

CASE STUDY TO UNDERSTAND THE CHALLENGES AND OPPORTUNITIES IN DESIGNING OF CONTEXT BASED CURRICULUM

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ABSTRACT

The paper in the form of a case study would throw light on various challenges and opportunities in the designing of a context based curriculum. The case would discuss the issues pertaining to context based curriculum in an Omani environment with reference to the Colleges of Technology in general and Ibra College of Technology in particular. The insights drawn from academicians, academic administrators, students would provide a bird's eye view regarding the planning and implementation of context based curriculum. Periodical evolution of curriculum development in the Colleges of Technology, leading to the emergence of the context based curriculum would bring to the fore transformations that have led to the current status of this concept vis-à-vis the teaching-learning environment. The case would lend credence to the aforesaid factors on the basis of secondary data, interviews and some primary data gathered from key stakeholders involved with the ideation, planning and implementation of the context based curriculum.

Aims/Objectives of the Study

The study would have the following Aims/Objectives

- To understand the challenges and opportunities while designing, planning and implementing context based curriculum with reference to the Colleges of Technology.
- To understand the perspective of various stakeholders and related to context based curriculum.
- To understand the benefits offered by context based curriculum towards the teaching-learning environment of the Colleges of Technology.

Rationale/Importance of the Study

The study would provide first hand insights pertaining to the challenges and opportunities of designing context based curriculum for Higher Education in the Sultanate of Oman. The paper would bring to the fore the perspectives of academicians, academic administrators and students while designing a context based curriculum that, in turn would provide solutions to many of the issues grappling with Higher Education institutes (HEI).

Research Setting

The research setting for the study would include the physical, social and cultural aspects related to the students, teachers, infrastructure, society, employers and academic administrators of Ibra College of Technology.

Findings and its Relevance

The study would decipher the challenges and opportunities in shaping up and implementing context based curriculum especially with regards to a Higher Educational set-up similar to that of the Colleges of Technology in the Sultanate of Oman. The findings would have high relevance not only for the aforesaid institutions, but can also provide solutions to many of the issues being faced by other Higher Education Institutes (HEI) in the Sultanate of Oman.

Contributions to Theoretical Knowledge and Professional Practice

The study would add substantial value to the theoretical literature available on the designing of context based curriculum. However, what would made the contributions different from any other findings revealed earlier, is the presentation of the challenges and opportunity in the form of a case study, particular to an HEI set-up, that too in particular to the Omani context. The findings would contribute towards the professional practices of the curriculum designer and implementer as the thought provoking questions after the case study would lead to many solutions that can be customized and used in diverse settings.

KEYWORDS: Context Based Curriculum, Higher Education, Colleges of Technology

INTRODUCTION

Teaching and Learning, especially in a Higher Education Institute (HEI) set-up calls for continuous development of the processes involved. One of the major components of the overall process in the HEI is curriculum development. The students joining various programs of Higher Education have an intention to do and most of those relates to being productively engaged once the program reaches the concluding stage. Curriculum forms the major ingredient in the teaching-learning process as everything else hovers around it. The need for periodical refurbishment in the contemporary era, where change is the only constant makes it even more imperative for all the concerned stakeholders to act in a concerted manner. The paper is an attempt to put forth the perspectives of the authors in the form of a case study so as to start the deliberations on the opportunities, challenges and stakeholder's roles in the context based curriculum development.

LITERATURE REVIEW

Curriculum forms the backbone for any academic program. The importance of curriculum increases manifold when it comes to Higher Education (HE) and Higher Education Institutes (HEI). (Chavez, 2011) opines that curriculum development in HE calls for faculty in all spheres, including those from various levels like local, province, state, national and international for increased attention to learning outcomes, through integrated learning across courses, usage of business models to enhance productivity, blending of theory and application along with the need for collaboration across disciplines. The importance of understanding the need for shaping up a curriculum in line with the need of the hour facilitates in churning out quality graduates. Services-learning courses have provided with instances where there are combination of academic content, service experience and critical reflection, much needed while framing modern day curriculum, especially in the HE sector (Kelly, 2012). The need for understanding context and the associated catalysts contributing positively towards the curriculum development in Higher Education is what is required to make result driven course curriculum. Reforms in the HE sector require curricular assessment and development initiatives at a variety of institutional levels. "Faculties within institutions of higher education are increasingly being asked to play leadership roles in curriculum

assessment and reform initiatives. This change is being driven by quality concerns; burgeoning disciplinary knowledge; interest in a broader array of learning outcomes, including skills and values; and growing support for constructivist's pedagogies and learning-centered, interdisciplinary curricula. It is essential that faculty be well prepared to take scholarly approach to this work. To that end, this issue presents the frameworks used and lessons learned by faculty, administrators, and educational developers in a variety of curriculum assessment and development processes" (Wolf, Hughes, 2008). Internationalization of curriculum so as to benchmark with the best in the world, attain standardization in terms of learning outcomes, methods of delivery are the other challenges encountered by curriculum experts, especially when it comes to localizing context of the curriculum from the global perspective. "There is a lack of clarity around the concept of internationalization of the higher education curriculum and its boundaries and further research is needed with respect to meaning and process. In particular, there is a need to construct a broader perspective on the concept, which stretches beyond just curriculum content. Equally, thinking in the area must move away from a narrow focus on international students and provide international experiences to all university staff and students so that they will perform successfully (professionally, economically and socially) within diverse contexts" (Welikala, 2011). Comparison of curriculum across nations might allow the academics and academic administrators to understand different context and setting in which specific contexts are inserted into the teaching curriculum of higher education. Comparative analysis of the literature from the UK, US and Australia provides a context in which to discuss the present and future utility of 'curriculum' in an Australian higher education context. The learning derived from the paper provides perspectives related to the multiple meanings of 'curriculum' as conceptualized by students, lecturers, course co-ordinators, and institutional planners and administrators. The paper presents insights on Australian literature on curriculum in the school sector, relating the one considered here to higher education, as well as reviewing recent international initiatives focusing on curriculum in higher education.

NEED FOR MODELS AND MECHANISMS IN CURRICULUM DEVELOPMENT

There is a need for models and mechanisms to encourage a deeper understanding and more rigorous application of the concept of curriculum in higher education are developed and presented for discussion, before being considered to be used in an HEI set-up (Hicks, 2007). Competence based curriculum is also being adopted in some HEI set-up and even there the need for understanding the context and then framing the curriculum becomes important. Context based curriculum in terms of aligning with competence based curriculum of the academics and learner plays a pivotal in the modern day teaching-learning environment. A paper focuses on the characteristics of successful competence-based curriculum development. Competence based curricula is ensured by paying attention to the role of generic competencies in academic environs especially to what constitute 'academic competencies'. In developing countries many higher education institutions wish support in designing and developing competence-based curricula in a variety of disciplines. Since a competence-based curriculum is dependent on the context of the institution offering the curriculum, the routes that are followed in curriculum development can divert to a great extent (Kouwenhoven, 2007). (Beasley & Butler 2002) described context based approach a teacher initiated introduction to a specific context at the outset of the unit. Subsequently, the content is developed and provided in a need-to-know-basis and concepts are taught through discussion as and when required by the learner. Instances like understanding marketing management in the context of Omani market, where all stakeholders represents a context in Omani set-up rather than an alien condition goes a long way in imbibing contents through context based curriculum and approaches. Even subjects like chemistry has been taught using context based approaches to make it simpler and easier to understand. Context based chemistry connecting concepts with contexts

relevant to the students' forms an important basis for teaching the subject. Understanding the practices adopted by experts in different fields can also enable the practitioners and planners to understand the nuances of context based curriculum and allied approaches. The context based approaches adopted in teaching chemistry was presented and observed in ChemCom programs in the United States of America especially related to chemistry. Even the Salters approach in the United Kingdom in the University of York Science Education Group (UYSEG), 2000, where research studies on such courses have reflected the value and importance of context based approach in curriculum development (Gutwill-Wise, 2001; Key, 1998; Ramsden, 1992, 1997; Sutman & Bruce, 1992). Australia has also witnessed adopting context based approach on a pilot basis to start off in selected classrooms, only to implement it later on in a full-fledged manner mirroring real life situations (Queensland Studies Authority, 2004).

DEVELOPMENT OF HEI TOO PLAYS A ROLE

The origin of HEI along with its periodical evolution play an important role in the enhancement of the curriculum development as more rapid is the progress in terms of moving from one level to another; faster would be the progress in terms of all aspects of the teaching-learning domain. The progress had been slow and steady, even though transformation in terms of curriculum revamping happened at a brisk pace.

Table 1

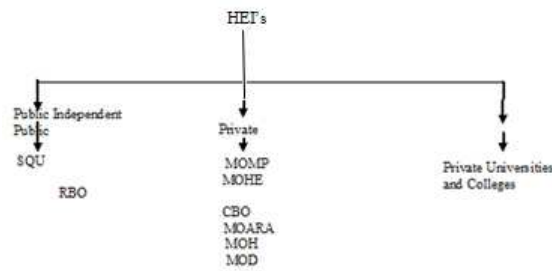
Year	Happening
Before 1970	Absence of Higher Education
1970-1980	Vocational Education started by Sultan Qaboos University
1980's	Ministry of Manpower starts vocational educational institute all across Oman with the epicenter in Muscat.
1990's	Private and Public sector colleges and universities starts in Oman. Foreign and domestic programmes were initiated in these HEI's.
2000 and onwards	Tremendous growth of HEI, along with the entry of foreign universities.

Source-<http://www.unesco.org/education/wef/countryreports/oman/contents.html#cont>

As is evident from the table above, HEI progressed periodically and along with that brought in changes in the teaching-learning aspects, including that of curriculum. It is understandable that evolution of curriculum so as to culminate into context based curriculum could not have happened right from the outset as HEI's came into being over a period of time and also got seasoned to adapt and acclimatize into a learning environment that encouraged curriculum based on the basis of context. It goes without saying, a holistic development in terms of economic and industrial progress along with other macro and micro environmental factors are important as well. All these contribute towards education, notably, higher education also contributed towards the progress.

HEI's in Oman

The following figure shows the classification of HEI's in Oman



Source: <http://www.mohe.gov.om/>

Figure 1

As is evident from the diagram above, along with the evolutionary discussion presented before, Ministry of Manpower, being the pioneer in HEI's, by starting with vocational institution and then gradually metamorphosing into HEI, provided the right platform to evolve in terms of different aspects of the teaching-learning environment. The alteration of curriculum from adoption of courses offered by peers to customizing into other aspects including contextual based one was a slow and steady affair. Although, Colleges of Technologies are adopting context based curriculum in different domain of teaching, it is still evolving on the basis of the periodical audit reports emanating from the Ministry, apart from the accreditation being done by the Colleges so as to benchmark with the best in the country, region and the globe.

Overview of Colleges of Technologies

The market needs brought in changes in terms of the transition from Vocational Training Institutes (VTI) to the Colleges of Technologies. From 5 Colleges of Technologies to start with, the Ministry of Manpower added two more to its fold, mainly to groom future Engineers, Managers, Information Technology professionals, Basic and Applied Sciences graduate so as to meet the market requirements, by providing quality manpower. The scope of VTI was limited in terms of the development of curriculum and move over to a pure context based curriculum as the program was offered till the Diploma level. On the other hand the commencement of the Colleges of Technologies providing Higher Education from foundation studies to the bachelor's level across a wide range of discipline provided with more opportunities to switch over to different curriculum including context based curriculum periodically. VTI to Colleges of Technologies thereby provided a bed of opportunities to move over to specialized curriculum.

Ibra College of Technology at a Glance

Ibra College of Technology is one of the established technical Colleges in the Sultanate of Oman that is being governed by the Ministry of Manpower since 2001. The idea to improve College of Technology to Higher College of Technology is through the help of the Academic committee who worked and developed a new B.Tech program which was first offered in the 2003-2004 Academic Year. The College believed that all individuals, regardless of economic or social status, are entitled to be treated with dignity and respect and should be provided with opportunities to develop their skills and benefit the welfare of society.

Both technological and general education are essential parts of the Ibra College Technological curriculum, enabling students to develop self-awareness and social responsibility necessary to successfully compete in their chosen occupational fields. The programs offered by the Ibra College of Technology are directed towards serving the needs of all individuals within the community, as well as the needs of the community as a whole (Adapted from internal record and

website of ICT). The sequential list of events leading to the contemporary status enjoyed by the institution can be seen below.

- From 1982-1993, the college operated as Vocational Training Institute offering programs in Vocational Training.
- From 1993-2001, it was known as Ibra Technical Industrial College offering programs in Arabic Program in 1993-1995, and General Certificate of Vocational Education (GNVQ) Program in 1995-2001.
- From 2001, the college has been upgraded and called Ibra College of Technology offering programs in Oman National Diploma (OND) in 2001-2003 and the New Program in 2003-2004 onwards.
- From 1982-1997, the college was under the Vocational Training Authority.
- Until 2001, the college was under the Ministry of Social Affairs for Labour and Vocational Training.
- From 2001 onwards, the college has been under the Ministry of Manpower (MoMP). (source-<http://www.ict.edu.om/ENUS/Pages/About/CollegeHistory.aspx>)

It is clearly evident from the aforesaid sequence of events that the need for curriculum development and finally getting into the context based mode was for the metamorphosis witnessed within the organization and even outside, in line with the needs of the stakeholders.

Essentials for Developing Context Based Curriculum

There are quite a few essentials forming the basis for developing a Context based Curriculum. Some of these essentials are

- **Defined Learning Outcomes:** Learning outcomes should be defined on the basis of the context in which the teaching-learning process is to be fulfilled. A simple example could be to teach concepts related to banking sector in the Arab, the context should emphasize on Shariah compliant products and Islamic banking as an avenue of service, apart from traditional banks, viz. commercial, specialized and cooperative ones.
- **Content or Context First:** It is a cat and mouse game. Which would move ahead of the other, the content or the context? The experience of the authors places context above content as once the context is finalized, content can simple follow, as contents are universal and should rather be finalized with respective to the context. For example, teaching marketing management in the Arab world would also involve teaching all contents of the subject, viz. 4P's of Marketing, Segmentation and Positioning, however, the impetus should be more on understanding the context, i.e. organizations culture, societal issues, economics, market likes and dislikes, which might completely vary from markets in the west or even other parts of Asia.
- **Collaboration:** Context based curriculum would draw in insights related to courses and subjects which might have a subtle or strong interrelationships between each other. Context based curriculum is impossible if taught as standalone courses and the intended objective cannot be achieved through that. Teaching specialized courses like Managing trouble employees would necessarily have to bring in insights from important pre-requisites like Human Resource Management, Organizational Behavior to name a few.

- **Assessments:** In order to achieve the goal of testing the actual understanding of the learner, the assessments should also be framed in a setting commensurate with the requirements of a context based curriculum. For example, case analysis for a specific course should have a case study or even a case-let strictly based on the content-context taught rather than meandering away from it.
- **Flexibility:** Context based curriculum would call for periodical changes as context in which contents are finalized might undergo minor or major alterations owing to various reasons. For example, dynamics like market dynamics, economic fundamentals would always vary and therefore the context would also vary from time to time. Flexibility holds the key, rather than a steadfast approach.
- **Teaching-Learning Environment:** Teaching-learning environment existing within the institution would add a Philip to the incorporation of context based curriculum. This is mainly because setting and implementing context based curriculum calls for an encouraging environment that emphasize on peer learning, open and positive critical feedback, where the stakeholders are welcoming change as dynamic players rather than static objects.
- **Text-Books, Workbooks, Reference Books:** Context based curriculum are contents taught and learnt within a specific context and therefore it is apt to have customized textbook, reference book and workbook, rather than focus on international publications. GLOCAL (Global +Local) approach is what is needed as the learning resources ought to be in line with specific contexts.
- **Faculty Development Programs:** Finalizing a context based curriculum would call for a very high level of standardization, in terms of the processes to be built and the strict Do's and Don'ts to be followed. Periodical faculty development programs or refresher courses would not only bring everyone concerned in the same platform, but also, share insights pertaining to domain specific contexts and contents.
- **Benchmarking with Customization-** Benchmarking should be in place for periodical development of the curriculum framed under different context, however, it should be done with the necessary customization, necessary for the institution, the teacher and the learner, apart from the mission and vision of the organization.
- **Audit:** Auditing the progress of the work internally and externally by different agencies through feedback from all the stakeholders would go a long way in understanding the efficacy of the context based curriculum.

OPPORTUNITIES PROVIDED BY CONTEXT BASED CURRICULUM

Context based curriculum provides a wide array of opportunities to a large section of stakeholders. Majority of them are listed below

- Context based curriculum can be made contemporary with the needs of the environment, thereby offering opportunities of research and development.
- The implementation of context based curriculum would enable the learner to understand the concepts better.
- Context based curriculum would act as a solution provider to the problems encountered by the society, industry, economy and the nation.
- Context based curriculum can lead to a need based learning approach on the part of the learner.

- Context based curriculum is more student friendly and therefore student centered learning becomes comparatively easier.
- Performance of the student would improve owing to better understanding of the contents.
- Localization of globalized contents would enable the trainer-learner duo to participate in enriching teaching-learning relationship.
- Context based curriculum would lead to the development of local textbooks with local illustrations, case studies, demonstrations, that can facilitate in better learning, rather than the foreign ones having different contexts.
- Learning innovation would lead to more creative graduates, impacting their workplace related performances.
- Entrepreneurial opportunities would increase as the graduates would have better understanding of the opportunities available along with the business solutions to be offered.

CHALLENGES FOR CONTEXT BASED CURRICULUM

Opportunities are aplenty, however, some challenges has to be overcome in order to implement Context based Curriculum in the right earnest with the ultimate objective of benefitting the beneficiary (read, the students). Some of the challenges are listed below, for which solutions are needed, that too which are practically viable and feasible.

- It calls for the trainer/teacher to have a complete understanding of the local happenings and need, which at times might not be available in optimum quantity.
- The need for having a strong, symbiotic and perennial relationship between institute and industry is a necessity, which at times may not be available.
- Defined process so as to involve all stakeholders before finalizing the curriculum is an absolute must, which may not be available.
- Periodical overhaul would be a need owing to the dynamism involved in this technique of curriculum involvement, thereby calling flexibility in the processes and organizational structure.
- Benchmarking global practices but with a localized touch would call for customization, leading to a dedicated team of professionals working on the area continuously.
- Textbooks, workbooks and other teaching-learning materials need to be standardized.
- Uniformity in assessment with an objective to attain the goals of curriculum based learning.
- The need to learn, unlearn and relearn would be the driving force in implementing curriculum based on contexts.

The challenges albeit in the form of opportunities for improvement of the curriculum development from a context perspective basically means to consider the needs of every stakeholders and catering to them so as to smoothen the process. End to end understanding of the roles and responsibilities by everyone would enable the context based curriculum take center stage in the teaching-learning process.

STAKEHOLDERS AND CONTEXT BASED CURRICULUM

The following table provides a snapshot of different stakeholders and their relationship with context based curriculum in an HEI.

Table 2

Stakeholder	Type of Role(Direct/Indirect)	Key Areas of Contribution	Level of Involvement	Periodicity of Interaction
Teacher/Trainer	Direct	Curriculum Development, Implementation, Review & Enhancement	At the operative level while implementing, top level while designing.	Continuous interaction with the industry and student.
Student/Learner	Direct	Soliciting feedback and participate full-fledged in the implementation process	At the operative level while implementing	Triangular interaction with teachers in the college, with industry during internship and with society regularly.
Academic Administrator	Direct	Facilitating and controlling the designing, implementing and following processes involved in context based curriculum design and implementation	At the strategic or the top level.	Interaction with all stakeholders with an outside-in and inside-out approach
Industry	Indirect	Inputs through active participation in training, collaborative research for framing the curriculum and feedback after monitoring graduate performance.	At the top level with the academic administrators through feedback and with teachers for collaborative research and student guidance	Teachers, academic administrators and society, regularly during Industry-Institute-Interaction and other forums.
Parents	Indirect	Inputs on students learning style, behavior and attitude towards learning and development, especially after the college/university hours.	Periodical interaction with academic administrators and teachers during parent-teacher-meeting.	Mainly with the student, teachers and the academic administrators, periodically as decided by the institution.
Society	Indirect	Feedback in terms of the solutions achieved by the students/graduate to the problems faced by the community.	Strategic level with academic administrators, with students and teachers at the operative level, with the industry.	Regularly.

Most of the aforesaid aspects are covered by Ibra College of Technology either as part of the teaching-learning roles or during the On the Job Training exercises, or during the graduation ceremony, alumni meet, result analysis, 10 percent annual curriculum enhancement, makeover in assessments on a semester basis, Job Fairs to name a few.

The need for improvement lies in channelizing everything from the context based curriculum perspective so as to get the requisite insights directly related to enhancement of the curriculum.

CONCLUSIONS

Context based curriculum is indeed a dynamic teaching-learning tool in order to achieve excellence in the HEI set-up. The role of stakeholders is varied and keeps on changing from time to time, especially when the context for the finalization of the contents of a curriculum of Higher education is never stagnant. The opportunities offered due to the implementation of context based curriculum is manifold, notwithstanding the challenge that needs to be overcome. The need for continuous and channelized discussion on the basis of the environment prevailing within a HEI goes a long way in deciding the success percentage of context based curriculum.

LIMITATION

The study has limitation of not having any primary data and dwells on secondary data from published sources, both in Oman and outside Oman. The paper is a compilation of perspectives of the author on the basis of their experience, along with the published literary works researched by them.

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