Learning uncomfortably

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Abstract

This paper outlines a research process entwined with delivery of a final year elective module "Managing Strategic Design". This module challenges a mixture of business and design management final year undergraduate students to develop truly innovative business opportunities. The research has been based on six roundtable discussions with a variety of participants from design and business communities, as well as classroom observation and reflections from students on the aforementioned elective module. The process of creating these innovative opportunities is at times deeply uncomfortable but it is at these points that students' learning can be most productive. The iterative process of research and teaching have led us, the authors, to reflect on the value and positioning of design and strategic thinking in business education: the methodology behind our particular curriculum delivery drawing on cross disciplinary teaching and learning; and the ability of students to learn from practice by experiencing 'zones of discomfort' and 'what if' scenarios. These reflections have altered the focus of the elective module, from provision of tools students need to know to understanding the learning journey and facilitating the acquisition of decision-making confidence in response to a complex challenge.

Keywords: Innovation, Blue Ocean strategies, Design thinking, Strategic thinking, Zone of discomfort, Business education

Introduction

Since spring of 2008 we, the authors, have been delivering a final year elective module entitled 'Managing Strategic Design' to business students undertaking a BA (Hons) in Global Management at Regent's College, London. This module is designed to challenge students to develop a truly innovative business opportunity, drawing on design and strategic thinking. In developing this module we came across Sanchez's (2006) argument that designers need to be able to communicate with their clients in ways that can

be identified as directly feeding into business goals. This pointed to the value of exposing future business graduates to contexts in which design and strategic thinking can be integrated as a way of meeting the challenge of innovation.

At the 2009 European Academy of Design Conference, we argued that with greater integration of design into business contexts, there is a need to further embed design thinking within business education. Thus in order to develop our module and our teaching, we instigated a research project stemming from the key issues illuminated by the curriculum delivery. The research project initially focused on relationships between business and design that lead to new business opportunities. It explored factors that would, potentially, have an impact on or support this relationship such that it would become meaningful for both designers and business managers. At that time we argued that it is not enough to expose employees to this relationship in the context of their employment. Rather, this exposure needs to take place prior to entering the employment market, at the point of business education. We therefore made an argument for business education to take a much more active role in exposing its students to the importance of integrating design and strategic thinking in business curricula.

This project has evolved to include four sets of delivery of the module (in the spring semesters) interspersed with two sets of roundtable discussions in the intervening 2009 and 2010 autumn semesters. As the project gained momentum, each stage offered insights and directions to explore, where the ongoing process of teaching reinforced research and vice versa. This reflective and iterative process described above has been instrumental to developing teaching methods that assist students to tap into deep learning combining design and strategic thinking. In addition, it has generated a process of transformation for students from merely gaining knowledge to developing the confidence necessary to make decisions that engage with the complexity that many business organisations face today. As the process of our research and teaching has been mutually integrated, a reflective process triggered an examination of the teaching methods supporting the curriculum delivery on this module. This working paper explores the insights gained from this reflection.

Integration of teaching and research

Teaching

To date our teaching has been informed by concepts such as the Innovation Pentathlon Framework (Goffin & Mitchell, 2010), 'comfort zone' as a teaching and learning metaphor (Brown, 2008)[1], the design thinking model (Brown, 2009), Blue Ocean thinking (Kim & Mauborgne,

2005), Strategic Management Dynamics (Warren, 2008) and the Applied Empathy Framework (Knemeyer, 2006).

Goffin and Mitchell argue that '[i]nnovation management often requires managers to match 'technical' expertise, in areas such as technology, project management and finance, with 'soft' skills in managing people and creativity' (2010:26). Thus their Innovation Pentathlon Framework, consisting of five elements (innovation strategy, implementation, ideas, prioritisation, and people and organisation), offers a representation of an innovation process within an organisation in order to help portray this integration. The underlying premise of this framework is the Wheelwrite and Clark (1992) *development funnel* or *knowledge funnel*, as couched by Martin (2009). Goffin and Mitchell (2010) identify the five elements contained in the framework as highly complex areas of activity that have to come together in order to generate successful innovation management. At the same time, Goffin and Mitchell (2010) argue that this framework allows for splitting a hugely complex process into more understandable and manageable parts. The relevance of the framework to our teaching stems from its graphic representation of the integration of the five elements, highlighting for students the process they are asked to undertake in order to develop truly innovative proposals.

Originally, Luckner and Nadler argued that, '[t]hrough involvement in experiences that are beyond one's comfort zone, individuals are forced to move into an area that feels uncomfortable and unfamiliar – the groan zone. By overcoming these anxious feelings and thoughts of self-doubt, while simultaneously sampling success, individuals move from the groan zone to the growth zone' (1997:20). Panicucci further elaborates: '[e]xperience has shown that learning occurs when people are in their stretch zone. Intellectual development and personal growth do not occur if there is no disequilibrium in a person's current thinking or feeling' (2007:39). However, Brown argues for the notion of comfort zone to represent a metaphor of '… how we might think about learning and growth' (2008[1]:11). He maintains that it is through emotional safety, security and stability rather than emphasis on increasing risk that students learn the most. Brown's (2008)[1] argument offers a very useful lens through which to understand the context, process, and students' learning experiences on our module, suggesting a far more constructive approach to zones of discomfort.

Brown defines design thinking as '… a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity' (2008[2]:86). In particular Brown's (2009) insistence on a harmonious balance of desirability, feasibility and viability is of interest to our teaching as it provides students with a solid framework for reviewing and reflecting upon their proposals.

Blue Ocean thinking (Kim and Mauborgne, 2005) and Strategy Dynamics championed by Warren (2008) provide an overall business platform for the elective module. Kim and Mauborgne (2005) introduce a practical range of tools and techniques such as the Strategy Canvas to highlight what is important to current and potential customers and the Four Actions Framework to help managers identify such opportunities. A Strategy Dynamics approach fosters the mapping of interaction between resources - both tangible such as customers and capacity and intangible such as brands. An Applied Empathy Framework (Knemeyer, 2006) engages '… customers through very thoughtful and intentional design that deeply considers the needs and desires of people—*independently* of the business and strategic goals that usually define the products we design.' The use of all the above students' support in developing and testing their innovative propositions are critical to how they respond to the project brief. We will hitherto refer to this process of responding to the brief as the students' 'journey'.

Research

The research project was a two-year project supported by the Business and Management Faculty Learning and Teaching Development Fund at Regent's College and is providing a means of gaining strong insights into our teaching. The underlying premise of this research was that in order to generate truly innovative business ideas, students must leave their comfort zone in order to consider 'what if' scenarios and explore new opportunities. Students see this process as making them very uncomfortable. This is evidenced in an excerpt from one of the students' reflective reports about three weeks into the semester:

"I think it was at this point we realized that some of our initial ideas really were not suited for this project, and when you notice that weeks go by without being confident that we have a very strong idea, you can easily get wary and frustrated".

Hence, one of our aims in the research was to identify methods that might help students see this process as an opportunity for development, both creatively and as future business graduates. Through both teaching and research we observed that only when students combined design and strategic thinking could they contribute to the generation of new ideas. Thus, the research engaged with developing ways to help students particularly through the more 'uncomfortable' parts of the process. The continuation of the investigation leads to a reflective exploration of our teaching practice in terms of how we facilitated this process.

Methodology

The research project can be understood as participatory action research. Reason and Bradbury define it as '… a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes' (2001:1) Thus, it is a systematic approach that seeks knowledge for social action (Fals-Borda and Rahman, 1991). 'Action researchers reject the theory/practice divide and believe that applied research can both build theories and solve problems' (Brinberg and Hirschman, 1986). Ozanne and Saatcioglu argue that '… action research is demanding because researchers are expected to both develop knowledge and work toward social change' (2008: 424). It is an appropriate methodological choice as the research question focuses on both solving a practical problem, namely helping students to gain confidence in and understand the process of developing innovative business proposals. It also contributes to the development of knowledge around the integration of design and strategic thinking into a business education curriculum. The research project pursues '... a spiral [of] self-contained cycles of planning, acting and observing, and reflecting' (Kemmis & McTaggart, 2000:595), which aligns with the participatory action research design. This research design was applied through reflection on module delivery leading to the development of roundtable sessions which delved into issues identified in teaching. The analysis and insights were then fed back into the next round of teaching, followed by further post-teaching reflection. This process started in summer 2009 and will continue until summer 2012.

Drawing on Kemmis & McTaggart's (2000) definition of participatory action research, the suitability of this methodology stems from:

1.   its participatory nature, which examines participants' knowledge and their interpretation of that knowledge;

2.   its practical and collaborative nature, which insists on examination of social interactions;

3.   its criticality, which allows participants to review critically what is being observed and, through the process redefine its nature and its meaning, resulting in change for the better;

4.   its recursive nature; that insists on reflection in order to arrive at change and change in order to drive the reflection; and

5.   its transformative nature, that affects both theory and practice.

Following this methodology meant conscious questioning and reviewing of the curriculum delivery to develop ways in which design and strategic thinking might be integrated within business education. For instance in the first two iterations of the module delivery we noted that aspects of curriculum, which were meant to develop richer pictures of the Strategic Architectures of the respective business ideas did not always result in

students' deeper understanding of the prospective customers needed to respond to the given module assessments. Through the process of our reflection intertwined with our research project, as well as asking probing questions of the students in more recent semesters, it became apparent that all of the groups still did not have enough clarity on their respective target customers. Higher level work based on such shaky foundations would have added little value. Therefore, we designed a number of interventions to really flesh out their understanding and empathy with the potential customer. These interventions were always customised to the particular context of groups on their particular journeys and included:

- Lecturer and peer review sessions;

- 'Summarise your customer on a napkin' – forcing students to focus and identify the essential aspects of their customers;

- 'Name a customer' – paint a pen portrait of an individual customer;

- Applied Empathy Framework (Knemeyer, 2006) – facilitating students development of the transitional states between various stages of customer development;

- Skeleton "MyStrategy" models which students could customise to their context.

Part of this questioning process also meant identifying the nature of the relationship the lecturers and students have, during the teaching and learning process, vis-a-vis the integration of design and strategy within a business context. Furthermore, the nature of students' interaction at an individual as well as a group level has been reviewed and reflected upon in order to ascertain the level of students' own empowerment in the learning process. In particular, the development of criticality meant that each time that the module ran we took the opportunity to improve its delivery based on previous observations. Moreover, the cyclical approach to the research process meant that each period of module delivery (spring semesters) was followed by series of roundtable sessions investigating themes arising from the teaching (autumn semesters). The results of this process lead to us gaining important insights which had an impact on our teaching practice and enabled us to develop and ask questions of business education more generally. These insights are discussed below.

Learning uncomfortably

From its inception, the module in question has been based on one assessment brief which is broken up into four stages: project brief, the pitch, design implementation and business model. However, through the process of questioning the curriculum and the learning experience, as noted

above, we developed a metaphor of a journey as a tool to help our students to grapple with the conceptual complexity of the challenge posed by the module curriculum. Therefore, students are expected to respond to this brief by starting on a journey consisting of a number of decision-making moments and their own reflections on these decisions.

The journey

Through the analogy of a journey, we ask students to imagine they are the equivalent of settlers traveling from 'New York' to 'California'. They have the general direction and four points of reference. They are aware that this journey will be a challenge, but at the same time they cannot predict the precise nature of the experience nor what is awaiting them along the road they will travel. The only way to know is to undertake the journey. The following diagram demonstrates the above analogy as it applies to the context of the module.
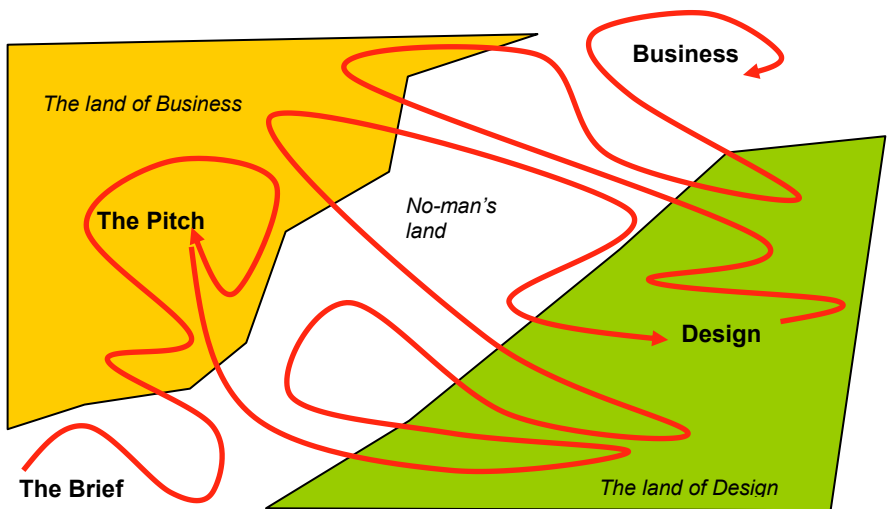

Diagram: A student journey during 'Managing Strategic Design' module

Starting with the brief

The challenge here lies in what appears to be a rather minimalist set of guidelines. The more prescriptive environment in some other modules can discourage students from taking full ownership of project brief, and

developing confidence in their own interpretation. The students often see the perceived lack of constraints as a 'problem' as they have potentially so much 'space' to play with (compared to their normally more constrained briefs). This can lead them to jump to a particular solution as a way of reducing the uncertainty, and it can be very difficult to free them up from this initial 'anchoring'.

To the pitch

As the brief requires students to develop a pitch for their truly innovative business proposal, they almost immediately need to step out of their comfort zone. Hence, they often tend to settle for the first idea to deal with the uncertainty. Often students rely on their own perceptions of what is new, thus attempt to bring already existing concepts with which they are personally familiar into what they believe is a new environment. The challenge is to push a lot further to identify truly new opportunities. We have observed that students who have pushed their own boundaries and developed ideas beyond the familiar have a much better chance to succeed in the later stages of the journey. It is the students who best 'get under the skin' of potential customers who do best at this stage, and indeed the project as a whole.

Design implementation

The process of design implementation of the proposal often gives the project a second wind. As this stage is deeply rooted in creative processes, students are able to rethink their proposal from a different perspective and develop their ideas even further. As the outcomes are based on a process of developing a physical mock-up, this set of activities generates challenges of its own. This stage also provides students with a more flexible toolkit stemming from design disciplines to deal with the 'no-man's land' as portrayed in the diagram above.

And finally, the business model

The final stage of the brief requires students to develop a convincing business model that not only presents a truly innovative idea, but also meets business criteria. The challenge here is not only to learn new software that allows such modeling, but to also demonstrate confidence in the proposal and in making decisions around issues of business viability.

By questioning and analysing this journey through the roundtable group discussions, we began to redefine the nature of that journey and the processes involved. In particular, we tried to identify the process that would drive each of the states and identify where the students leave their comfort

zones. The roundtable sessions have also highlighted the value of 'creative confidence' (Kelley, 2010) and the need to help students make decisions in order to respond to the process required by the brief.

The exploration of the notion of a 'comfort zone' has offered a useful analytical device with which to reflect on teaching and learning practice. The current literature on this subject, noted above, presupposes that the context within which students are learning is adjusted to take them out of the comfort zone in order to learn. Through the investigation and reflection on the student journey and the supportive process we have identified that, although the assessment brief was not set up to follow such a mode of delivery, the negotiation of the complexity of the challenge almost inevitably generates zones of discomfort. Students are told from the start that this is the nature of the journey and are given various tools, noted above, to help navigate the required process. The trick is to spot opportunities and to develop students' confidence to explore 'what if' scenarios in order to learn from them. Within the context of the assessment brief, the zones of discomfort come across as 'no man's lands' – areas where there is no clear ownership and any direction or exploration holds value. It is only when students learn to negotiate their discomfort and engage in exploration and trial/error activities (design thinking) that they can then progress successfully. However, without the ability to 'draw a line' under this exploration and make a decision (strategic thinking) they cannot escape the 'no man's land'. It is this process of making a 'leap of faith' that emerged as a real challenge.

It is evident from observation of student body language and response to classroom-based discussions that students struggle to step out of their comfort zones and engage with the opportunities presented by the 'no mans land'. A lot of responses captured in individual tutorial with students, or entered in their reflective reports as well as group task discussions involved 'anchoring' to initial half-formed views of the customers. Therefore, our observations have prompted our reflections and resulting in the insight that it is in those zones of discomfort where the students have learned the most. In particular, if they trust the process and see their development as part of a journey, they gain the most. However, the observed interactions and student responses clearly demonstrated that unless creative thinking and analytical thinking were integrated with a solid understanding of the potential customer it was all but impossible to devise robust innovative business propositions.

Evolving students' own self-reflection through practice has also been a great opportunity stemming from this module. The students are required to record the process throughout the entire project. For the most part, these records are shaped to contain knowledge but from time to time students began to capture their engagement with the process of responding to the

brief. These responses are more frequently documented when students are under stress because they have left their 'comfort zone' and need to engage with the actual challenge or question of the brief itself. The final responses tend to demonstrate newly gained confidence obtained from undertaking the journey triggered by their response to the project brief. Following is an example of this from one of the student's reflective reports:

"I am very much a quiet observer, and what this module has taught me is how important reflection can be, not only in a learning environment but to assess the process that I have gone through. This is something you learn early on, that reflection is important. However, I have never used it the way I have in these last fourteen weeks. I think we went through a test of confidence throughout the course of the module. Taking leaps of faith as we have done in changing our proposal and changing our view of the customer has at times resulted in risky developments of our project, but all in all we have witnessed that even though we are leaving a safe option behind there are greater riches ahead".

Finally, this particular module has generated an opportunity to experiment with curriculum delivery to give students a chance to develop more integrated cross-boundary skills. The challenge of bringing two, often differing, perspectives into a classroom, at many times forced students to confront their own fears of negotiating different views and approaches. It is this negotiation and their ability to develop confidence in decision-making that is of value here. In this context students tend to view each module as a distinct unit which rarely ties into other subject areas unless it feeds into their own perception of the linkages. The learning environment where students have no choice but to engage with perspectives that they otherwise view as separate, forces them to learn to negotiate the boundaries of those perspectives and to find value in bridging the gaps. From our perspective, the same process of negotiation takes place. The ability to co-teach, on the one hand, offers an ever present mirror to one's own teaching methodology but also it means that both lecturers have to define points of integration in the taught materials on an ongoing basis where the context changes based on changing needs of the students. Leaving the comfort zone thus means fully embracing the notion of co-teaching, whilst also facilitating students' own development. It also means taking on board that there are different approaches to delivery and that the teaching space in this context is just as much a learning space for both lecturers. This can be exhilarating, but at the same time, just as students need to develop 'creative confidence' (Kelley, 2010) so do both lecturers as the context changes every time students bring their own interpretations.

Future research

To date, our iterative process integrating both research and teaching has illuminated the ever increasing value of design and strategic thinking as a problem solving tool within business education. We have also noted the value of 'learning uncomfortably' for both students and lecturers. However, there is merit in further exploration of these topics in order to continue developing teaching methods that might address such a context. Therefore, we will be looking into developing more tools and approaches to help the next cadre of students through the module in the future semesters and embedding more self-reflection prompts into the process to better capture their experience as they travel the journey. We also intend to draw upon techniques and methods from allied areas of literature, including customer visualisation and process of decision-making, to see if insights from these areas can help the students on their respective journeys.

The changes we plan to implement in our teaching will also resonate with the ongoing research aspects of this project. Thus, we have planned to delve a lot deeper into the reflective nature of this module and the opportunities this aspect carries in the process of strengthening students' confidence in decision-making processes. Therefore, we intend to conduct discourse analysis of the reflective submissions generated by students as they progress through as a tool to further reflect upon the module. We believe that this will enable us to further refine the analogy of the journey as well as give students a more effective platform for self-discovery and personal insights in to their own decision-making processes. Continuing such iterative process of teaching followed by period of research, we believe, has created a true opportunity for reflection on teaching practice. This is of great value in the context of higher education and thus we intend to foster this process by continuing to actively integrate research with teaching.

Conclusions

The authors' experience, our own 'journey', often raised more questions than it answered. It indicated that the delivery methods employed to date on this module are fully appropriate and tend to meet wider academic good practice. In particular, the roundtable sessions with the business academics have confirmed that we were on the right track in grounding design and strategic thinking within business education. However, the research also highlighted differences in the perceived positioning of design thinking and practice within a business organisation and its wider context. These differences were often aligned with the particular professional perspectives presented by the participant groups. Nonetheless, these similarities and strong differences have impacted positively upon our approach to helping students think through and apply design thinking in a business organisation.

Trying to identify the process (the student 'journey' with four fixed way points but unique paths between them) and interventions that might help students to respond to the brief (noted above) has provided insights into how the curriculum delivery takes place and evolves in real-life context. Thus, with each successive module delivery, we become clearer about the students' journey (for instance by discussion and questions in class, and working with students' reflections) and as we learn more, we become better at diagnosing the support students need in order to engage with the curriculum (for instance through intervention exercises outlined previously). Therefore, to summarise, this iterative teaching and research process has identified a number of key themes of and for, reflection. They are as follows:

- the value and positioning of design and strategic thinking in the business education;

- the methodology behind our particular curriculum delivery, drawing on cross disciplinary teaching and learning; and

- the ability of students to learn from practice by experiencing 'zones of discomfort' and 'what if' scenarios.

These reflections have altered the focus of the module, from provision of tools students need to know (in order to negotiate the process and successfully respond to the assessment brief), to understanding the learning journey and facilitating the acquisition of decision-making confidence. This approach is rather different in that many modules that these students undertake tend to concentrate on providing them with knowledge, but not necessarily fostering their ability to utilise that knowledge as a decision-making tool.

Finally, the whole experience has illuminated how the integration of teaching and research can lead to an experience where these usually distinct practices positively reinforce each other. At the same time, this experience has allowed us to reflect upon the ability to guide the students through the process, diagnose potential problems and help students overcome those, as well as to customise a toolkit for the students (as noted above) in order to develop their own skills in dealing with the complexities of generating truly innovative business propositions.

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