Fostering Excellence in Management Education through Ingenious Learning

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Abstract: *In the present era it is essential to provoke major shifts in educational practice, the focus has to be to explore new forms of teaching, learning and assessment for an interactive world, to guide instructors and policy makers in productive innovation in the education sector. Massive open social learning brings the benefits of social networks to the student community taking massive open online courses (MOOCs). A central theme of massive-scale courses is 'personalization'. Learning design is used in the development of courses or series of lessons to help educators plan a coherent sequence of media, technologies and pedagogies. Flipped learning reverses the traditional classroom approach to teaching and learning. It moves direct instruction into the learner's own space. Bring-your-own-device like smart phone and tablet computers have the potential to reduce the cost of ICT provision and introduce new possibilities for learners, and offer new challenges. Web tools and activities if designed properly will support learning to learn. The event based time bounded learning encourages students to learn together. The objective being supporting face to-face encounters between amateur and experts, and the scale of events can provide access to resources that would otherwise prove inaccessible. A threshold concept is something that, when learnt, opens up a new way of thinking about a problem, a subject. Instructors are increasingly using threshold concepts as starting points for the design of effective lessons. One approach is to develop standard sets of threshold concepts for different subject areas; another is to embed them in teaching and learning processes and practices. As today's graduates engage with the demands of the current Knowledge Age, the skills that they need to succeed in their lives after college, or any other institution of higher learning, are 21st century skills rather than 20th century skills. Kivunja (2014) calls this "the new learning paradigm". Unfortunately, those skills are not yet included in many of the learning outcomes prescribed by most educational jurisdictions or required to be assessed in high-stakes state and national examinations. It is essential that policy makers, across all nations, and in particular higher education providers, have a firm understanding of the skills most in demand in the 21st century Digital World, how those skills relate to the orthodoxy academic standards, and how those skills can be effectively taught. So, it is imperative to ask and answer the questions: what are those skills, and how can they be taught effectively to present and future students in higher education to improve their Digital Economy readiness?*

Keywords: Curriculum, Teaching, Innovation, Higher education, Pedagogy

1. Need For Innovative Pedagogy

The higher education system in today's scenario is faced with many challenges like competitiveness, management, financing and reorientation of program by laying equal emphasis on quality of higher education, ethics and values together with the assessment of educational institutions and their accreditation. In the 21st century, the higher education can be used as a powerful tool to build knowledge based society.

Developments in society and economy require that educational systems equip young people with new skills and competencies, which allow them to benefit from the emerging new forms of socialization and to contribute actively to economic development under a system where the main asset is knowledge. The need for new approaches in education has emerged from a complex international business environment and evolving social expectations for managers (Laasch & Conway, 2016). The 20th century was characterized by a resurgence of 19th-century concepts of management associated with laissez-faire economic liberalism that persists to this day. Managerialism is the organizational form of neoliberalism that implicitly endorses what Lynch (2014) describes as the concept of educating managers to be market-led. Education is defined in terms of human capital acquisition, skilled for the economy. If the principles of a neoliberal, market led, and introduction to management education are not examined, educators run the risk of overlooking contemporary demands for managerial

social ethics and responsibility for the environment. Management is a discipline combination of liberal arts and social sciences, and should include experiential learning methods, though these may call down the wrath of fellow academics and the establishment; yet too theoretical an approach may result in student dropout. Connections must be made between students' life experience and the management concepts they need to learn; thus, instructional methods in introductory management education need to be student oriented, rather than instructor-centered, to overcome students' passivity and to encourage their creative involvement. The following accounts are of various innovative ways to do so. They involve the complete learning cycle, from "knowing" to "being" and "doing"; and include intellectual, reflective, active, and experimental approaches. A powerful tool for these activities is innovative technology.

Technology is in constant evolution and its changes will be reflected in educational systems; but there remains a need for human models that are active, expressive, and creative. Creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable insights to situations and problems. The main objectives of a creative philosophy are to think beyond existing boundaries; to awake curiosity; to break away from rational, conventional ideas, and formalized procedures, to rely on the imagination, the divergent, the random; and to consider multiple solutions and alternatives (De Bono, 1993).

2. Industrial Revolution In Education

There is a need for the 'industrial revolution' in education, in which educational science and the ingenuity of educational technology combine to modernize the grossly inefficient and clumsy procedures of conventional education. Work in the schools of the future will be marvellously though simply organized, so as to adjust almost automatically to individual differences and the characteristics of the learning process. There will be many laboursaving schemes and devices, and even machines – not at all for the mechanizing of education, but for the freeing of instructor and pupil from educational drudgery and incompetence.

2.1 Massive Open Social Learning

Massive open social learning brings the benefits of social networks to the people taking massive open online courses (MOOCs). It aims to exploit the 'network effect', which means the value of a networked experience increases as more people make use of it. The aim is to engage thousands of people in productive discussions and the creation of shared projects, so together they share experience and build on their previous knowledge. A challenge to this approach is that these learners typically only meet online and for short periods of time. Possible solutions include linking conversations with learning content, creating short-duration discussion groups made up of learners who are currently online, and enabling learners to review each other's assignments. Other techniques, drawn from social media and gaming, include building links by following other learners, rating discussion comments, and competing with others to answer quizzes and take on learning challenges.

Many consumer technologies have started small, then expanded, then engaged people in networked social interactions. Television, telephones, computers, and electronic games are examples of this development pathway. In a similar way, innovative pedagogies generally start small and then increase in scale and sociability, for example MOOCs, seamless learning, game based learning, inquiry learning and geo-learning are all now developing as large-scale social activities. This means they face the issues of how to reap the benefits of the Social Learning Effect while avoiding congestion, overload, and mass disorientation.

2.2 Learning Design Informed by Analytics

Learning design is used in the development of courses or series of lessons to help educators plan a coherent sequence of media, technologies and pedagogies. The use of learning design tools and templates shifts attention away from content, towards learner activities and the learning journey. A learning design specifies intended learning outcomes, identifies the ways in which these are to be achieved, and sets out how they will be assessed. Data from tracking and management of learning activities can inform learning design by providing evidence to support the choice of media and sequence of activities. When analysis of learning data is also used to evaluate and improve learning design, the circle is complete, so design and analytics work together to support the development of successful learning and teaching.

Substantial progress has been made to use the power of learning analytics to inform and tune innovative learning designs. An important consideration for institutions wanting to implement learning analytics is their capacity to produce and act on reliable data. Organisational change takes substantial time, effort and financial resources. An increased use of learning analytics by managers and instructors will improve the quality of their courses. This, in turn, will help the learning analytics community to understand more clearly which variables for learning are important, how to incorporate informal learning, and where the ethical boundaries of learning analytics lie.

2.3 Flipped Classroom

Flipped learning reverses the traditional classroom approach to teaching and learning. It moves direct instruction into the learner's own space.At home, or in individual study time, students watch video lectures that offer them opportunities to work at their own pace, pausing to make notes where necessary. This allows time in class to be spent on activities that exercise critical thinking, with the instructor guiding students in creative exploration of the topics they are studying. Flipped learning is sometimes seen simply as a different approach to delivering content. It also offers opportunities for the classroom to become a more flexible environment, where the physical layout can be shifted to enable group work, where students can make use of their own devices, and where new approaches to learning and assessment are put into practice.

Although there may be hype around the term flipped learning, it is a useful way to consider effective use of environments and tools. If a instructor is repeatedly explaining basic concepts that could be better covered via online instruction, it makes sense to flip and apply a more engaging style for the face-to-face element. Open education resources and MOOCs now provide a range of good quality and freely available online resources that suit different learners. With flipped learning, the classroom becomes the place to share, discuss and explore these materials, guided by a instructor.

2.4 Bring your own Devices

When students bring their own smart phones and tablet computers into the classroom, this action changes their relationship with the institution and with their instructors. They arrive equipped not only with individual technologies that they maintain and improve, but also with their own personal learning environments and social networks. This means that instructors become managers of technology-enabled networked learners, rather than providers of resources and knowledge. This shift opens opportunities for connecting learning inside and outside the classroom. Computer-based activities that are set in the classroom can be continued elsewhere and then shared in the class. Students' personal collections and networks, gathered inside and outside can become resources for learning. Bring-your-own-device (BYOD) approaches have the potential to reduce the cost of ICT provision and introduce new possibilities for learners, but they also offer new challenges. The institution need to be willing to support a wide range of

technologies and to open their educational networks to new devices. They must also avoid disadvantaging learners who cannot afford suitable devices, and develop ways for individuals to keep their social and learner identities apart if they prefer to do so.

BYOD can bring many challenges. Learners may be disadvantaged if they cannot afford the multimedia devices needed to participate fully, or if they have to monitor and restrict their data usage. Giving students uncontrolled access to the internet at all times may result in students browsing the web or messaging their friends when they should be concentrating on a classroom activity. Students may misuse the power of their devices, for example by filming instructors or students without their permission. In some countries, these issues of access and appropriate use have been highlighted in the press and taken up by instructors' organisations.

As a technology, mobile devices may threaten the carefully managed environment of the classroom. From the perspective of innovating pedagogy, BYOD is a means to introduce everyday social learning to the classroom. This requires careful management, since the instructor has to keep control of a room where learners can connect with each other and the outside world, continuing conversations and sending messages. The instructor and the college together need to set clear guidelines for appropriate use, and also to accommodate those students who have their own devices and can afford to run them.

2.5 Learning to Learn

We are always learning. Throughout our lifetime we take on board new ideas and develop new skills. What we find difficult are learning what others want to teach us, and managing our learning in order to achieve particular goals and outcomes. Self-determined learning involves learning how to be an effective learner, and having the confidence to manage our own learning processes. 'Double-loop learning' is central to this process, for double-loop learners not only work out how to solve a problem or reach a goal, but also reflect on that process as a whole, questioning assumptions and considering how to become more effective. This helps them to become self-determined learners with the ability to seek out sources of knowledge and make use of online networks for advice and support. Web tools and activities such as reflective journals and concept mapping have been designed to support earning to learn, but these are rarely well integrated into a learner's social world.

In learning to learn, success is not linked to the content a person acquires but to their development as a learner, so that when faced with situations in the future they have the personal capability to find new approaches or fresh information, and they are able to apply these in an effective manner. Connected with learning to learn is the ability to determine the learning needs and to reflect continuously on the learning process. This involves developing skills of open communication and teamwork, being flexible in approach and creative in new situations, and becoming confident in the ability to take appropriate and effective action in changing circumstances. This is all based on the assumption that learners want to determine their own learning and are able to do this. There is therefore an emphasis in learning to learn on enabling young learners to make sense of their world and helping them develop creative strategies for organising their studies. There are skills and techniques to becoming a learner that can be acquired and revisited over time, supported by 'learning to learn' courses on how to diagnose your learning needs, set goals, find valuable resources including other people to learn with, choose learning strategies, reflect on progress, develop creative skills, and evaluate learning outcomes.

Learning to learn makes sense in a world where nearly half of all job titles are now expected to change within 20 years and personal values cannot be linked to fixed measures of success. But the rethinking and techniques that are required for learning to learn are neither easy to acquire nor easy to teach in a classroom. Becoming a self managed learner is not enough, as at least part of the problem in learning is too many options and unclear aims. The next steps include recognising that learning to learn is worth the investment in time, and looking for learning frameworks that bring together opportunities for learning around a mindful and reflective approach to life.

2.6 Dynamic Assessment

The basic premise of dynamic assessment is that it is important to assess students' potential to learn rather than measure what they have just done. Testing acts as a diagnostic tool that enables the instructor or the computer to offer guidance to the student during the assessment process. Thus, it differs from conventional testing in both assessing and guiding the progress of the student. The relationship between the assessor and student is not neutral because the whole purpose is to find suitable ways to promote student learning. A role of the assessor is to identify barriers to the student's success and then apply an appropriate strategy to overcome the difficulties.

Assessment and intervention combine in the process of dynamic assessment. As well as being a way to offer direct support to the learner, dynamic assessment can inform the instructor about topics and skills that many students are finding difficult and so help the process of re-designing and improving the teaching. It can also motivate learners to reflect on their learning journeys and decide on which skills they need to improve. It is particularly valuable for developing 21st-century skills of reasoning, problem-solving, decision making, leadership, creativity and literacy. The differences between dynamic assessment and conventional or static assessment are that:

- The focus of dynamic assessment is on guiding future development, whereas static assessment measures past achievement;
- The assessor and student relationship is different, since the assessor intervenes during the process;
- With dynamic assessment there is feedback to the student during the assessment process.

Dynamic assessment has been criticised on the grounds of its reliability. In order to construct a reliable test, the test items need to be stable, but the dynamic assessment

procedure is deliberately associated with change, not stability. However, the main value of any assessment lies in the inferences that can be made from it about how well the student is progressing, and with dynamic assessment these inferences are sound, since they are tightly connected to administration of its test procedure. Although dynamic assessment puts new demands on instructors, test instruments have been constructed for use in the classroom. It should be considered as part of a range of assessment tools that can support individual students to reach their full learning potential.

2.7 Event-Based Learning

Technology provides opportunities to extend these benefits. Social network systems such as Facebook enable participation and collaboration, allowing us to share distributed expertise, disperse ideas and build understanding with friends and colleagues around the world. The possibilities opened up by the combination of event-based learning and social networking are being explored in a variety of subject areas, including science, computer science, history and literature. Technology-enhanced event-based learning offers opportunities for participation, collaboration and distributed expertise. These events not only have the potential to engage millions of people in memorable learning experiences, but can also make significant additions to the body of knowledge available to us as a society. Event-based learning runs over a few hours or days and creates a memorable sense of occasion. Examples are the 'maker fairs' that gather together enthusiasts who are keen on do-it-yourself science, engineering and crafts projects, and the 'Raspberry jams' where fans of the Raspberry Pi computer meet up and share ideas. Local events spark national gatherings and these build into international festivals.

Many, like the UK's annual Spring watch week or the worldwide Scratch Day for computer programming, are initiated at national or international level, but all depend upon local enthusiasm and initiative. The time-bounded nature of an event encourages people to learn together, its local setting supports face to-face encounters between amateurs and experts, and the scale of an event can provide access to resources that would otherwise prove inaccessible. Having such an event as a focus gives learners something concrete to work towards and to reflect upon afterwards, together with a sense of personal engagement and excitement.

2.8 Learning through Storytelling

Learning through storytelling – by sagas, parables and fables – has a long history. The rise of a more objective, scientific approach to learning and teaching has often sidelined these narratives in favour of a curriculum that emphasises mastery of facts and figures. However, as the wealth of information that is available online continues to grow, there is an increasing need for storylines that can help learners to find their way through resources. There are three approaches to learning through storytelling: narrative pedagogy, narrative-centred environments, practomime.

1) **Narrative pedagogy**
Narrative pedagogy is a community practice that allows students and their instructors to consider what is possible and what is problematic within their teaching. This approach provides earners with opportunities to hear and consider different viewpoints. Within these different narratives, knowledge is contested and elements of uncertainty are explored. Nothing in the subject area is taken as certain: everything is open and problematic.

2) **Narrative-centred learning environments:**
Narrative pedagogy takes place within a realworld environment. A narrative-centred learning environment, by contrast, provides a 'story world' in which guided exploratory learning can take place. These environments may be based within virtual worlds (such as Second Life), augmented reality or game settings. In each case, they situate learners within unfolding stories that require them to ask scientific questions, design experiments, make predictions, generate and test hypotheses. The aim here is to provide engaging and effective narratives that motivate students in a variety of ways. Tasks set at the right level for learners provide challenge.

3) **Practomime**
By blending elements of role-playing games and alternate-reality games, learners are prompted and guided to produce creative solutions to problems. The aim here is to provide engaging and effective narratives that motivate students in a variety of ways. Tasks set at the right level for learners provide challenge. A successful practomime brings together problem solving, student inquiry and the social construction of knowledge in a continuous and engaging process. This means the approach is transferable, and can be applied to the study of science.

Storytelling offers a way of engaging learners over time, structuring learning and encouraging students to develop their understanding. Although narrative is traditionally associated with Arts-based subjects, the examples explored here show that it can be used across the curriculum and also in practice-based settings.

2.9 Threshold Concepts

There is general agreement that threshold concepts are those parts of a curriculum that students struggle to understand and that they have one or more of these characteristics:
- Transformative: they shift a learner's perceptions of a subject
- Irreversible: once learned, they are hard to unlearn
- Integrative: they expose the inter-relatedness of some things
- Bounded: they border with other threshold concepts to define a disciplinary area
- Troublesome: they appear difficult and unintuitive

A simple approach is to say that threshold concepts are core topics in education without which students cannot progress in the subject. The characteristic of 'troublesome knowledge' is central. A recent shift has been towards applying threshold concepts through the design of curricula and lesson plans, to guide teaching practice. Threshold concepts can provide a starting point for this transformation.

Effective design of a curriculum around key concepts can provide a structure for teaching, promote dialogue among students, help in introducing complex topics, and prompt inquiry into the nature of student and instructor understanding. They may act as a means for instructors to reflect on important points in learning from the students' perspective, indicating areas of misunderstanding and barriers to deeper learning of a subject.

Threshold concepts can also guide assessment practices. By breaking a concept into related elements, a instructor can guide and assess knowledge of each part, then fit them together into a composite whole. Just as with a jigsaw puzzle, there is also value in showing the 'big picture' of a threshold concept – why it is important and how it can be applied in practice – before putting together the component parts. These formative assessments and quizzes not only review students' deep learning of threshold concepts but also show where they are encountering barriers to understanding. The true value of threshold concepts is that they provide an approach to teaching across different disciplines that are based on fostering deep understanding of difficult concepts rather than measuring outcomes. Threshold concepts are hard to define and so have provoked debate about their use as an educational theory. There is a growing movement to exploit them in designing curricula and in helping instructors with their lesson planning. By sharing and discussing barriers to understanding, instructors can adopt a more student-centred approach as an alternative or supplement to outcomes-based teaching.

2.10 Bricolage

The term 'bricolage' is French for 'tinkering',or working creatively with whatever tools and resources are available. There are two uses of bricolage with relevance to pedagogy. The first refers to the ways in which people learn by improvising around materials. The second use of the term in education relates to engaging in innovation by creative exploration of the practices and technologies needed to achieve an educational goal. In a larger scale, researchers and entrepreneurs develop innovations in education from resources that are available locally.

The Development of the New Learning Paradigm

Traditional	Future	Anticipated benefits
Static	Dynamic	Cheap methods of producing, transmitting and restoring acceptable quality video and animation will have greatly improved the presentation of a wide range of materials.
Impassive	Supportive	Well-designed computer-based learning support systems will have been made highly supportive in dealing with a learners difficulties. This will provide great scope for remedial teaching.
Single Medium	Multimedia	The imaginative and skilful use of a wide range of media will provide scope for attractive learning, eg audio, video and animation.
Synchronous	Asynchronous	The space and time constraints of traditional presentation methods
		using lecture and laboratories will have been removed by a shift to self-paced learning using a variety of support mechanisms.
Passive	Active	Learning will be seen as an active process in which concepts are acquired, incorporated into appropriate schemas, and tested in action
Unidirectional	Interactive	Interactivity offers scope for benefits in clarification, elaboration and consolidation, and is the key to the production of highly supportive learning environments.
Location	Network	Learning can be supported on a network basis across space, rather than in only one location.
Audience	Person	The possibility of developing learning support systems that tailor their response to an individual's needs and performance.
Real	Virtual	The use of virtual objects simulated by computer, and which are interactively accessible, offers considerable scope for linking theory and experiment in teaching and technology.

3. Conclusion

The introduction of the above mentioned pedagogical tools in the present educational revolution in teaching and learning will have a greater impact .The various technologies produce a greater level of interaction between and among the instructors and students. They help to improve the educational environment while providing enrichment in the learning experience. The infusion and integration of the new information technologies in the teaching pedagogy surely will have immense impact on the educational environment. Education providers at all levels, should follow innovative pedagogical tools to help all students become a well prepared citizenry and workforce that will succeed in the Knowledge Economy driven by critical thinking, communication, collaboration and creativity, and fuelled by digital technology.

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