that elicit written responses expanding on these initial responses, such as "How have you benefitted intellectually from taking Breadth subjects?"

I formulated and presented a broader series of questions about student experience of Breadth first, before narrowing the questions to my subject area (SEA) as the specific case study in question.

Analysis and Discussion

The open-ended survey questions produced some detailed responses from participants, beginning with an exploration of what students knew of the UOM Melbourne Model and Breadth subjects prior to starting at the UOM. Almost 40% knew very little about the UOM stand-alone model prior to commencing their course, indicating it had nothing to do with their initial selection process. The remaining respondents had some idea that Breadth electives would be from an unrelated field of study:

> I didn't know much at all. From what I had heard from people they were the fun subjects. Personally, I originally thought that they may be a waste of time, as I would end up doing a unit that I have no interest in. (#40)

What is most interesting about this response is the hint of a shift in thinking over time, and the remainder of this respondent's survey responses confirm a change in position from their original, somewhat negative perceptions of Breadth:

> For someone like me, who is indecisive about what path they want to take, I would recommend the model. It has given me a chance to study a broad range of units, which has made those units that I enjoy the most stand out…It gave me a chance to focus my attention on something different rather than my core subjects that were quite heavy… I am even considering aiming my course more in the direction of my breath subjects, as it opened all these opportunities and interests that I had never even thought about before. (#40)

Not only is this student a convert, but it has transformed their view of their learning environment and opened options never considered

Another student responded that Breadth subjects were "the "bludge subjects" to space out your course. (#30). Again, this student was a convert with most their responses affirming the UOM model:

> I enjoyed it. I expected to be under the pump in my breadth, but the work loads are well dispersed and easy to catch up on if you get behind…The thing I enjoy most about my breadth subjects is the interaction is a main part of the course (#30)

Clearly, respondents saw Breadth as an opportunity to experiment and this was beneficial in the longer term. Almost half of those surveyed would unequivocally recommend Breadth to others based on this.

> It gives you a chance to experience a range of subjects in different majors before jumping into a specified major, which is more logical and practical for a wider range of students as many tend to change their ideas about what they want to study in. University of Melbourne gives students the time to decide without feeling rushed. (#32)

The remainder shared these sentiments and were happy to recommend the MM, though also voiced some concerns in equal numbers. Students questioned the model but these responses tended to be pragmatic rather than philosophical in nature. Of the few negative responses, the general theme was of time and money wasted, and these are legitimate concerns for many students:

> Breaths (sic) are forced upon you. Though I happen to like a few of them, I'd prefer a choice of my own (#31)

Again, legitimate issues of freedom of choice are raised; while there are a huge range of subjects to choose from, the very fact that students are put in this position and compelled to choose is an irony and anathema for some.

> I saw breadths as a way to learn something alternative to my main discipline but now I see it as a bludge subject and a subject I can get free marks in (#18).

However, while s/he was in the minority it was certainly not black and white. What became apparent in reading these responses was not just the range and diversity of Breadth subjects available to students, but the range in content and implied *quality*. It was apparent that Breadths varied widely in terms of their degree of difficulty, the quality of teaching and the range of assessment practices adopted. Inconsistency was one of the key findings, and for some students there was the expectation that these Breadth subjects would be easier than their mainstream subjects. They were often surprised that this was not always the case. There was also the dilemma for students, whether to choose subjects they liked, or subjects they felt would cause them the least inconvenience and offer a 'free ride'.

This meant that selection criteria determining their choice of Breadth subjects often changed over time:

> Once I started with my breadth subject I found myself really enjoying them. My views changed, and I actually found myself interested in so many of the breath options. There was such a vast collection to choose from, which meant that I could pick something I was interested in (#40).

Generally, responses were favourable:

> Now I understand that they are meant to expand the student's academic horizons. The overall goal of Breadth subjects reminds me of the "open curriculum" my own (Grinnell College) and many other institutions utilize back in the US (#36).

> I found my breadth studies very interesting. It wasn't just the course work which was drastically different, but the way in which you had to think about things and the way in in which my peers thought about things. It was quite an enlightening experience to work and learn from different people who learn and approach tasks from drastically different angles (#16).

> Interacting with new people I think is always going to help on a personal level. Breadth subjects forced me to take a broader look at the university rather than just confining myself to one group of people. As a person, I think it showed me that there are many different people, opinions, ways of thinking etc. across the university, allowing me to build new relationships with new people I wouldn't meet (#31).

These responses are important in that they demonstrate that while students often felt 'forced' to do something against their will, end results were generally favorable. This tends to fit with the adage that 'teacher knows best'; we don't know what we don't know! The reflective nature of students' responses indicate that formerly entrenched positions and opinions may have changed over the course of time because of their experience of Breadth.

When asked, what do you see as the advantages of taking Breadth subjects? Some responses were very pragmatic but most emphasized the advantage of being able to diversify:

> Complete a minor concurrently with a major. Taste of future study options. Prepare for postgraduate study, i.e. Masters of Education which is not offered as an undergraduate course. (#29).

> Expanding academic horizons; exposure to different types of learning; if specialization is in science courses, breadth subjects allow students to continue improve non-scientific writing; allows for connections to be drawn between one's own specialization and the rest of the academic world (#36)

When asked, How have you benefitted **personally** by taking Breadth subjects? Breadth subjects had a profound impact on some of them personally, with implications for future career choices and educational pathways:

> I am even considering aiming my course more in the direction of my breath subjects, as it opened all these opportunities and interests that I had never even thought about before (#40).

> My breadth subjects have been my favourite subjects, made me reassess my undergrad Major into possible transfers (#46).

The Melbourne Model was designed to delay entry to professional degrees in the hope that this would promote greater equity, access and diversity (Potts, 2012). The fact that students recognized this was an endorsement of the model. Some students mooted the idea of changing courses, and acknowledged that breadth subjects influenced these decisions. This indicates that the goal of the MM was being achieved to some extent, and that delayed entry was leading some students to rethink their career choices and make more appropriate choices.

Others saw Breadth subjects as having wider and more far-reaching effects in terms of their own personal growth:

> I think I have become a more well-rounded person and more interested in a wider range of subjects. (#17)

> Greater acceptance and understanding of different viewpoints on social, political, historical and economic principles. (#46)

> Interacting with new people I think is always going to help on a personal level. Breadth subjects forced me to take a broader look at the university rather than just confining myself to on group of people. As a person, I think it showed me that there are many different people, opinions, ways of thinking etc. across the university, allowing me to build new relationships with new people I wouldn't meet. (#16)

There was also the social aspect and acknowledgement that these subjects afforded them room for personal growth and emotional wellbeing. This was a thread running through many of the responses:

> I could take subjects I enjoyed and study topics I found interesting. I also made some good friends. (#14).

> Many subjects were very social and allowed me to meet new people. (#11).

This focus on fun and friendship may seem trivial to some, but in fact is a key to students thriving and succeeding, a core notion of *wellbeing*, something that is fast becoming a key element of many mission statements:

Positive relationships foster connectedness and feelings of belonging and are essential for wellbeing. These relationships are characterised by constructive interactions that provide enthusiastic and genuine support. They are important because they help us to build social and emotional skills and in turn nurture other positive, caring and respectful relationships (p3, NSW Department of Education and Communities, 2014).

While this has become a key focus in secondary schools, it is often forgotten at tertiary institutions where students are left to fend for themselves. One survey response highlighted this in setting out the case for the affirmative:

It is also a wonderful transition for undergraduate students from high school to university. i.e. study broad subjects at high school, specialise at uni. It leaves a small aspect of high school life in university life which is comforting in a world where you are often only a number (#29).

Sheer enjoyment of the classroom experience was an oft-cited response from students as to why they took a Breadth subject. This is another key to students achieving *wellbeing*; having a sense of purpose and feeling a sense of belonging at university:

Enjoyment, or the presence of positive emotion, can increase a student's wellbeing. Learning occurs more effectively in the context of positive emotions. Enjoyment broadens a student's ability to think creatively, be innovative and to problem solve more effectively (Griffin & Care, 2015, p 4).

When asked *"How have you benefitted* educationally *from taking Breadth subjects?"* A lot of the comments acknowledged the acquisition of new knowledge outside their core disciplines. However, an ongoing theme was the *skills* learned, such as academic essay writing:

As a science student, you learn how to write academic essays as an art student would be required to do (#39).

By far, the most interesting response was the following, which supports the research question regarding students learning complementary ways of thinking:

Studying subjects where there isn't a 'correct' answer has been very beneficial for me. As I am generally a person that likes a definitive answer. So, the breadth subjects I have taken have forced me to learn in different ways. (#16).

While many spoke about Breadth subjects providing relief from stress and boredom, others demonstrated recognition of the more esoteric benefits of diversifying:

I personally would never have ventured outside my course and faculty, and I would be worse off from a purely personal sense and perhaps an educational sense when thinking about how 'rounded' my education would be. (#16).

I would be more close-minded about the world around me (#25)

Sport and Education in Australia

The survey then moves from the general to the specific, looking at the subject *Sport and Education in Australia*, which was one the students all had in common. While 95% responded that they chose it because they '*liked sport*', 89% said the '*content appealed*' to them, almost 50% responded that they chose SEA because it was '*Intellectually stimulating*'.

The latter came as somewhat of a surprise as the previous two responses clearly indicated that their overwhelming interest lay elsewhere. The word-of-mouth recommendations and Handbook outline which approximately 45% of respondents had gone by, had piqued their interest and alerted them to the fact that this subject would be an intellectual pursuit rather than activity-based.

When asked *"Was Sport and Education in Australia what you expected?"*, some were unequivocal in their response that the course met their expectations, but the majority said it was different to, but in most cases far exceeded, their expectations:

It was more intellectually stimulating than I thought (#34)

Didn't expect it to be so sociology based (for some reason) but that's the part I liked the most! (#14)

I found the content much more stimulating than I had imagined and I consider this to be my favourite subject that I have studied in my whole degree (#27)

When asked*: What were the most positive outcomes you gained from this subject?" (*SEA), the answers ranged from friendships made, to learning to be a more critical thinker. Some commented on '*easy marks*', others on how the subject was more difficult than they had anticipated. Finch & Gordon (2014) made the very same observation in their Breadth study, describing a similar response to the Math content in their *University-Breadth* subject, *Statistical Literacy for Undergraduates*:

Given the diversity of the student cohort…there is a diversity of feedback; for some students, the subject is challenging, for others it is too light on… (p.94).

The ability to analyse issues in greater depth was another comment that emerged, as did sheer enjoyment of the subject matter. An appreciation of this depth and diversity was reflected in some of the comments made:

Being more critical on how things are portrayed in the media. (#26)

Citing the most *positive outcomes gained* from studying SEA, six people commented on the friendships made, with statements such as:*)*

I enjoyed being in a class with people I probably would never encounter as everyone is from different courses. (#32)

Some simply put the word "*Friends*" as being the most positive outcome, where one word summed it up.

In response to the question, "What was it about the course that you enjoyed the most?" responses were ranked per the top three-rated responses given by the students. Thinking outside the box (56%) rated very highly as one of the top three. Learning to present (48%), and Hearing the opinions of others (48%) also rated very highly in the top three responses.

However, it was group work and class discussions that were one of the most enjoyable, stimulating and thought provoking aspects of the course according to the written responses in the follow up question, with a great many positive comments and this is a very positive result in the light of desired outcomes of the Breadth model. Inadvertently, students were acquiring new *skills*.

Breadth and Wellbeing

Effective group work, developing friendships and taking enjoyment from subjects might seem superficial outcomes, but in the bigger picture these are very important in terms of the students' overall wellbeing.

Wellbeing is about leading a meaningful, purposeful life with positive relationships *(*MGSE M-Teach Partnerships Conference, 2015).

Surely this is something we all aspire to, and as educators we would like the same for our students, so it is not surprising that *wellbeing* is such a growth industry in education and psychology. Research by Associate Professor Lea Waters charts the benefits of Positive Psychology within twenty first century schools.

Wellbeing should also be an accepted indicator of school success…Not only schools, but universities need to be thinking strategically about how to embed positive psychology into the culture…to create a positive and productive environment for students (Waters, 2011).

Cumming & Nash (2015) discuss the need for students to have a sense of belonging as a key component in promoting positive learning and a connection to their community. While this study explores these factors at the primary school level, my current research indicates that these factors are just as important at the tertiary level. In March 2014, The Age newspaper reported on university dropout rates:

Almost one in five students leave their studies nationwide by the end of first year… They blame unhappiness with the subjects they chose, financial hardship, failing courses, and class sizes (Gilmore & Marshall, 2014).

Yet in Victoria, The UOM boasted the lowest attrition rate of just 5% and surely Breadth subjects are a contributing factor if they are the defining difference between the UOM and other Australian universities. Cargill & Kalikoff cite evidence linking inter-disciplinarity to a range of benefits which "can be a valuable method to improve student performance, increase student retention and build learning communities" *(*p.90).

If programs such as Breadth are proven to be a contributing factor in stemming the tide of student drop-outs, and can be linked to increased retention rates in university courses, this may be yet another benefit of the Melbourne Model.

Breadth and Its Place in the Twenty-First Century

This study has called into question the Melbourne Model and the legitimacy of Breadth subjects within the UOM curriculum. The NSW Department of Education's Wellbeing Framework for Secondary Schools rests on three successive pillars: Connect, Succeed and Thrive.

> Wellbeing, or the lack of it, can affect a student's engagement and success in learning (NSW Department of Education and Communities, 2014, p2).

Wellbeing can be shaped by several factors, first and foremost, *choice,* something which Breadth aims to provide at the tertiary level:

> Choice is important because it impacts positively on a student's learning and engagement in schooling. It contributes to enhanced motivation, interest and commitment to tasks. The provision of choice supports self-regulation, self-discipline and achievement. When students have choice and opportunities to engage in activities that are of interest and value to them, their wellbeing is enhanced (NSW Department of Education and Communities, 2014, p3).

Emeritus Professor Patrick Griffin, founder of the Assessment Research Centre at the MGSE, UOM, describes the three Rs being replaced by the four Cs: Communication, Collaboration, Creativity and Critical thinking. He highlights evidence of changes in the workplace and the emergent 'knowledge economy' requiring changes in the skill set of the workforce:

> A recent survey of business executives identified problem solving, team working and communication as top required skills, and predicted that demand for these skills would grow (M-Teach Partnerships Conference, 16/07/15).

The very fact that students are required to take subjects outside their main learning area means they are getting depth and "breadth" in their education. The Melbourne Curriculum is designed to meet the challenges of the twenty-first century and appears to be meeting this part of its brief. SEA/Breadth delivers with its emphasis on weekly reading circles, group work, shared resources and the need to hone communication skills in both small and large group situations. Communication, collaboration and critical thinking are the very foundations of the course and support the goals of the MM:

As a Case Study of Breadth, SEA can be shown to have met not only its brief, but to have gone well beyond that. In teaching broader twenty-first century skills it has furnished students with the skills and autonomy to meet the challenges of a more diverse world and an unpredictable future.

Conclusion

Summing up, I can say with some confidence that the evidence points to Breadth in general, and SEA in particular, as having been a success. Overall, students were satisfied and supportive of the Melbourne Curriculum Model and with the role of Breadth subjects within that. Expectations were met and on many occasions surpassed.

The MM and Breadth as a core component of that provide an area ripe for further research. Questions of modified academic pathways for students, issues of wellbeing and questions about retention rates at University were all were raised during this investigation. Naysayers argue that Breadth is a waste of time and a distraction from the real work of universities, but I would argue otherwise. This research indicates that Breadth contributes significantly to students' measures of wellbeing and their overall success at University. It has also raised questions regarding the range and scope of Breadth subjects available to students. Increased regulation and more effective moderation of Breadth subjects may be worth considering, while still retaining the myriad of choices available to students.

The Bologna reforms have set the pace and tone for recent changes and initiatives in higher education across the developed world.   A slimmer, trimmer and more streamlined model of education has emerged, with an emphasis on consistency and inter-changeability.   Breadth and depth at the undergraduate level are promoted, with specialization taking place at the post-graduate level in line with the North American Model of higher education. The University of Melbourne has followed the trend, adopted the model and modified the program in their unique and aptly titled *Melbourne Model* of higher education.

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