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Integrating Multiple Stakeholder Perspectives in Curriculum Design

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Abstract

Interventions in higher education have sought to improve student attainment levels in core competencies at the undergraduate level.   Curriculum redesign has been advanced as one such critical strategic approach for addressing persistent disparities in rates of progression between students.

However, we suggest that there exists a serious tension between curricular structure that serves to enact and enforce artificial boundaries around core subject areas, and a narrative which espouses disciplinary fluidity and a worldview that recognises the increasingly interconnected nature of global business and management activity.

To gain a deeper understanding of the potentially conflicting perspectives and expectations of stakeholders in curriculum design, the study selected one core undergraduate management module for further investigation. Initial results of the study suggest the need for a holistic framework for capturing the interconnections that influence curriculum design, and thus aims to contribute to pedagogical research debates in business and management education.

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Introduction

There is evidence to suggest that students compartmentalise domains of knowledge and find it difficult to establish content links, both horizontally in the same year of study, and vertically linking subject areas at different levels of an undergraduate programme (Mintzberg, 2004). Thus, for some first-year undergraduate students, the transition process to higher education represents a significant and often insurmountable challenge (Tinto, 1993; Byrne and Flood, 2005; Kift et al, 2010; Biggs and Tang, 2011). Different reasons have been advanced for this compartmentalisation, particularly tensions between the demands and expectations of the higher education sector and the underpinning epistemological views reinforced by secondary schooling (Biggs, 1996; Cook and Leckey, 1999; Lowe and Cook, 2003; Fee and Holland-Minkley, 2010; Coertjens et al, 2017). Students therefore often enter the first year of degree level studies with legacy expectations of boundaries around subject areas and an expectation that these lines of demarcation will be maintained in the curriculum that frames their learning experience at University.

Legacy student learning expectations coupled with 'silo-ing' in the undergraduate curricula are possibly detrimental to a wider and deeper understanding of the interconnectedness of disciplines as experienced in organisations. Thus serious tensions may occur between curricular structure that serves to enact and enforce these artificial boundaries and a narrative that espouses disciplinary fluidity, and a worldview that recognises the increasingly interconnected nature of global business and management activity. These tensions are acutely evident in disciplines such as business and management education that exemplify a divided focus between developing scholarly competencies and providing experiential learning elements for students, and suggests that in embracing this compartmentalisation within the business education core curriculum, students may carry this approach into their later professional practice (Ottewill et al, 2005). Past research therefore assert the need to integrate experiential elements into the curriculum and suggests that students "…should be given tasks that develop and test the skills and practices that they will need in their future careers" James and Casidy (2016).

In response to this perceived misalignment in the curricula, and faced with strong pressure from the external business community and independent agencies, business schools expend effort in developing initiatives aimed at improving student employability skills through academic studies, work experience, skills development training, and extra-curricular activities. However it can be argued that perceived deficiencies in business education at the undergraduate level may be directly attributed to "…outdated curricula, inappropriate pedagogical techniques and/or inadequate opportunities for work-integrated learning" (Jackson and Chapman, 2012, p. 96). Costigan and Brink (2015) further opine that "…misaligned learning goals may be the root cause behind misaligned curricula, suggesting that business programs may need to do more than revise their required courses to become increasingly relevant" (p. 265). Indeed, the issue of *relevancy* of the programme content in business and management education has been intensely and extensively debated (Badawy, 1976; Mutch, 1997; Arnold et al, 1999; Pfeffer & Fong, 2002; Trank & Rynes, 2003; Clinebell & Clinebell, 2008; Rubin & Diredoff, 2009).

However the principal focus of this past research is at the *graduate* level of management education with decided under-emphasis on learning processes at the undergraduate level. We assert the necessity to examine these learning processes during the crucial first year of transition for undergraduate students adapting to a more independent style of learning, as these processes may influence the general perception and approach of students to their higher education studies. This article therefore seeks to understand the interdependencies in the curriculum design processes for business and management education courses at the *undergraduate* level and thus explore where misalignment may occur in learning goals and expectations.

In the context of this article we describe "curriculum" as embodying course content and approaches to assessment. Previous research has investigated and proposed approaches to curriculum redesign to improve undergraduate student engagement and retention (Barnett and Coate, 2005; Black et al, 2014; Nixon and Williams, 2014). In management education, studies on curriculum redesign and pedagogical changes focus on the dichotomy of student and faculty perspectives (Ackerman et al, 2003; Howard and Warwick, 2013; Caza et al, 2015), and discuss the need to apply the principle of 'constructive alignment' between artefacts, such as syllabi, assessment methods, and other resources (Biggs and Tang, 2011; Colby et al, 2011). Constructive alignment emphasises methods for aligning teaching strategies and assessment methods with learning outcomes, and thus effective principles of curriculum (re)design integrate the use of hierarchical structures such as Bloom's Taxonomy (Bloom et al, 1956) to assist in understanding and defining key learning objectives.

However, we contend that curriculum and assessment structures at the undergraduate level may serve to support and uphold boundaries between disciplines. Though alignment between curriculum and assessment methods leads to improved learning outcomes (Biggs, 1996), and assessment is placed at the centre of the undergraduate experience (Brown and Knight, 1994), a disconnect remains between curriculum structures and traditional (formative and summative) assessment practices. This misalignment is particularly relevant during first year transition processes that may ultimately influence and shape individual learner perceptions and expectations. However Biggs (1996) suggests that any such attempts for change to the curriculum need to 'address the system as a whole, not simply add "good" components, such as a new curriculum or method' (p. 350).

In an attempt to bridge this gap between curriculum and assessment methods, several alternative strategies that inform the curriculum debate have emerged. These strategies include that of 'sustainable assessment' (Boud, 2000; Boud and Soler, 2016), 'authentic assessment' (Mueller, 2005; James and Casidy, 2016) and 'assessment for confidence' (Meer and Chapman, 2014). However, conflict may arise in subject curricula such as management education that also exemplify misalignment between the curricula and *stakeholder* expectations of learning outcomes (Howard & Warwick, 2013).

Stakeholder theory (Freeman, 2010) thus provides a useful framework for contextual exploration of the curriculum design process with focus on the interrelationships between stakeholders. Despite the multiplicity of approaches to defining and identifying stakeholders in higher education, we adapt Freeman's (2010) definition in describing stakeholders as those groups or individuals that can affect, or are affected by, realisation of learning goals or outcomes. Though the process of identifying stakeholders in higher education is not clearly defined, there is general consensus that key stakeholders should include students, faculty, businesses, and professional bodies (Jongbloed et al, 2008; Chapleo & Simms, 2010). Past research asserts the need to integrate these multiple stakeholder perspectives in curriculum design emphasising the integral role that students (Bovill et al, 2011) and businesses (Plewa et al, 2015) play as primary stakeholders in curriculum design.

However pivotal to an exploration of these relationships for curriculum design is an examination of pedagogical approaches described as the established mechanisms for content delivery such as lectures, group projects, tutorials, and work placements. Extensive past research suggest the need for stakeholder involvement in curriculum design (Bovill at al, 2011; Plewa et al, 2015) particularly in business and management, and Plewa et al (2015) further suggest that involvement of businesses as stakeholders in both curriculum design processes *and* delivery mechanisms is needed to ensure alignment between curriculum and learning goals and objectives. Thus in examining the integral stakeholder relationships that impact curriculum design, the contextual framework should embrace pedagogical approaches or mechanisms for content delivery.

We therefore focus our research on a first year undergraduate module in business and management education, a module that exemplifies some disconnects in curriculum and pedagogy. The selected core module, studied by students enrolled in a three-year or four-year B.A. in Marketing course, exemplifies characteristics of a traditional marketing module such as exam-based assessments and lecture-based curriculum delivery (Black et al, 2014). This undergraduate core module was initially designed as an introduction to information systems and the use of such systems for statistical analyses and business decision-making. However, a preliminary analysis of the module revealed several hidden problems in terms of structural legacy, delivery pragmatics and perceived interdisciplinary incommensurability. The module therefore provided a rich but well bounded case and, by virtue of some qualitative research with key stakeholders, afforded the opportunity to examine what lies beneath the visible problems. This ethnological-based study thus sought to gain the viewpoints of both students and teaching faculty in key areas such as assessment and teaching. It is anticipated that the results of this initial study can be further extended to analyse additional modules in business and management and thus offer a deeper understanding of the contradictions that may exist between critical components in curriculum design.

Background – Undergraduate module
The Management module under consideration is a core module for first year undergraduate students in the Business School. The module – *Business Information Systems and Quantitative Methods* (BISQM) - is taught during a full academic year. On average 120 students enrol on the module each year, with approximately two thirds of enrolled students pursuing the B.A. in Marketing degree; the remaining one third of students are enrolled on an LL.B. with Business course offered by the Law school.

In 2016/17 approximately 10% of students on the module qualified at A-level only; 30% of students gained BTEC qualifications only; and the remaining students had gained combined A-Level and BTEC, or other, qualifications. Teaching on the module is structured as weekly one-hour lectures, and weekly one-hour seminars with up to 20 students per seminar group. The module exemplifies some of the disparities in student engagement and achievement that the Business School are keen to improve. 2016/17 statistics compiled by the university showed that at the course level:

- Student engagement (based on attendance) is low
- Progression rates for Marketing students is less than 80% (from year 1 to year 2 across all level 4 modules)
- Disparities between students of different educational backgrounds – students classified as having an 'A-levels only' background achieved an 85% pass rate compared to 'BTEC only' students who achieved a 25% pass rate on the course.

Specific to the module, the failure/non-completion rates for students were relatively high compared to other core modules; in 2015/16, the failure/non-completion rate was 20.7% for students enrolled in the Marketing course, though this figure does not take into account withdrawal rates due to personal or financial reasons, or course transfer. In 2016/17 the failure rate was 19.5% with 42% of students achieving a module grade of 2:1 or above.

Research Methodology
By embracing action research to examine the inter-relationships between stakeholders for curriculum design and delivery in a first year undergraduate module in business education, we propose the use of a general analytical framework that encompasses the primary interactions between core components. The suggested framework helps to contextualise this research by exploring the stakeholder relationships that are inherently part of the environment within which

a course is introduced and taught. In this context, our definition of stakeholders extends to students, academic and professional university staff, and the external business community (including relevant professional associations). Thus the framework examines stakeholder influence in:

    A. *Curriculum* – defined in this context as the course content to include learning outcomes, assessment methods and feedback practices; and

    B. *Pedagogy* – in this context we define this as mechanisms for content delivery to include teaching practices and resources.

The proposed general framework for this phenomenological research thus affords a deeper contextual case study analysis of the single module (Figure 1). At the centre of this framework is the primary object of our research, the selected module under consideration. The outcome of the inter-dependencies within our framework is the redesigned module. Thus, in our role as qualitative researchers, we interpret the contextual data based on our experiences as educators and practitioners in the field of business and management, to suggest changes that will result in the redesigned module.

The selected first year management module under consideration provided an important opportunity to gain student feedback in order to improve teaching practice. Analysis of the curriculum design process also provides insights into the experiences that the module teams go through in developing and adapting their approach and their materials in order to help them better meet the needs of these first-year students.   Specifically, the research conducted as part of this study sought to understand:
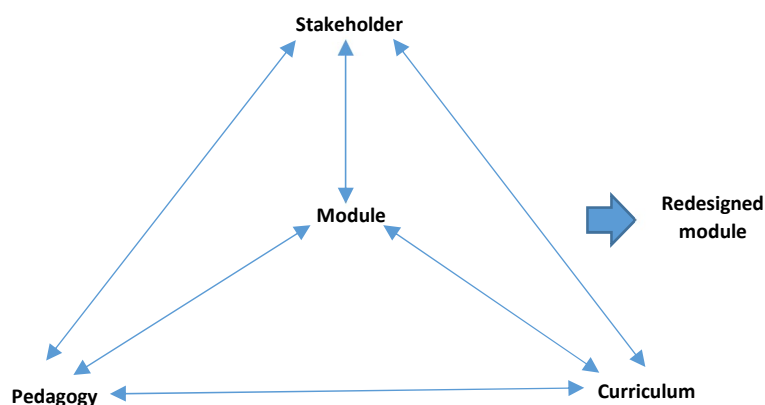

Figure 1: General research framework

    1. The learning expectations that students bring to the University course in general and this first-year module in particular;

    2. The expectations of the teaching team on the module;

    3. The changes that students, and teaching staff, think might improve their learning/teaching experiences on the module; and

    4. The level of empirical support for changes to the module.

The results of this research is used to examine contradictions between the identified components – pedagogical approaches, curriculum, and stakeholder expectations – and explore opportunities for redesign of the module that may help to address some of these contradictions.

Data Collection

This research views the learning environment as a system where an analysis of the interdependencies and interrelationships among the various components, from the differing

Figure 2: Survey instrument (partial)

viewpoints of multiple stakeholders, provides a better understanding of the system as a whole. This paradigm of interpretive systems research lends a richer and more in-depth perspective for understanding and analysing possible contradictions in learning expectations of stakeholders. Therefore the study primarily aims to discover:

   a. *What learning expectations do students bring to their University course in general and this first year module in particular?*
   b. *How do students expect to be assessed?*
   c. *What are the learning expectations of the teaching team across the two parts of this module?*
   d. *What are the learning expectations of external stakeholders across the two parts of this module?*

It is anticipated that in achieving the primary aims, we also discover what it is about the module that cause students to disengage and underperform, and the role that the teaching team plays across the two parts in understanding barriers to the integration of material. Reasons may include - the developmental sequence; the delivery of material; use of enmeshed and coherent cases and examples; the final assessment; and consistency across the teaching team.

To facilitate feedback from students, the researchers developed and administered a short survey designed to elicit key student issues around the selected undergraduate management education module under investigation. The research instrument for the initial exploratory phase was an anonymous online (electronic) questionnaire distributed to current and past undergraduate students of the module via email. The survey was divided into three sections, and explored the main themes of: pedagogy and curriculum (module content and assessment methods). Students were asked general questions pertaining to background data such as their educational background (BTEC, A-level) to determine any pre-existing differences in educational background that may influence student perceptions; and questions specific to their learning experiences and expectations of the module. A five-point Likert scale was used to allow students to express their perceptions and indicate their overall satisfaction of the module. Figure 2 illustrates some of the questions asked of students concerning their learning

experiences and expectations of the module.   A link to the online survey was distributed via email to past undergraduate students of the module, approximately 150 students and sixty (60) responses were received, representing a response rate of forty percent.

Feedback from past teaching faculty for the module was also facilitated in order to understand learning expectations for the module, and curriculum redesign processes. The primary research is also supported by evidence from *secondary research*, particularly past studies that apply stakeholder theory in curriculum redesign.

Findings

The following paragraphs present the findings in both identified core research areas – (a) curriculum and (b) pedagogy.   The subsequent section, *Module Redesign,* discusses the implications of the research findings with on areas of perceived misalignment between the two components, and will analyse the results from the perspective of the primary stakeholders – students, faculty, and businesses/professional bodies. The study benefits from both primary research and secondary qualitative data in exploring and understanding the contradictions that occur.

Curriculum

University-wide initiatives place curriculum design mechanisms as one of the primary strategic goals of the university. These articulated mechanisms include, in part:

- Engagement of alumni, employers and professional bodies in the formulation
and facilitation of all courses;
- Development of relevant professional attributes gained through work
placement or experiences embedded in course design and assessment
methods
- Personalisation of learning experiences to address disparities in attainment
levels

Students have the option of enrolling in a full-time 3-year course or a 4-year sandwich course (one year work placement).   At the course level, design of the curriculum is informed by some requirements of external professional associations as graduating students have the opportunity to gain exemptions toward a professional certification in marketing.   Teaching on the module is divided into two distinct strands:

(a) *Business Information Systems* (BIS)
Theoretical concepts in information systems are introduced in weekly lectures, and weekly one-hour seminars (held within a traditional classroom environment) reinforce these concepts by incorporating experiential learning elements through application of a case study approach.

(b) *Quantitative Methods* (QM)
Weekly lectures introduce key statistical techniques for analysing data, and weekly 1-hour seminars, primarily conducted in computer laboratories, focus on practical application of these statistical concepts using industry-standard software (Microsoft Excel and IBM SPSS Statistics) for data analysis.

The learning outcomes for the module provided to students are described below, and are defined distinctly for each of the two topics, with little overlap between the two parts of the module:

Business Information Systems	***Quantitative Methods***
a. Describe major classes of information systems, their source data, and functions	d. Interpret representations and summaries of univariate and bi-variate data relating to business & marketing.
b. Develop a basic understanding of issues affecting the use of information systems within organisations.	e. Analyse output from both specialist statistical and general office software.
c. Apply basic information systems concepts in an organisational context.	f. Gather business data from published sources.
	g. Conduct and interpret basic quantitative analysis using software

Theoretical concepts from the information systems literature, introduced in the first term of the module, were also introduced in other first year core modules required by B.A. Marketing students. Microsoft Excel and SPSS were two statistical packages used for data analysis in Quantitative Methods. However SPSS is also introduced to B.A. Marketing students on a core second year module. As this module also represented a core module for students registered on other courses, faculty expressed that B.A. Marketing students were at a distinct advantage in understanding the SPSS statistical package, and exhibited levels of disengagement as some of the SPSS content introduced in the module overlapped with content already introduced in BISQM.

Formative assessment in *Information Systems* occurs near the end of the first term and comprises optional submission of one essay, similar in format and structure to a final exam question. For *Quantitative Methods,* formative assessment occurs near the end of the second term, and require students to perform general data analyses (using the standard industry software) on a small dataset of companies, and submit the results in the form of an essay. Essays are submitted electronically (email) to teaching faculty, and formative feedback is returned electronically (via email) or printed.

Summative assessment designed by teaching staff from the two faculty divisions, consists of a single three-hour examination accounting for 100% of the final grade. The exam is taken at the end of the academic year, typically three to six weeks after the last lecture/seminar for the module. The exam comprises two sections, *Information Systems* and *Quantitative Methods* sections and, as an open book exam, students are allowed to bring in any reference material including written notes and one textbook. The exam sections are equally weighted – each section contributes 50% to the final grade. For the *Information Systems* section of the exam, students are required to answer 2 out of 5 essay questions; and for *Quantitative Methods* all questions are mandatory. One external examiner has responsibility for moderation of exam scripts, and review of the final examination paper.

Reviewing the survey responses distributed to past students of the BISQM module, 40% of students answered 'Definitely disagree' or 'Mostly disagree' in response to the question '*In your experience of the module did you find that: - Overall I was satisfied with the module*'; 20% answered Mostly agree; and remaining 40% of responses were Neither Agree or Disagree. Table 1 provides some survey responses concerning module assessment to the questions '*What did you like most about the module?*' and '*What did you dislike most about the module?*':

Table 1: Survey Responses – Curriculum (Assessment)

'What did you like most about the module?'	'What did you dislike most about the module?'
"While there was a clear divide between the BIS part and the QM part, both work well together and what I learnt has been very relevant in my later studies in both marketing and other business topics." [A-level; Marketing]	*"Was slightly unsure how both sides of the modules were related with each other."* [Mixed – BTEC, A-level; Law] *"Difficult to understand and feel the seminars are rushed, as well as work not being explained clearly"* [A-level; Law]
"I am familiar with a lot of the content from previous studies" [A-level; Marketing]	*"The case studies about information systems"* [Mixed – BTEC, A-level; Marketing]
"I liked that it was quite easy to understand " [A-level; Law] *"I could understand the relevance of the module to the future of business and marketing."* [A-level; Law]	*"Did not understand the module and its relevance to future study and in real business practice. Overall, was very boring and confusing. I don't think anybody enjoyed it or felt like they did well and got anything from it."* [A-level; Marketing]
"The quantitative methods part, statistics..." [Mixed – BTEC, A-level]	*The content felt irrelevant to my chosen career* [A-level; Law]
"I did maths at A level so I liked some of the elements of quantitative half of the module" [A-level; Marketing]	"*The lectures for the maths part and the first few seminars. I felt like I had gone back to my year 7 maths class. It was not needed for all members of the group.*" [A-level; Law]
"I enjoyed how challenging it was, the two different sides of the module made it interesting." [Mixed – BTEC, A-level; Law]	*"I find it confusing sometimes as to how some topics are relevant to my course"* [A-level; Marketing]
"I liked the variety of case studies for BIS" [A-level; Law]	*"SPSS (the computer system we had to learn) I thought it was irrelevant and the formative did not help at all."* [A-level; Law]
"I didn't actually enjoy the module at all" [A-level; Marketing]	*"It is not overly interesting and does not relate to the course I am studying."* [A-level; Marketing]
"Quants section of the unit is more interesting as the lectures are more understandable and they involve us more. The maths aspect is more enjoyable" [BTEC; Marketing]	*"I already knew a lot of what was covered and felt that it didn't need as much explanation as was given as it lead to module and seminar content becoming less interesting."* [A-level; Marketing]

Table 2 illustrates some survey responses related to the curriculum theme. Each response indicates the enrolled course of the respondent (Law or Marketing), and educational background that is A-level or BTEC or Mixed (A-level and BTEC).

Table 2: Survey Responses – Curriculum (Content)

'What did you like most about the module?'		'What did you dislike most about the module?'
"The exam - it was an open book exam which means it involved so little stress. The seminars leading up the exams were good"		*"The formative assessment was fairly late in the year and was not every relevant in the final exam."*
"The fact that the exam was an open book" *"The exam and the help we were given towards it"*		*"I did not understand the module at all. The only reason I got a good grade was because there was a set formula to follow each year to pass."*
"I liked the QM exam, because the answers were right or ones answers as it was quite maths based."		*"The seminars didn't help at all, and felt the formative assessment was irrelevant."*

Pedagogy

At the university-level, teaching stuff are faced with increased pressure to consider initiatives aimed at improving student engagement, retention and progression. These initiatives include the Curriculum Redesign strategy and the Success for All strategy that both bring focus on meeting the challenges of a diverse and expanding undergraduate first year intake, which means in practice a re-evaluation of the use of materials and assessments that rely on a common educational background. It is this difference, for example in terms of BTEC or A-level experience, which has already been identified as a factor in differential module performance.

Another university-wide initiative focuses on embedding employability skills within the curriculum. Though there is no single definitive description of what these skills should be or how such skills can be effectively measured or transferred (Cranmer, 2006), the university-wide employability initiative articulates four transferable business skills that students should develop during the B.A. Marketing course:

- ability to express clearly, both verbally and in writing
- advanced planning and strategic thinking
- research, analysis and presentation skills
- the ability to take the initiative and think creatively

Specific to the BISQM module, information systems content is delivered in the first term by faculty from the Information Systems Division of the Business School. The quantitative methods content of the module is delivered in the second term by faculty from the Economics Division of the Business School.

In response to the question *In your experience of the module did you find that: - The teaching on the module was of a high standard*, 35% of respondents selected Mostly Disagree or Definitely Disagree; 25% indicated Definitely Agree or Mostly Agree; with the remaining registered as non-responses. Similar responses were received for the question *In your experience of the module did you find that: - The module content was intellectually stimulating*. In answer to the question, *'What did you dislike most about the module?'* student responses included:

> "I did not like the lectures. They weren't intellectually stimulating and weren't engaging, this is for both BIS and QM, but mainly BIS….however I did attend every single one because I'm a high achieving student."
> "I basically had to teach the whole module to myself because the teaching made not much sense at all"

> "The BIS section was all over the place, I couldn't understand the
> teacher or the lectures and my seminar teacher was useless."
> "Unfortunately it was taught quite poorly and the information and
> support was a minimum."
> "SPSS (the computer system we had to learn) I thought it was
> irrelevant and the formative did not help at all."

Students were either enrolled in an LL.B. with Business course offered by the law school or the B.A. in Marketing course offered by the business school. The entrance requirements for enrolment in either of the two courses is illustrated in Table 3:

Table 3: Entry requirements to respective courses

B.A. Marketing	LL.B. with Business
In addition to GCSEs in English and Maths grade C/4, students require one of the following:	In addition to GCSEs in Maths OR Science, and English grade C/4, students require one of the following:
• A-levels BBB, excluding General Studies	• A-levels BBC
• BTEC Extended Diploma DDM	• BTEC Extended Diploma DMM
• 120 UCAS tariff points from 3 A-levels	• 112 UCAS tariff points from 3 A-levels or equivalent qualifications

Thus students potentially enter the module with a widely varied background in quantitative skills, from students not possessing GCSE pass qualifications in mathematics, to students who have gained A-level qualifications in the subject area.

In answer to the question, *What did you dislike most about the module?* student responses included:

> *"The formative assessment was fairly late in the year and was not every relevant in the final exam."*

> *"I feel like the exam length was too long as well. The time duration didn't really make sense with what we had to complete in the exam."*

> *"That the final assessment was 100% a written exam, this is unfair on others who don't like exams, more coursework would be recommended."*

> *"being in the computer room and then not doing a computer based exam"*

> *"Pointless time spent on computers"*

Module Redesign

The research findings revealed several contradictions in approaches to curriculum design and pedagogical approaches from the perspective of the identified groups of stakeholders – students, faculty and businesses/professional associations. The sub-sections highlight some of the primary contradictions identified, firstly through an examination of stakeholder perspectives in curriculum design, and secondly with a focus on those interrelationships with respect to pedagogical approaches. These research findings, and further review of the literature, served to inform redesign of the module design which is also explicated within this section.

Stakeholders and Curriculum Design

1. Students expressed their failure to form conceptual links between the two disparate topics of the module and link the topics with content in other undergraduate modules. The module therefore demonstrated some critical gaps in student learning experiences particularly the lack of continuity in content from term one to term two. This disconnect is possibly reflective of the silo approach taken in initial design of the module:

    (a) the title of the module is *Business Information Systems and Quantitative Methods;*
    (b) learning outcomes reflect the dichotomous nature of the module; and
    (c) significant overlap in introduction of theoretical concepts and analytical tools within the same and successive years of study.

Thus, in redesigning the module, the researchers sought integration of the content which would encompass key elements from both topics, that is business information systems and quantitative methods. Key changes were implemented informed by: (a) survey responses from past students of the module; (b) consultation with teaching staff on the content and structure of other first year core modules to ensure less overlap on module content; (c) feedback from members of the business community (through the Business School alumni association); and (d) analysis of content requirements from external professional bodies. After verification and validation through internal university quality assurance processes, the following module changes were implemented for the academic year 2017/18.

    (a) The module was renamed from *Business Information Systems and Quantitative Methods* to *Business Analytics;*
    (b) Module content was changed to ensure less repetitive material across all modules, and more coordination with other core modules. This also resulted in use of only one industry software for analysis – use of Microsoft Excel and discontinued use of SPSS; and
    (c) Design of new learning outcomes to reflect the integrated content of information systems and quantitative methods and highlight the application of data analysis to business decision-making processes:

Old learning outcomes	New learning outcomes
a. Describe major classes of information systems, their source data, and functions	To explore the role of data, metrics and information systems in business/marketing practice
b. Develop a basic understanding of issues affecting the use of information systems within organisations.	To produce information from data using industry standard software
c. Apply basic information systems concepts in an organisational context.	Interpret observed data patterns and relationships for solving specific business challenges
d. Interpret representations and summaries of univariate and bi-variate data relating to business & marketing.	To apply statistical techniques to solve quantitative business problems
e. Analyse output from both specialist statistical and general office software.	Design an effective database using data from relevant published sources
f. Gather business data from published sources.	Demonstrate proficiency with some data analytical tools
g. Conduct and interpret basic quantitative analysis using software	As part of a team, prepare a professional business report which clearly communicates data analytical results to a wide audience

2. Contradictions are also apparent in approaches to assessment. Though the use of technology is predominant in learning activities throughout the academic year for experiential learning elements including case study analysis and data analysis, and in the preparation of formative assessments, the summative assessment does not align to teaching strategies and instead comprises a single three hour *paper-based* examination. Feedback from students also commented on the timing of assessments, as the final assessment occurs at the end of the academic year, at least five months after the final lecture/seminar for *Business Information Systems* in the first term. The timing of formative assessments, held for each topic at the end of the respective term, suggests that students' understanding of content is not adequately evaluated during the term. In addition, based on survey responses, students generally understood the module content when revising for the formative assessment at the end of the academic year, suggesting that students were not engaging to the level that teaching faculty assumed or expected.

Thus, in considering the integration of experiential elements into the redesigned module, and ensuring *relevancy* of content, we suggest a combination of authentic assessment methods, the adoption of tasks similar to those that may be encountered in a business environment (Mueller, 2005; Fook and Sidhu, 2014), with traditional modes of assessment that include multiple choice and essay questions. James and Casidy (2016) further assert that this combined approach to assessment is a viable approach rather than a single mode of assessment.

Hibbert (2016) asserts that "assessment regimes in the first year help students to development an early sense of achievement and confidence" (p. 5). In adopting the 'assessment for confidence' model suggested by Meer and Chapman (2014), the following characteristics were adapted in redesign of the module: (a) deliver the assessment early, within 4 weeks of starting the course; (b) the assessment should provide a low-stakes opportunity for success; (c) the assessment should offer a quick turnaround for marking; and (d) written and oral feedback should be provided. This suggests the introduction of an assessment early in the first year to provide a 'low-stakes opportunity for success' (p. 190). Assessment on the module was therefore changed from a single point of assessment to multiple points of assessment comprised of individual assessments worth 50% of the final grade during the first term, and a group assessment worth 50% submitted at the end of the second term. In our approach to redesign of the assessment methods and alignment to the redesigned learning outcomes, we incorporate learning elements that afford students the opportunity to develop their practical skills and knowledge and change:

(a) In the first term, students are introduced to key concepts in business analytics and statistical techniques. Four multiple-choice quizzes were used to assess students' general understanding of the module content. The first summative assessment occurs during the fourth week of the first term, with each of the successive three quizzes occurring biweekly (every two weeks). An average of the best three of the four quizzes contribute to 50% of the final grade. The timed 50-minute electronic multiple-choice quizzes, using computers in ICT labs, are facilitated during regular seminar sessions. Students receive immediate electronic feedback and grade once the online quiz is complete. Students also receive one-to-one oral feedback, if needed, from respective seminar tutors.

(b) In the second term, students participate in a group-based project where statistical techniques, learnt in the first term, are applied in the analysis of more complex data sets. Groups comprised of 4 – 5 students are each required to prepare a structured business report and presentation. Specific tasks assigned each week contribute to

development of the business report. Teaching staff provide formative feedback at regular intervals on draft versions of the final group report. The final group grade, adjusted based on peer feedback and individual levels of engagement, contributes to 50% of the final grade.

3. Though university-wide initiatives place the student at the centre of design processes, little opportunity is afforded for students to contribute to curriculum design at the module level. Standardised surveys, for example EvaSys, capture student perspectives on their learning environment, module content, and teaching staff, however fail to provide more in-depth feedback on improvement in content delivery and curriculum design, and thus full responsibility for poor learning outcomes is shifted to teaching faculty. Each course is also represented by a nominated representative from the first year graduates enrolled in the B.A. Marketing module. However feedback from course meetings do not facilitate thorough discussions on issues of content or assessment.

   To facilitate more in-depth feedback from students as part of module redesign, students registered on the module were invited to participate in one of three small focus groups (approximately 5 – 8 current students in each group) near the end of the second term of the academic year (2017/18). The focus groups are designed to provide students the opportunity to reflect on their own learning experiences, and in turn think critically about their own learning expectations and assumptions of the module. As incentive, focus group participants would receive credit hours that are applied to their undergraduate portfolio for continuing professional development.

4. Businesses and external professional bodies are viewed as key stakeholders in curriculum design including the development of relevant learning outcomes. However little opportunity is provided to the business community to contribute to curriculum design at the module level. At the course level, standard requirements for gaining exemptions for professional associations are carefully articulated, yet at the first point of student contact with an employer, typically in a work placement or internship, few structures are available for business to provide direct feedback to curriculum design with respect to employer perceptions or students learning experiences. This may, in part, be attributed to lack of alignment between the taught curriculum and the work environment into which students are eventually placed, however curriculum redesign processes including the design of any experiential elements or approaches to employability can only gain by an understanding of the work environments that students face.

   Thus in redesign of the module, opportunities for facilitating feedback mechanisms with stakeholders (external business community) will be explored and developed to gain continual understanding of the technical skills-based competencies that students require within a professional environment. Through the Business School's alumni association, two members of the business community with extensive experience in marketing data analysis were invited to facilitate one guest lecture each during the academic year. The business professionals provided students with understanding of the current business environment, and technical skills and knowledge required within the workplace.

Stakeholders and Pedagogy

1. Students expressed the disconnect in the BISQM module in approaches to content delivery - in the first term, seminar sessions for information systems occurred in a traditional classroom environment, and quantitative methods in the second term seminars were primarily delivered in computer labs using Microsoft Excel and SPSS software. Business representatives also expressed the need for students to have an in-depth understanding of

data analysis using software such as Microsoft Excel. However the single summative assessment comprised of a written paper-based examination where students were required to submit a mixture of essay and short-answer questions.

In redesigning the module, seminar sessions were therefore all facilitated using technologies either in ICT labs during the first term or in collaborative rooms during the second term. Students applied concepts learned during weekly lectures to data analysis processes in the seminar sessions.

2. Experiential elements on the module were limited to analysis of case studies, and the use of industry-standard software for creating databases and conducting simple data analysis. However inclusion of additional elements to satisfy university-wide initiatives for enhancing student employability skills, needed to balance with an equal focus on academic content.

Thus in redesigning the module, the focus was on the inclusion of relevant learning elements that would serve to reinforce key learning objectives and thus promote employability. However the use of case studies within the BISQM module to convey business analytical skills were not sufficient in achieving those goals. Hibbert (2016) asserts that curriculum and course content should be structured so that students can see the "practical relevance" of it. We therefore incorporated the use of more experiential learning elements that are representative of the external business environment. These elements included group presentations and preparation of business reports as part of assessment procedures within the redesigned curriculum. The experiential learning elements in the revised curriculum were therefore designed to scaffold learning and reinforce cognitive learning of theoretical aspects through practical application. Group sessions were also modelled to encourage students to generate their own knowledge within a constructivist learning environment.

3. As within any classroom environment, catering to mixed abilities within a classroom and adapting teaching strategies accordingly pose challenges to teaching staff on the module. However there is no defined minimum standard in mathematics qualifications that students need satisfy before enrolment on the module. Thus students who have not obtained a GCSE pass in Mathematics or undertaken a prior remedial Maths programme struggle to understand the relevance of the module, which requires significant quantitative skills, to their chosen career.

In redesign of the module, we established approaches whereby students, as stakeholders, provide input to the teaching strategies. The inclusion of students in pedagogical planning processes thus go beyond outcomes from staff-student committee meetings and internal/external course evaluations, to active participation of students in the design of teaching strategies and methods (Bovill et al, 2011; Healey et al, 2014). One such approach is through development of a 'flipped classroom' where students are actively engaged in constructing their own knowledge. This is facilitated in SCALE-UP (Student-Centred Active Learning Environment with Upside-down pedagogies) an approach that replaces lectures in a traditional learning environment with group-based problem-solving activities. The concept was initially developed by Beichner and Saul (2003), and focuses on the creation of an active (and interactive) learning environment where class time is primarily spent in experiential learning elements for developing knowledge of assigned topics. This approach was used in group seminar sessions during the second term to facilitate the application of knowledge of theory and concepts learnt in the first term to the analyses of data sets
.

Outcomes

The re-designed module was launched in the 2017/2018 academic year as Business Analytics. Several positive outcomes were highlighted at the end of the academic year. Significantly:

1. The failure rates for the previous module *Business Information Systems and Quantitative Methods* (BISQM) in 2016/17 was 20%. In addition, 42.3% of students achieved a grade of 2.1 or above in the module. In 2017/18, 3.2% of students failed the module, with 61% of students achieving a grade of 2.1 or above.

2. Completion rates for the BISQM module in 2016/17 was 84.5%, that is approximately 15% of students did not complete the module which may be attributed to leaving the course or the university. In 2017/18, the completion rate for the redesigned Business Analytics module increased to 95.1% that is less than 5% of students did not complete the module. When taking into account only students enrolled in the B.A. Marketing course, 4.9% of students did not complete the module, which is average for the course. Though statistics on retention rates for first year Marketing students is not readily available, according to Woodfield (2014) Marketing students typically had a 6% completion rate for the course. Hibbert (2016) further emphasises a positive correlation between attainment in the first year of studies and students retention rates.

Generally students reported satisfaction with the format of individual assessments during the first term. In written surveys, students responses to *What did you like most about the module?* included:

"Structure of first term, lecture, seminar, test, feedback"
"It is helpful for the future and relevant"
"The learning style, I retain a lot of information"
"50% coursework and 50% exam"
"Having tests at the start of the year"
"The format of exams"
"Transferable Excel skills"

Students also responded with increased satisfaction to the group assessment in the second term:

"I loved the latest assignment as it helped me learn about real life challenges at work places and helped me to put theory into solving an authentic problem"
"I liked the workshops because I could practise the skills I learnt"
"The group/team work that we are able to participate in"
"I like how challenging it is and that we can work within groups"

However, one issue that students highlighted was disconnect in the structure and application of the SCALE-UP sessions. Though students were given specific tasks to complete during each SCALE-UP session, most students felt that the learning experience was not as expected as they did not like the idea of 'teaching themselves'. As each session was a combination of two seminar groups into one, facilitated by two tutors, students expressed that the number of students in each session was distracting and felt that the number could be reduced. A successive iteration of the module will use the SCALE-UP sessions structure as they provide students with the opportunity to adjust to a more independent style of learning and facilitates critical reflection of learning experiences. However the sessions will be facilitated within a smaller group setting (one seminar group instead of two) so that students receive more support.

Discussion and Limitations

The primary goal of this study was to investigate stakeholder inter-relationships in curriculum design and delivery. Thus the study highlighted several contradictions in learning expectations among stakeholders that served to reinforce compartmentalisation within the curriculum. This explicit consideration of the inherent contradictions is aimed at directly supporting the desired outcome of a redesigned module and assessment regime that better meets the learning needs of students. Qualitative research using a core undergraduate business education module showed that while stakeholders are often placed at the centre of successful curriculum design and delivery, few mechanisms actually exist to facilitate stakeholder feedback into the processes, an approach which negatively impacts on teaching strategies and learning experiences. Gaining relevant stakeholder feedback is particularly crucial during the transitory first year where learning experiences may influence and shape student learning expectations for the remainder of their higher education studies. In the absence of such feedback liberal assumptions are made on the format and structure of experiential elements that are beneficial to students' practical understanding of content. Such continuous feedback from students and external businesses contribute significantly to curriculum redesign efforts.

However, the survey was limited to a single core undergraduate business module in order to gain an initial understanding of some of the contradictions that may occur in curriculum redesign. The limitations of the framework used are inherent in its design as it narrows research to an examination of lateral stakeholder relationships that may exist. Extending this research to include more business and management education modules at the undergraduate level, and include more in-depth analyses with stakeholders through interviews and focus groups for example, will help to facilitate further insight into respective stakeholder relationships. Thus it is expected that further research using a larger sample of modules, and longitudinal studies on modules that have undergone a curriculum redesign process, will provide richer data for the development of a more accurate framework for systemic exploration of these relationships.

Future Research Directions

The study thus asserts the need for a more systemic investigation of these contradictions to effectively inform processes in curriculum redesign. One such approach, Activity Theory, provides a useful descriptive framework for examining the role of a network of actors in determining the success or failure of an activity in this case curriculum redesign. First postulated by Engeström (1987), the main unit of analysis in Activity Theory is the activity system model that supports a rigorous examination of interactions between actors or components in order to reveal possible contradictions. The framework supports examination of the inter-relationships from different stakeholder perspectives, examining the inter-dependencies among faculty, other students, businesses, student support services and external examiners (the *community)*; the impact of curriculum, timetabling, learning outcomes (labelled the *rules* of the system*)*; and examine the influences of module handbook, textbooks, computers, and methods of assessment (all grouped as *instruments/tools* of the activity system). Thus employing the activity theory framework is one approach to systematically identifying the underlying contradictions between two activity systems (for example from the perspectives of students and teaching staff), and assist in the process of resolving these contradictions. This explicit consideration is aimed at directly supporting the desired outcome of a redesigned module and assessment regime that better meets the learning needs of students. Application of such a research framework to additional first year undergraduate modules thus presents opportunity for exploring curriculum implications within a wider context. However more in-depth study is required to explore the validity of this model for extending this research to other modules in Business and Management.

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