Best Practices in Curriculum Development & Delivery with special reference to Educational & Professional Development Department at Caledonian College of Engineering, Oman

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ABSTRACT

Higher Education Institutions worldwide have designed various strategies to ensure that curriculum and material development involves all teaching faculty in that department so that there is a greater sense of satisfaction, ownership as well as better understanding of the purpose of why it is the way it is. Collaborative strategies are envisaged to bring significant improvements in the quality of material production. Benchmarked curriculum development and effective delivery strategies are contributing components for achieving quality in teaching and learning. This paper presents the curriculum development process and delivery strategies as practiced in the department of Educational & Professional Development at Caledonian College, Oman.

Keywords: curriculum development, curriculum delivery, teaching & learning, Oman.

1. INTRODUCTION

In the last two decades, Oman has made significant developments in tertiary education. There has been a phenomenal growth in higher education in Oman. Ministry of Higher Education and Oman Academic Accreditation Authority have jointly set up procedures to ensure academic quality and standards in all academic operations. Generous funds have been invested for education, new colleges and universities are promoted and support is given to the youth for tertiary education. Furthermore, resource facilitation and infrastructure development has been given significant attention.

Private higher education colleges are on the rise in light of the national policies and strategic planning for developing higher education in Oman. The private higher education colleges offer courses on par with international standards and are affiliated to one or more international universities. Students in the country now have access to best educational systems and high-end infrastructural facilities.

However, one of the challenges is to 'align higher education outcomes with the needs of job market, attracting/training good academics'. (Dr Addullah bin Mohammed Al-Sarmi, 2014). It is true that most

often, colleges import courses from the affiliate universities which sometimes do not address market demand or the needs of the students. Courses may be imported because it is a global trend or since it was successful in some country. Quite frequently, courses are planned and designed by a handful of people within closed doors. In this process, the involvement of stakeholders in the educational setup barely exists.

Curriculum design and curriculum delivery practices are very important factors for maintaining quality in educational system. In this paper, the authors present the curriculum design and delivery practices that have been found to be effective in the department of Educational & Professional Development at Caledonian College, Muscat, Oman. The paper touches upon the meaning of curriculum design and delivery and its importance in a brief manner and explains its process as applied in the college. The paper describes the process of curriculum design and delivery with particular reference to Professional development courses in the institution under discussion.

2. DEFINITIONS

According to Roberts M (2014), 'Curriculum may be defined as the sum of the learning activities and experiences that a student has under the auspices or direction of the school.' He believes that curriculum encompasses general (academic) education as well as career and technical education. It includes courses and experiences associated with preparation for life and for earning a living.

Kessels J and Plomp T (1999) state that 'Curriculum design focuses primarily on the acquisition of skills and competencies that are sustained by the day to day work environment of the participants in an educational programme.'

Curriculum is an "academic plan," which should include: the purpose of the curriculum (i.e., goals for student learning), content, sequence (the order of the learning experience), instructional methods, instructional resources, evaluation approaches, and how adjustments to the plan will be made based on experience or assessment data.' Lattuca L & Stark J (2009)

Curriculum is an organized program of learning, usually segregated by subject area, composed of four main categories: content, instruction, assessment, and context.(Studymode.com)

Curriculum development is defined is the process of selecting, organizing, executing and evaluating learning experience on the basis of the needs, abilities, and interest of the learners and the nature of the society or community.(Studymode.com)

Curriculum development describes all the ways in which training or teaching organisation plans and guides learning. (Rogers and Taylor 1998).Source: World Agroforestry Center, 2003

3. IMPORTANCE OF CURRICULUM DESIGN & DELIVERY

Curriculum design and delivery is a continuous process that involves many dimensions such as market analysis, understanding students' and employers' needs and assessing the strengths and opportunities available to the educational institution. An effective curriculum is one that satisfies the learners' and job market needs and that which meets the new trends in the market.

Change demands in the higher education field have necessitated educators and administrators to have advanced and flexible modes of curriculum development and delivery. With immense growth in technology, there is even more a pressure and a need to keep the stake holders of educational institutions satisfied.

Many diversified models of curriculum design and delivery have been suggested by experts globally. As stated earlier, curriculum design and delivery models are to be developed taking into consideration the cultural and societal needs, market demand, students' need and new trends. It is indeed a huge challenge for curriculum designers to match the requirements of the stakeholders and that of the institution while developing a curriculum.

4. LITERATURE REVIEW

Different studies on curriculum design and delivery have identified significant components that are essential for the process of design and delivery. Most studies report that for effective curriculum design the institution's mission statement, values of the organization, learning outcomes expected to be achieved, evaluation and assessment need to be embedded in the developing system.

Anderson TR and Rogen JM (2011) have identified the major components of curriculum design as vision, operationalization of the vision, design, and evaluation. They have summarized some of the major influences on curriculum design as policy, local context, societal expectations, research trends, and technology.

The key elements and relationships to be considered in curriculum as identified by Flinders University (2013) are Educational aims (of courses, sequences and topics), learning outcomes, assessment, content, learning interactions and the connections between these elements.

All aspects of the student life, the learning needs of students, the time available for the sessions and the teachers' idea, capability and workload need to be taken into account for the curriculum. (Importance of Curriculum, 2014)

Penuel WR et al (2007) found that required time for planning programmes and provision of technical support were significant for promoting programme implementation.

Oliva 1992 cites the Taba Model in developing curriculum who advocated the inductive approach. According to her it should be the teachers who should design the curriculum rather than the higher authorities (Oliva, 1992). Source: De Mesa nd.

The February 2012 Wilson Review of University-Business Collaboration placed emphasis on 'the need for universities to liaise with industry when designing their curricula in order to deliver courses that meet the needs of business'.

It is noted from several literature that curriculum review and / or development need to be aligned with the institution's mission statement, clearly defined outcomes, assessment process and learning experiences. (Diamond RM & Gardiner LF 2000); aims, intended learning outcomes, syllabus, learning and teaching methods and assessment (University of Manchester)

Aibueku SO (nd) has identified some parameters of curriculum delivery as infrastructure, personnel, environment and resources.

Baloyi MS (2008) states that if the desired outcome in curriculum delivery has to be achieved, then all the stakeholders, especially the Department of Education, the parents of learners and educators should be committed in improving the management of curriculum delivery.

Teachers use curricula to decide when and what to teach students and the type of worksheets to be used. It all rests with the teachers to design the worksheets and on how it needs to be delivered. (Teachnology,nd)

5. PROCESS OF CURRICULUM DESIGN AS APPLIED IN THE PLACE OF STUDY

With increasing demands from the stakeholders of education, an educational institution will need to keep itself abreast in terms of resources and facilities, teaching learning technology, efficient delivery strategies and value added courses. Each department in the institution will also have to evaluate its strength in terms of its uniqueness, available resources, professional expertise and receptivity of courses in the job market and use them effectively for designing value added courses. In the following paragraphs, the authors have presented the process followed for curriculum design and delivery of Professional Development courses at the department of Educational and Professional Development in Caledonian College of Engineering, Muscat, Oman.

The department of Educational & Professional Development is a department with twelve members of staff with varied specialisations drawn to teach Advanced Life Skills. The members of staff are from varied age groups, nationalities, educational backgrounds and teaching experiences. Approximately 1000 students go through EPD each semester taking one of the three modules viz: Technical Communication, Employability Skills and Entrepreneurship.

Modules are designed or revamped keeping in mind the job market and the interests and aptitudes of the learners. Existing modules are periodically revamped in order to meet new market needs, government's goals as well as the Graduate Attributes set by the educational institution. The institution and the department are attentive to the new courses being offered globally and are quick to learn of its challenges and implications in the home market.

Different stakeholders may have different requirements and effectiveness lies in satisfying the needs of the stake holders in all perspectives so as to yield a win-win situation. This requires careful analysis of the existing curriculum and involving the stake holders in the review process. In the place of study under discussion, reviewing of the curriculum is done with respect to the contents, its delivery style, meeting the learning outcomes, satisfying the quality standards and meeting the employers' changing requirements. The process for curriculum development goes through many phases which are represented in the flow chart:
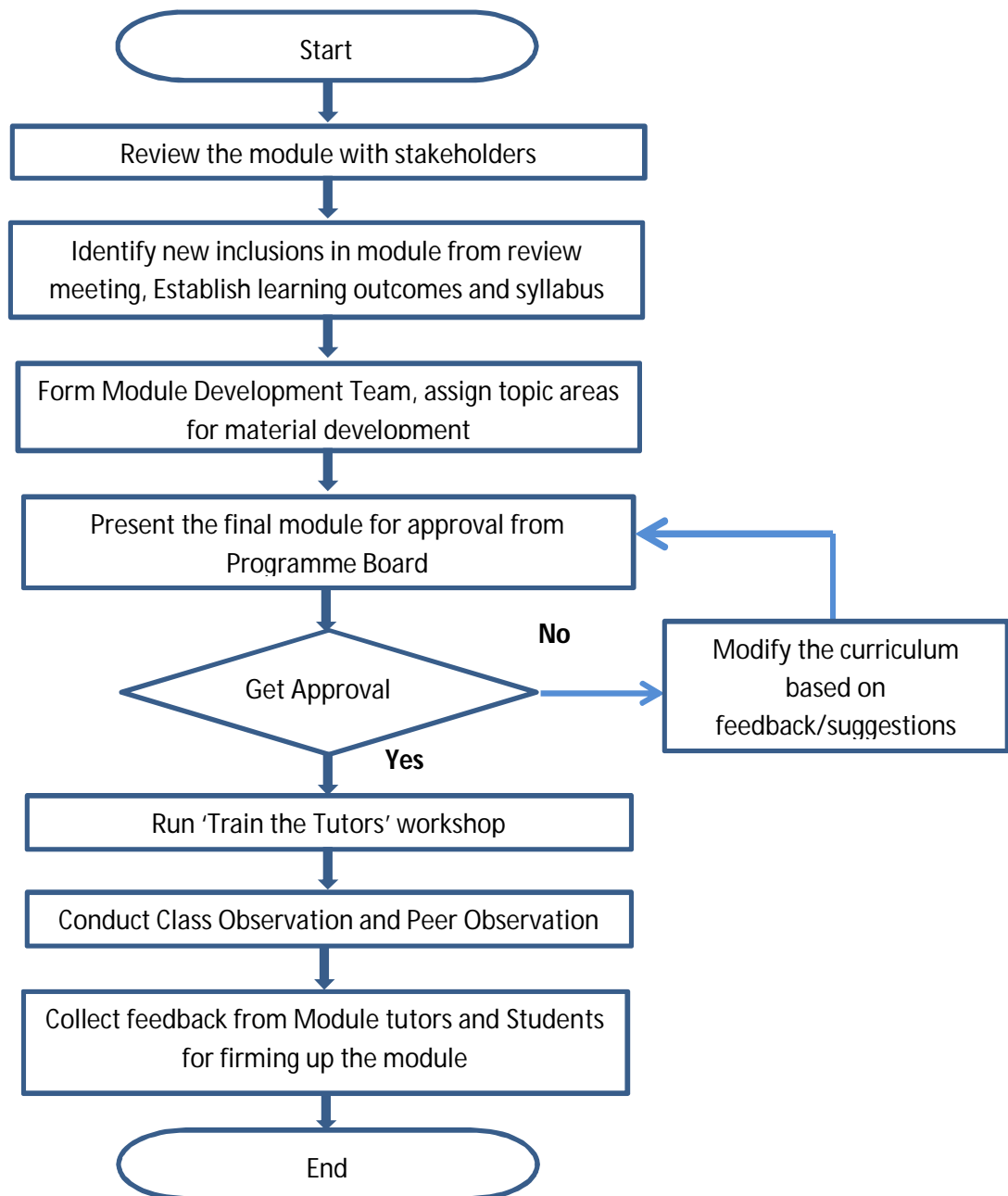
The modules offered by EPD Department are unique in nature and are designed to develop Advanced Life Skills, Employability Skills and Entrepreneurship skills. Soft skills training is embedded in these modules is the key objective.

The process of curriculum design starts with need identification and evaluation of the existing courses. Feedback about each module is obtained from the students every semester and further inputs are drawn from meetings with the Student Council, Ministry of Higher Education, Industry Advisory Board, faculty members and External Assessor. Based on the feedback, the module structure is defined. Working teams are formed with specific responsibilities. This working team brainstorm on the nature and scope of the courses that would meet the needs and the expectations of stakeholders. The learning outcomes are drafted in line with college graduate attributes and teaching and learning strategies and course works are identified. Once the Module Descriptors are ready, it is presented for approvals at the Programme Boards and the Academic Council. Upon approval the session development on topic areas begins. The most valuable part in the whole process is that it is a bottom up process where the working teams involving all members of EPD are part of module development process and are paired for each topic area. The pair then designs the teaching learning packs for each topic area and conducts workshops for the other member of the team to help assess the effectiveness of the teaching. This ensures that all tutors teaching the same module have common teaching material and common session plans.

'Train the Tutors' workshops are conducted for each session in every module by the respective teams responsible for session development. The complete session is run through to get the feel of the session and to make necessary changes in content or delivery if required. This is followed by uploading of materials in the Blackboard and conducting periodical module coordination meetings with tutors. All these are carried out to ensure effective sessions delivery. New teaching faculties feel supported and confident having a well thought – out lesson plan which clearly indicates session objectives to be achieved and how to achieve them. The session pack with videos, session plan, e-learning tools and worksheets ensures consistence in delivery across the board

The sessions are delivered by different teachers to different batches. High level of professionalism and commonality in session delivery is maintained in all the classes though the batches are handled by

different teachers. The challenge comes in handling the sessions uniformly across the batches by following the session plans. All efforts are taken to ensure that tutors get the confidence in the delivery of the modules underlined by homogeneity and commitment.

Peer observation and Head of Department's (HoD) class observation ensures further support and is a regular feature every semester. These observations are aimed at identifying the best practices in teaching and learning and for giving support to develop in areas requiring improvement. At the end of the semester, the module assessment questionnaire is administered to the students in order to get their feedback on their learning experience.

This process of team involvement in the curriculum development and design process has empowered the teaching faculties who are now more confident and feel part of the process. The staff have expressed greater sense of satisfaction and an increased confidence through preparedness. This approach has also ensured consistency in session delivery across all tutors and classes through common session teaching packs. The train the trainer workshop has made delivery effective and interesting and tutors are trained in e learning tools to teach the 'Y' generation students.

6. A MODEL FOR MODULE DELIVERY
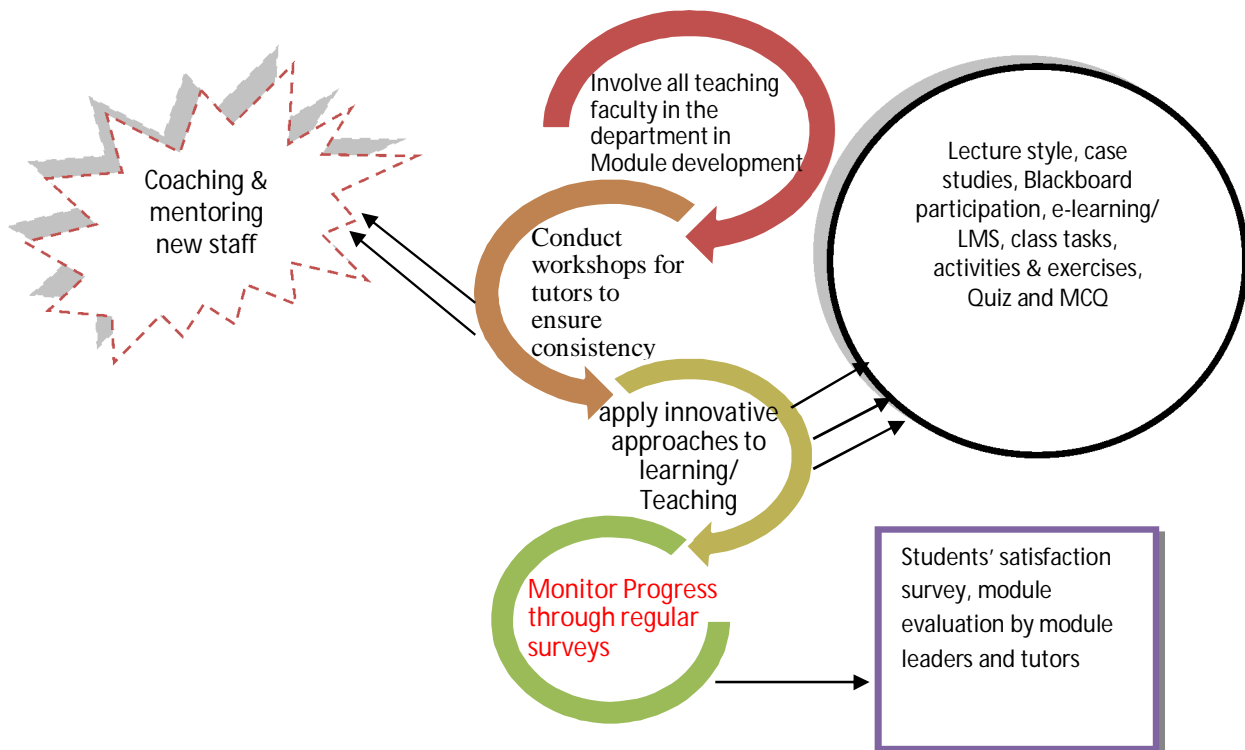
The strength of the department in delivering effective sessions comes through clear channels of communication, effective leadership, brainstorming by teachers, intensive in -house training workshops and weekly module meetings. The staff members function as a team for curriculum framing, module designing, material development and building strategies for delivery and evaluation.

7. CONCLUSION

Curriculum Development can be made effective through bottom up process, joint teaching and learning material development, by having intensive staff workshops, developing lesson plans, coaching and mentoring new staff, developing different delivery strategies using e learning tools. Academic institutions have to ensure that the courses offered meet the national and global job market. Technology need to be embedded into delivery strategies for making the exercise effective and efficient. They will have to keep themselves updated on the rising challenges and changes in the educational arena.

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