

Questioning Best Practices with an Innovative Pedagogical Design for Professional Development of Teacher Educators

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Abstract: Best practices in any field of study utilize methodologies that have been proven as reliably leading to desired outcomes, while adding an appreciable value to the experiences of various stakeholders and enhancing the quality of the process. The Master of Arts in Teacher Education-International (MATE-I) Programme of the Open University of Sri Lanka adopted an innovative pedagogical design, namely Scenario-based Learning (SBL) to promote best practices in the professional development of teacher educators. SBL is a unique learning design, grounded in the principles of constructivist pedagogy. It is based on fundamental principles of meaningful learning which include established best practices in teaching and learning such as learning by doing, problem-solving, situated learning, scaffolding of learning and authentic assessment tasks. It also supports collaborative learning and critical reflection while students are supported with various resources including Information and Communication Technologies. While use of an innovative pedagogical design in the MATE (I) programme is expected to lead to best practices, there are several concerns about how it might work in particular educational settings. These include barriers posed by limited English language competency of students and their insufficient background knowledge which may obstruct active participation of learners. Facilitating interactive sessions is also a demanding and challenging task for the teacher. The expected changes in the roles of teachers and students may be difficult with both parties, who are more comfortable with conventional teacher-centered methods. Although the learners might find the programme more practical, their grounding in the theoretical foundations of the subject matter may be inadequate, if careful attention is not paid to this. The workload of SBL with continuous learning and assessment activities and online methods poses challenges to students. The outcomes of such an innovative programme may be quite rewarding, yet there is a possibility that it might not be received with enthusiasm by some at least in the early stages of its implementation. However, there is some hope that with the emerging trend in society towards more emphasis on general transferable skills rather than narrow academic specialization, the MATE (I) programme stands to make a significant contribution to the development of such skills in our learners.

Introduction

Best practices in any field of study would utilize methodologies or techniques that have been proven through experience and research, which would reliably lead to desired results or outcomes. These practices should also add an appreciable value to the experiences of various stakeholders involved, and enhance the quality of the process. Although descriptors for best practices can always be borrowed or adapted from other systems, contextualizing these ideas is essential (Prasad & Antony, 2004). However several constraints sometimes unforeseen may be encountered when a system adopts a particular practice.

Best practices in Higher Education, as identified by National Assessment and Accreditation Council in India are, 'quality-enhancing academic/administrative/ infrastructural strategies adopted by highly accredited institutions of higher learning in the present instance' (Francis & Madhukar, 2004, p.11). Innovative pedagogical designs in teaching-learning processes and associated assessment and evaluation schemes that are expected to lead to quality enhancement of these processes can be considered as best practices in teaching and learning.

Best Practices in Pedagogical Designs

Adoption of best practices in the pedagogical design of any teaching-learning situation would mainly concentrate on enhancing the quality of learning. The paradigm shift in pedagogical

assumptions from teacher-centred methods to learner-centred methods had resulted in various innovative approaches to teaching and learning, where the active engagement of the learners in the learning process is emphasized.

Such constructivist approaches to learning basically view learning as an active process of constructing rather than acquiring knowledge, and instruction as a process of supporting that construction rather than communicating knowledge (Duffy & Cunningham, 1996). Thus, the learners will take control of their learning by actively testing ideas and experiences, applying these to new situations and integrating the new knowledge gained with pre-existing views, finally resulting in a meaningful learning (Jonassen, Peck & Wilson, 1999). However, the high demands placed on the learners necessitate certain measures to be adopted such as situating learning and scaffolding learners when implementing constructivist learning approaches (Brown, Collins & Duigid, 1989; Cognition and Technology Group at Vanderbilt, 1993; Jonassen, 1996). Designing such learning should thus mainly focus on providing carefully planned learning experiences, paying close attention to the nature of the teaching and learning process, its relevance to the learning context and especially the intended learning outcomes, and the assessment strategies.

Various experience-based pedagogical designs such as Problem-Based Learning, Case Study-based learning and Goal-based or Scenario-Based Learning are used as best practices when designing constructivist learning environments. In a Problem-based learning approach the goal of the students is to solve an instructional problem, and using a case in teaching is a way of bringing the real world into a classroom so that students can "practice" on actual or realistic issues and incidences under the guidance of the teacher. Goal-based learning comprises of a scenario or context which includes a precipitating event and the goal of the students is to solve the problem or to complete the task considering their own experiences (Naidu, 2003).

Scenario-Based Learning (SBL) is an innovative learning design, with its theoretical foundations grounded in the principles of constructivist pedagogy. It is specifically based on fundamental principles of meaningful learning which include learning by doing, problem-solving within authentic and realistic settings, cases and/or problems, situated cognition, scaffolding of learning activities, coaching and authentic assessment tasks, which are established best practices in teaching and learning. SBL basically comprises of three main attributes: a scenario that will afford learning in the particular subject matter domain, learning activities that will allow learners and teachers to perform, and assessment tasks which allow learners to demonstrate competencies in the identified skills. The scenario serves as the essential scaffold for student learning in SBL, with the concept of "story-centred curriculum" lying behind it (see Schank, Fano, Jona, & Bell, 1994). A story-centred curriculum is goal-based, and also activity-based. Students work through various activities to develop critical skills they require in order to accomplish the desired goals (Naidu & Oliver, 1996; Naidu, Oliver, & Koronios, 1999). As these learning experiences are situated in authentic learning activities that are meaningful for the students, the focus of such a learning design is on improving the quality of the student learning. Hence it can be considered as a best practice in pedagogical design. SBL is especially suited for practice-based discipline areas such as teaching, accounting and commerce, legal and medical practice, as learning and teaching in these areas have to be closely aligned to practice. (see Naidu, Menon, Gunawardena, Lekamge & Karunanayaka, 2005b, for a more detailed discussion of SBL).

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Quality professional development of teacher educators is critical to ensure quality teacher performance, and it should be an on-going process of gaining new knowledge, refining skills, adopting new methods and technologies and improving their decision making competence. Innovative approaches such as collaborative, reflective practices and use of Open and Distance Learning (ODL) and Information and Communication Technologies (ICT) are essential in professional development programmes for educators (Menon, 2004). Adoption of collaborative learning designs is identified as an indicator of quality teacher education (Naidu, 2004). Further, ICT is a powerful tool in professional development as it allows educators to be creative thinkers, problem-solvers, risk-takers and innovators, as well as supporting learner collaboration (Koufman-Fredrick et al, 1999). Especially in distance education systems where opportunities for students to meet frequently are limited by time, distance or resources, ICT can play a major role. Thus, use of ICT can also be considered a best practice that support innovative pedagogical designs, as it effectively enhances collaboration among individual learners, especially engaged in distance learning.

Considering the need to enhance best practices in the professional development of teacher educators, The Open University of Sri Lanka (OUSL), introduced a unique, practitioner-oriented programme, MATE-International (MATE-I), which adopted Scenario-Based Learning as its pedagogical design. In this innovative approach, learning and teaching activities are orchestrated around authentic learning scenarios drawn from the field, seeking to make learning more meaningful for the practising teacher educators. Because of the suitability of the SBL approach for a practice-based discipline such as teacher education, it is expected that the graduates of the programme would naturally adopt it in their own teaching activities.

MATE (International) Programme

The MATE (I) Programme of the OUSL is offered to practising teacher educators in the field, entirely in the distance mode. The goal of this Programme is to develop among teacher educators, competencies and practices in the areas of teaching and learning, use of educational technologies, design, development, and evaluation of curricula, management and leadership, research and evaluation and teaching as a profession. MATE (I) programme consists of six compulsory courses and a learning portfolio project, which allows learners to critically reflect on the achievement of their learning outcomes. The major forms of student support comprise of print materials and multimedia resources including a Study Guide and a Resource Pack, while face to face contact sessions with the local tutors provide opportunities for closer interaction. In addition, local study center support consists of library, computer and Internet facilities, Electronic media such as web site and CD ROMs, on-line provision for tutor support and assignment submission, and an online discussion forum to facilitate student interactions are also provided. There is no final examination, while continuous assessment leads to the final assessment in a course (See MATE -International Programme Handbook, 2004).

The Scenario-based learning approach adopted in MATE (I) programme, seeks to focus student attention on critical reflection and problem-solving activities. It aims to promote a more learner-centred focus, which represents a major shift away from traditional content-based approaches to learning and teaching. This approach to learning and teaching is grounded in the belief that learning is most successful when it takes place within the context of realistic settings in which

learners are clear about the goals for learning (see also Karunanayaka, Lekamge, Gunawardena, Naidu, & Menon, 2005; Karunanayaka, Lekamge, Gunawardena, Naidu, & Menon, 2007; Naidu, Menon, Gunawardena, Lekamge & Karunanayaka, 2005a; Naidu, Menon, Gunawardena, Lekamge & Karunanayaka, 2005b).

After two years of careful design and development, the MATE-I Program was implemented by the Faculty of Education, OUSL, in February 2005, with a small group of 15 Sri Lankan teacher educators, as a pilot program. This was closely monitored and evaluated continuously, throughout implementation. The evaluation focused on finding out the challenges faced by students and academic staff in adopting the new approach, Scenario-based Learning.

Questioning Best Practices in SBL

While innovative instructional designs, teaching-learning processes and assessment and evaluation schemes are often hailed as leading to best practices, concerns have been expressed about how they operate in actual fact. One question raised in the SBL approach is, with regard to the frequency of developing Scenarios. For a particular course/subject, how frequently can the programme developers conjecture and write up new Scenarios? Once developed, for what period of time can the same Scenario be used? Can they be used repeatedly without modification? If new Scenarios are felt to be necessary, will new problems/issues have to be identified? Will such new problems/issues surface continuously or repeatedly to be used as stimulating nuclei for instructional programmes? Finding appropriate answers to such questions is not easy, yet it is important.

Innovative instructional designs such as SBL are accompanied by interactive teaching-learning processes to promote active participation of learners in teaching-learning rather than restricting them to passive listening. Yet it is necessary to recognize the barriers that may obstruct the effectiveness of interactive learning even at postgraduate levels. Among these, one is the medium of instruction. When the medium of instruction used is not the mother tongue, the learners who do not have competency and confidence in using a foreign language may feel diffident about participating in discussions. This is especially true of mature-age students who would feel uncomfortable about making mistakes before their more confident peers. On the other hand, when students lack sufficient background knowledge and understanding of the themes/issues being discussed, even if they have been provided the needed learning materials, the participation can be less.

Students as well as teachers, who are used to and more comfortable with the conventional teacher-centred methods may also find that it difficult to imbibe the expected changes in the roles of teachers and students in a constructivist learning environment. The attitudes of some students that it is the responsibility of the teachers to teach and the task of the learners to learn may also affect the effectiveness of interactive sessions. This factor may give rise to genuine concerns, in societies such as Sri Lanka, where knowledge acquisition is equated with intellectual development, as the coverage of content in interactive sessions is likely to be less than in a teacher-directed lesson.

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Student-centered and practitioner-oriented learning is widely believed to contribute to the development of a wider range of competencies and to personality development without being restricted to knowledge acquisition. However, if what is assessed upon the completion of an innovative programme is only content knowledge, these learners are likely to feel disadvantaged and lose faith in the design and the processes adopted in such a programme.

Student-centered teaching-learning could also underemphasize the significance of knowledge as a base for the development of attitudes and skills. For example, it is possible that learners might find the programme more stimulating and enjoyable and feel more confident in having developed desirable competencies such as communication skills, but at the masters level, especially, their interest and grounding in theoretical bases may be inadequate.

Facilitating interactive sessions conducted in this SBL environment is a much more demanding and challenging task for the teacher than conducting a traditional lecture. Teachers can prepare themselves well and engage in teaching effectively, when equipped with well-designed teaching aids. Their task is to deliver, to clearly explain the subject matter of the lesson. In an interactive session, teachers have to, not only have a thorough understanding of the subject matter, they have to manage their students. They need to give space to those students who are confident and articulate, but not allow them to dominate in the discussion. They also have to draw out and encourage the learners who are 'silent', due to lesser familiarity with subject matter content, prior socialization, or personality characteristics. This requirement for every learner to actively participate in teaching learning, could thus affect learners who are not proficient in a particular medium, learners with disabilities, and minority and underprivileged groups and women. Feminist research has highlighted the gendering of classroom participation as an aspect of the hidden curriculum, that is often perceived and interpreted as backwardness on the part of women students (Spender, 1982).

Moreover, the balance between the interactive and independent activities in a distance system has extensive repercussions on the administration and economics of distance education. For example, Daniel & Marquis (1979) and Snowden & Daniel (1980) pointed out that the cost of interactive activities tends to increase in direct proportion to the number of students.

The background characteristics of learners in distance education institutions is particularly noteworthy for the MATE(I) programme. The majority of distance learners are mature students, with work and family responsibilities. SBL coupled with learning activities, a Learning Portfolio and continuous assessment, would pose a major challenge to these students unlike when they have to prepare and sit for one final examination. Time constraints, which become more severe as these activities have to be spread throughout the academic year would make it more difficult for these learners to complete an innovative programme such as the MATE (I) successfully.

Moreover, the effect of using these approaches on students' proneness to copy from each other, producing reports/assignments on manipulated data without actually going through the expected learning activities have not been sufficiently researched. When assessment and evaluation does not take place under examination conditions, these misgivings are likely to become real and not imagined shortcomings.

Use of technology, especially online methods to facilitate student learning will also pose certain challenges to students, especially for those who are not competent enough to use such facilities. For example, while e-learning in distance education and the use of ICT are globally increasing, Nigeria reports how this is impeded by a ratio of 1 telephone to 600 people (Odejide, Akanji & Odekunle 2004). Digital divide is being pointed out as deepening the chasms that prevail with regard to education, especially in South Asian countries (Aryasinha, 2005). Further, despite the fact, that the students realize the importance of online collaboration through the discussion forum, and are very much motivated in such activities, in reality there are many obstacles for them to engage online in these activities, such as limited facilities and high Internet costs.

Reflections on the initiative

Students have found this novel programme to be very interesting and challenging, despite various issues faced by them, mainly changing from the conventional teacher-dependent passive roles they are comfortable with. The students claimed to gain more confidence as they move along and to have a sense of achievement once the learning and assessments activities are completed. They were observed to be increasingly engaging in collaborative and reflective learning and gaining more confidence in self-regulated learning. Their main issues were found to be managing time to cope up with the associated workload and inability to use technology, and accessing the Internet. Acceptance of this new approach to learning by the academic staff was also observed, especially changing their role to become facilitators and empowering the learners to take control of their own learning and to stimulate them to become independent learners. (Karunanayaka et. al., 2005).

The issue of writing new scenarios or the possibility of using the same scenarios without modification did not emerge as a formidable issue in the pilot cycle. The scenarios in the subjects in the MATE-I program represent typical problem situations that practitioners are likely to face in real life. As such they can be used over and over again. These scenarios provide the **context** for the learning that needs to take place. What is more important from a learning and teaching perspective is the learning and assessment activities that students are required to undertake as part of the scenarios. Students have to actually carry out these activities in relation to their own teaching and professional developments interests and activities. As such, it is difficult for students to simply copy from the work of other students. As these specific contexts varied, the scenarios could not become outdated.

In learning designs such as what we discussed here, teachers do not take on a less important or tangential role in the learning and teaching process. In fact in situated learning designs, teachers take on a very central role in providing direction and support to students' learning activities. So much so that teachers have often complained about increased workloads.

Concluding Notes

It is indisputable that innovative instructional designs, teaching-learning processes and assessments procedures are not without its constraints, especially in resource poor educational settings. They need to be introduced by programme designers who are courageous enough to try out novel ideas. If implemented with equal zeal, it is very likely that the outcomes of such programmes may be quite rewarding and sustainable. Yet, at least in the introductory stages

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In conclusion, we express hope in that the emerging trends in the employment market and in wider society, appears to a shift towards a greater emphasis on general transferable skills such as communication, inter-personal relations, team work, decision-making and leadership and personality traits such as confidence, assertiveness, tolerance and integrity rather than narrow academic specialization all of which we believe the MATE (I) programme would certainly develop in our learners.

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