2nd International Conference on Higher Education Advances, HEAd´16, 21-23 June 2016, València, Spain

Principles and a model for advancing future-oriented and student-focused teaching and learning

Dominique Rene Parrish*

Faculty of Science, Medicine and Health, University of Wollongong, Wollongong 2522, Australia

Abstract

A major agenda of higher education institutions is to equip students to be employable and 'future ready' graduates; achieve their professional and personal goals; and respond, in a socially responsible way, to the challenges of the 21st Century. These aspirations require quality teaching and learning that is future-oriented and student-focused. This paper will describe the first phase of an initiative carried out in an Australian university to afford these aspirations as well as promote transformative and sustainable curriculum and pedagogy. An extensive review of literature was conducted to ascertain traits of Generation Y students. The findings from this review highlighted the diversity of preferences, goals, values and motivations of Generation Y compared to Generation X and Baby Boomers. This review informed the subsequent conceptualization of a suite of principles and a teaching and learning model, intended to have broad cross-disciplinary applicability and assist academics in the design, delivery and review of curriculum and pedagogy. A synopsis of the review findings, an explanation of the principles and model and an overview of the next phase of the initiative will be provided in this presentation. Additionally, a description of how generational information could more broadly inform higher education progress will be explained.

Keywords: Future-oriented teaching and learning; Educational strategies; new teaching/learning theories and models;

1. Introduction

The expectations and purpose of higher education institutions can vary depending on the individuals' or groups' perspective. Society broadly presumes that institutions will equip students with discipline-specific competence.

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* Corresponding author. Tel.: +61-2-4221-5492; fax: +61-2-4221-3151.
  E-mail address: dparrish@uow.edu.au

Current research suggests that higher education programs endow graduates with attitudes, beliefs and cognitive skills that will enable them to be effective citizens in the 21st Century. Students perceive multiple purposes aligned to their extrinsic professional goals and their intrinsic personal goals (Chan, Brown & Ludlow, 2014; McArthur, 2011).

The most successful higher education institutions will be those who can predict future societal and student needs and accommodate these in the educational programs that they design and deliver. However, ascertaining what these needs might be is challenging and subsequently, program design and delivery is often informed by conjecture. The first phase of an initiative, which sought to tackle this challenge is presented in this paper. This initial phases focused on reviewing and analyzing generational research and literature and in light of the findings rationalize an evidence-based suite of principles and a teaching and learning model that could inform the design, delivery and review of future-oriented and student-focused curriculum and pedagogy. Traits that were specifically investigated through a generational lens, to appropriately inform the suite of principles and ensuing model were career motivations, personal and professional goals and characteristics, educational preferences and societal values (Chan, Brown & Ludlow, 2014; Salmon & Wright, 2014). Phase two of the initiative will investigate the veracity and value of the principles and model through interviews and focus groups with academics using these resources.

2. Context for a Generational Focus

Rationalizing the basis for informing curriculum and pedagogy design and delivery, which is future-oriented and student-focused requires firstly an in-depth understanding of the student cohort and secondly an awareness of potential future needs and opportunities. In the Faculty of Science, Medicine and Health (SMAH), at the University of Wollongong (UOW), where this initiative transpired, 86% of the student cohort were classified as belonging to Generation Y, born 1980-1995 (Henry, 2007). Conversely, 84% of the academics were classified as belonging to Generation X (50%), born 1965-1979, or a Baby Boomer (34%), born 1946-1964, (Henry, 2007). In an attempt to understand the current student cohort, this initiative undertook an extensive review of research and literature into the traits of Generation Y, with a view to determining the significant career motivations, personal and professional goals and characteristics, educational preferences and societal values of this generation.

Curriculum and pedagogy decisions are most significantly influenced by the personal beliefs, views and assumptions of teachers (Nicholls, 2002). According to Walker *et al* (2006), the teaching preferences of Generation X (Gen X) and Generation Y (Gen Y) are considerably dissimilar. Thus, the hypothesis that underpinned this initiative was that in SMAH if the beliefs, views, assumptions and pedagogical preferences of the Gen X educators are contrary to those of their Gen Y students then the curriculum and pedagogy designed and delivered would not be student-centered or potentially future-oriented. Subsequently, the broad review undertaken as part of this initiative also examined the career motivations and educational preferences and characteristics of Gen X and Baby Boomers in addition to the Gen Y investigation. This was undertaken as a means of ascertaining the disparate motivations, preferences and characteristics of Gen Y students compared to their Gen X and Baby Boomer teachers and in doing so, highlight the specific curriculum and pedagogy elements that needed to be addressed in the developed suite of principles and ensuing teaching and learning model.

3. Methodology

An extensive review of generational literature and research was conducted on papers and studies published from 2005 onwards. The decision to restrict the data sources to this time period was based on a premise that the Gen Y information would not be adequately relevant or contemporary if the source was published prior to 2005, which is ten years post the end of the Gen Y time span. Data searches used specific terms including generational differences/traits/characteristics/comparisons and Generation X/Y and Baby Boomer. Papers and studies sourced were also limited to those that had pertinent application to adult learning, career motivations, societal values and/or personal and professional characteristics. Further, the selected papers and studies were contained to only those that provided descriptions of traits for each of the Generations X/Y and Baby Boomer.

A thematic analysis of the gathered research and literature data was conducted and the resultant findings were synthesized and organized into a data collection matrix that mapped the characteristics and traits of each generation

under elements associated with career motivations, societal values, personal and professional goals and characteristics and educational preferences. This matrix was then interrogated and refined to isolate the findings that could specifically inform the design and/or delivery of future-oriented and student-focused curriculum and pedagogy. The refined matrix was further rationalized to hierarchically order the comparative elements so that those elements with the greatest disparity across the three generations were at the top of the matrix and those with least incongruence were at the bottom of the matrix. In conceptualizing the suite of principles and teaching and learning model the elements at the top of the matrix were most influential and those at the bottom of the matrix were perceived to be least significant.

This presentation will provide a snapshot of the elements of the matrix and research findings that significantly informed the conceptualization of the suite of principles and teaching and learning model as well as share the principles and model. A goal of the presentation will be to seek constructive feedback and recommendations on the principles and model to advance these resources and the rigor around their development.

4. Findings

In Australia, Gen Y started entering university in 1998 and collectively has received more formal education than any other generation (Boag, 2009). They are driven by a strong ethical outlook, have a fervent sense of community, patriotism and loyalty, want instant gratification, are comfortable with change and need to feel like they are engaging in meaningful work (Boag, 2009; Coates, 2007; Henry, 2006 & 2008; Johnson & Romanello, 2005; Reeves, 2008; Sheahan, 2008). From a career perspective Gen Y's will have more than 5 distinct careers; initially they will have an average tenure of two years per job; they will have multiple overseas jobs and be self-employed numerous times. This generation will leave a job without another job to go to, they are not defined by their career and have high expectations of work/life balance, they 'work to live rather than live to work'. Gen Ys prefer teamwork and like to be involved in decisions that affect them, they want and will seek high positions at a young age but are not willing or expect to have to work long hours to achieve this goal. Gen Ys want inspiring leaders who will mentor them and will not accept traditional authority; they need a clear path for career progression and want some control over their work and career (Boag, 2009; Coates, 2007; Dorzias, 2009; Henry, 2006; 2008; Johnson & Romanello, 2005; Levett, 2010; Levy et al, 2005; Reeves, 2008; Sheahan, 2008).

From an educational perspective, Gen Ys prefer on-the-job or online learning; they intend studying at postgraduate level and are willing to invest in their learning at their own expense. Gen Ys dislike 'seminar style training' unless it is delivered by people they see as 'experts', they like discussion groups with peers, prompt timely and continuous feedback, are technologically advanced, often referred to as digital natives, ambitious and questioning. They want opportunities for authentic experiential learning that emulates real world, have a desire for flexibility, are comfortable with diversity and want to know why they are learning the material they are being taught but collectively, they are poor at critical thinking. Gen Ys prefer to learn using multi-media, they expect to learn and they are risk takers not afraid to make mistakes because they see this as an opportunity to learn. (Coates, 2007; Dorzias, 2009; Henry, 2006; Johnson & Romanello, 2005; Levett, 2010; Levy et al, 2005; Nosova, 2014; Reeves, 2008; Sheahan, 2008; Walker et al, 2006).

Many of these traits of Gen Y are in stark contrast to those of Gen X and Baby Boomers, as illustrated in Table 1. In developing the suite of principles and teaching and learning model, to foster future-oriented student-focused curriculum and pedagogy, the career and educational traits that were blatantly different between Gen Y and Gen X and Baby Boomers were the aspects that were intently focused on and addressed.

Table 1. Traits of Gen Y compared to Gen X and Baby Boomers. (Source: Coates, 2007; Dorzias, 2009; Henry, 2006; Johnson & Romanello, 2005; Levett, 2010; Levy *et al.,* 2005; Reeves, 2008; Sheahan, 2008)

Element	Gen Y	Gen X	Baby Boomer
Career	Will have more than 5 distinct career	Will have 3 distinct careers	Will have 3 distinct careers
	Self-employed by choice, more than	Self employed by choice at least once	Self employed if no other choice

	twice		
Work ethic and values	A means to an end	A difficult challenge	An exciting adventure
	Goal-oriented and achievement driven, ambitious	Outcome-oriented and output focused, work-life balance, very determined	Process-oriented
			Values collaboration, workaholic
Technology	Want to employ it, technologically advanced, attached to their gadgets	Want to enjoy it, technologically literate	Want to master it, are keen to understand how technology can be used
Communication	Texting, social networking	Email	Telephone
	Expect polite, positive, respectful and motivational communication	Straight talk, present facts, blunt and direct	Diplomatic, speak openly, employ a direct style
Feedback	Want continuous feedback	Need constructive regular feedback	Like praise and public recognition
Learning preferences	Visual, multi-sensory café-style, music and multi-modal atmosphere	Interactive, roundtable style, relaxed atmosphere	Structured, classroom style, quiet atmosphere
	Peers, experiential, stories and participative focused	Practitioner, pragmatic, case study & application focused, excellent multi-taskers, embrace online learning	Experts, data, technical & evidence focused
	Highly competitive		Do not enjoy or embrace online learning,
	Like online learning		

5. Principles and a Teaching and Learning Model to Inform Future-Oriented Student-Focused Curriculum and Pedagogy

The rationalization of a suite of principles to inform future-oriented and student-focused curriculum and pedagogy was undertaken prior to the conceptualization of the associated teaching and learning model. This is because the principles guided the development of the model. While the principles, which will be shared as part of this presentation, were developed to be broad and generic in nature, the model, which will also be shared in the presentation, was far more explicit and intended as a checklist of sorts to assist educators in designing their future-oriented and student-focused curriculum and pedagogy. Both the principles and the model address elements related to the focus of learning, instructional design, assessment and feedback, curriculum content, teaching strategies, technology, sociological considerations and student engagement. The principles are intended to be used more as policy statements that could be documented in a faculty or institutional policy. The teaching and learning model is targeted at a program, course, unit or subject level and its intended use is to guide the design of learning, teaching and assessment, to provide insights into communication and engagement with this generation of students, and as a resource in reviewing and refreshing curriculum and pedagogy.

6. Conclusion

An understanding of the motivations, values, characteristics and preferences of the current generation of students – GenY, is a sound basis from which curriculum and pedagogy design and delivery could be rationalized. Generational knowledge could also significantly inform other operational aspects of higher education such as marketing, academic development, alumni relations and decisions about course offerings. The research agenda that has been instigated as a consequence of this initiative, will be expanded to look at the nuances of management and

leadership of the different generations, user testing and evaluation of the application of the principles and model in practice.

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