

Early Experiences with a Community Driven Open Education Management System

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ABSTRACT

The mainstream Open and Distance learning programmes in Indira Gandhi National Open University are developed and delivered by a community of Programme/Course Coordinators, Academic Counsellors, Regional Centres, Study Centres and the other assisting staff. These programmes are offered across the length and breadth of Indian subcontinent and beyond necessitating an effective delivery mechanism for the successful running of these programmes. Needless to say that information and communication technology can play a significant role. However, despite reasonably good ICT facilities in IGNOU, there is a felt need for a concerted effort involving coordination amongst them. In order to address the same, an inclusive Open Distance Technology Enhanced Learning (ODTEL) framework has been developed at IGNOU with a community driven Open Education Management System. The academic management of this framework is anchored by the Vedyadhara Open e-Learning Environment (VOLE) - a community empowering e-learning environment. VOLE envisages integrating multiple modes of reaching out through ICT and is programme /course centric with assured quality independent of geography.

The present work describes the initiatives taken towards the use of the ODTEL framework and its open learning environment (VOLE) for one of the Post Graduate Diploma programmes with an objective to empower the learner with academic and administrative support in her/his endeavour to acquire the desired attributes of an enabled and transformed individual. The feedback from the first cohort of learners, academic counsellors and programme-in-charges at study centres has revealed results that give an insight into the utility of such a framework and motivate the development team to work more in this direction.

KEYWORDS: Open Education Management, Technology Enhanced Learning, Information and Communication Technology, Student Support

INTRODUCTION

Indira Gandhi National Open University has the world's largest enrolment of learners (more than 3 million) and has more than 400 programmes on offer (IGNOU website). The vast group of learners come across a number of issues related to student support (Fozdar and Kumar 2007; Tait 2003; Baruah, 2011), that can be best tackled by adopting technology. The information and communication technology (ICT) provides flexibility and multiple benefits (UNESCO report, 2009) and has been used both for the course design and learner support (Thorpe 2002, Jamtsho et al 2007). It can motivate learning, empower the learner and promote greater efficiencies in education systems and practices (Mikre, 2011). IGNOU makes use of the ICTs however; these cater to only a very small fraction of IGNOU's learners (Gaba and Sethy, 2010).

A framework was proposed in June 2009 under the ICT support system called 'Open Distributed Technology Enhanced Learning (ODTEL), more popularly as the 'Technology Enhanced Open Learning (TEOL)' system of IGNOU (Srivathsan, 2009). ODTEL is designed to address the challenge of IGNOU to provide e-learning support in a framework that is aligned with its system of schools, program coordinators, regional services, study centres, counsellors and students who are spread out over vast geography. The system makes use of the wiki platform that functions in a self directed manner and empowers the whole community with a do it yourself (DIY) attitude. A major attraction of ODTEL is that in its basic forms it uses license free 'Free and Open Source Software' (FOSS) in all its components. ODTEL (Srivathsan, 2010) has

the capability of engaging and empowering the students in learning activities through multiple systems of IT in education. The overall aims of ODTEL are to:

1. bring disciplined and scalable ICT facilitation to the growing numbers and
2. enhance quality assurance and the accreditation worthiness of IGNOU's programs.

The quality education is achieved by an Open Course Guide System managed by a Course Management Group and has interconnections amongst the developers of open course guide and the various study centres. This course management comes under the ambit of **Vedyadhara Open e-Learning Environment, VOLE**, that is designed to integrate the IGNOU's present ODL with the technology enhanced learning (TEL) practices and benefits from the growing volume of web-accessed rich content and resources. *VOLE* has been developed by a team of the Advanced Centre for Informatics and Innovative Learning (**ACIIL**) in IGNOU in which the thrust is on managed IT services of relevance in the context of IGNOU's ODL and online education programs. The task was accomplished under the guidance of Prof. K. R. Srivathsan, the then Pro Vice-chancellor of IGNOU.

The quality instruction and learning is managed and moderated through the central ODTEL wiki system. Each academic program is provided with an **Open Program Guide (OPG)** which is an open wiki page with several functional components. The other key area is the IGNOU **Open Course Guide, (OCG)**. This is provided for each course in every program. *OCG* is a major innovation to support disciplined community driven open e-learning. It is more detailed than *OPG*. Although all the features of this framework have not been exploited in this early initiative yet, it has been successful in providing a reasonably good learner support to all the enrolled and the prospective learners of the mentioned programme.

PRESENT WORK

In order to illustrate the effectiveness of the Community Driven Open Education Management System, the Post Graduate Diploma in Analytical Chemistry (PGDAC) programme was chosen to make use of *VOLE* to facilitate the first batch of enrolled learners (2009-2012) and get the feedback of vital stake holders of the programme. The paper provides a preliminary feedback on the views and potential issues faced by students, the counsellors and some of the study centres' programme-in-charges (PIC). It is re-emphasized here that Vedyadhara Open Learning Environment (*VOLE*) may be viewed as a community augmented and managed framework of ODTEL.

About the P. G. Diploma in Analytical Chemistry Programme

P.G. Diploma in Analytical Chemistry is a continuing education programme developed after conducting a need analysis and an explorative workshop. The programme mainly addresses the clientele from the industrial sector directly or the societal segments that play the roles of supplier or consumer to the industrial inputs and outputs, respectively. All the courses pertaining to the programme are developed by combined efforts of the experts and the concerned faculty at Head Quarters and managed for administrative support by the Regional Centres.

The Regional Centre offices have significant role in a number of activities which start before the learner has taken admission till s/he completes the programme. The Study Centres further manage the courses in terms of theory counselling, evaluation of assignments and term-end answer scripts, conduct of lab sessions, etc. A whole network of institutional services is dedicated to support the student. It is expected that the faculty and staff at Headquarter, Regional Centre, Study Centre, and Programme /Course coordinator would work as a team for running the programmes and remain informed about one another's activities.

Sample

The first batch of students took admission in July 2009 and a total of 129 students enrolled for the programme. As per the norms of the University they could avail the flexibility of 3 years for the completion of the programme i.e. till June 2012. It is this cohort that was chosen for the

present study. In addition to the learners, counsellors (15 in number) and programme-in-charges (5 in numbers) from select study centres were included for the preliminary feedback.

Methodology

The print screen view of the programme and one course page is given in Fig.1 to illustrate the learning environment made available for the learners and everybody interested. These pages have an easy navigation and give all the information regarding the PGDAC programme and the associated courses. The programme page has a list of objectives and information related to admission, course structure, syllabi, counselling, datesheet, assignments, etc. Similarly the course pages which are reached through the links on the programme page give the details of the course syllabi, relevant assignments, IGNOU approved material, web linkages, supplementary material, etc. These pages are enough to answer the FAQs for this programme.

The figure displays two screenshots of the IGNOU Vidyadhara Wiki interface. The top screenshot is the main page for the PGDAC: Post Graduate Diploma in Analytical Chemistry. It includes a navigation menu on the left with options like 'Main Page', 'Recent changes', and 'Random page'. The main content area features a table with the following details:

Programme Name	: PGDAC Post Graduate Diploma in Analytical Chemistry
Associated School	: School of Sciences, SOS
Programme Coordinator	: Dr. Lalita S. Kumar and Prof. J.A. Farooqi
Fee & Duration	: Rs. 7000/- Min. 1 year Max. 3 years

Below the table is an 'About The Programme' section and an 'Events & Announcements' box listing programme announcements, including a note about re-admission fees and datesheets for June 2012.

The bottom screenshot shows the course page for 'MCH-003: Spectroscopic Methods'. It includes a 'Course Information' table with the following details:

Course Name	: MCH-003: Spectroscopic Methods	
Programme	: PGDAC: Post Graduate Diploma in Analytical Chemistry	CMR: ★★★★★
Semester	:	
School	: SOS	
Course Co-ordinator	: Dr. Lalita S. Kumar, Associate Professor, SOS	

Below the table is a 'Contents' list and a 'Course Events & Announcements' box listing course announcements, including assignments and exam papers.

Figure 1: Print screen view of the programme and one course page of PGDAC

The most important and initial task of uploading the course content and other information could be accomplished towards the end of Year 2010 as the framework was still in its stages of

development and implementation. The whole batch of students was contacted through e-mail and the mobile phones. Simultaneously all the Regional Centres and a few Study Centres were also conveyed the details with a request to make full use of the information available for students already enrolled and also the prospective learners.

The feedback was obtained over a period of almost three months after sending the questionnaire by email. The responses to the items were obtained on a five point Likert type scale varying from 'strongly agree' to 'strongly disagree'. The counsellors and PICs of a few select places were personally interviewed for the feedback. They were asked specific questions.

Objectives of the Study

Whilst providing an overview of the experiences, the present study was intended to explore the following.

- Assessment of the effectiveness of the community driven open e-learning framework in terms of the coordination amongst all the stakeholders
- Assessment of the effectiveness of the *VOLE* with respect to the student support

Hypothesis of the Study

The premise of using *VOLE* framework was that it would be an important tool in filling the existing gaps in coordination and communication among all the communities involved in the delivery of the programme. It will not only facilitate the learner but also be an empowering tool for all the Regional and Study Centre staff that at times may themselves be lacking in programme specific information. It was hypothesized that the additional links and an inbuilt interactivity in the study material will create an interest and motivation in the learner and thus would play a role in enhancing the learning process.

RESULTS AND DISCUSSION

Amongst the first cohort of 129, a total of 42 learners (roughly equal number of male and female learners) responded to the questionnaire sent through the e-mails. The learners' use of ICT indicates a promising picture of computer and web use with maximum percent using it for emailing (66.7%).

Learners' Feedback

A good percent (64.3%) of the respondents strongly agree that the programme related information like, eligibility, fee structure, objectives, and programme structure etc. was readily available on the programme page. A little less than 50% strongly agree or agree that this platform can be useful for pre-admission counselling empowering them towards decision making. When analysed for the utility of the *VOLE* towards teaching-learning process, there have been mixed responses and reflect on some strengths and weaknesses at this point of time. They strongly agree (more than 60%) on the availability of the easily downloadable IGNOU course material, course related updated tutor marked assignments and term-end-exam papers. However, they (above 25%) are undecided or disagree on the interactivity of the provided supplementary material.

The innovative, e-enriched content, available *albeit* only for a small part of the approved course content has been quite useful as more than 60% of respondents strongly agree on its utility in enhancing the teaching-learning process. One of the important parts of this frame work i.e. the LMS had a low percentage on agreement towards the available interactivity which may be attributed to its being in its infancy at the time of feedback. Ultimately, an average number (about 50%) agree that the interactivity posed by the platform would be significant in reducing the distance between not only teacher and learner but also the other stakeholders.

Counsellors' and PICs' Feedback

The counsellors and the PICs strongly agreed on the ease of navigation to the programme and the course pages and expressed that the information on the programme page would surely help in pre-admission counselling provided the learners visit these pages before taking a decision. In fact, a few of them have suggested incorporating the link in the common prospectus. Nevertheless, the IGNOU website has the link in place and therefore navigation is not a very big issue. The IGNOU approved course material, assignments and term-end-exam papers have been uploaded as the *pdf* files which did not find any difficulty in downloading and the related information was also seen uploaded on time. All of them found the enriched material and the PowerPoint presentations related to the course material highly useful in understanding the concepts. Especially, the handy animations and the graphics in between the units were appreciated a lot and suggestions have been made to expand this concept throughout the course material. Most of the respondents felt that if all the features in the learning environment are exploited to a good extent then this would serve to integrate the activities of all those associated with the course management and learner support. Indeed this gives a lot of moral boost to the people involved in taking up the task of using this framework.

CONCLUSION

The ODETEL framework has come out as an ICT augmented support required by the learner right from the time s/he scrolls through the website and plans to enroll in a programme of choice. Such an open education management would prove highly useful when dealing with very large numbers and issues like pre-admission information, study material availability and intimation of counselling schedules during the study period would be easily managed even in the absence of the institutional staff. This makes the system truly empowering and promises to be a tool that would bring about transformation in the methodology of transacting and managing the academic programmes. This is substantiated by the responses of the learners of the PGDAC programme who happen to be quite aware of the technology and know its use in enhancing the teaching-learning process. The integration of communication amongst the whole community of people involved in the management of a distance learning programme seems to have achieved some success as is indicated by the feedback from the counsellors and the PICs. However, being in its infancy during the feedback, the interactivity within the study material has not been up to the mark and needs to be expanded for much of the material for various courses.

LIMITATIONS AND THE FUTURE COURSE

Since this is an early initiative towards the use of Community Driven Open Education Management System for a P G Diploma programme, there have been a number of limitations which the authors plan to address in the next stage. There is a provision of managing the whole course by planning the counselling sessions as per the calendar available on the course pages. This could help the counsellors in organising the counselling sessions in terms of the difficulty level of various topics in the self learning material. Also there is a provision of course wiki and course discussions on the course pages which could not be utilized this time. The course LMS has a great potential for learner interactivity and this is one aspect which needs a lot of exploration and work. The authors involved in the development of the programme using *VOLE* could not enrich a good amount of material which otherwise would have been very useful in facilitating understanding of the concepts. The reason for most of the limitations could be rationalised taking into consideration the fact that the students and those involved in student support also could not use the learning environment in its totality. Since this has been an early experience, learning from which the authors would put forth more efforts in adding much more interactivity. The whole activity needs more planning and more work at the policy level too so as to make the learning environment, a game changing effort for the benefit of the learners.

REFERENCES

1. Baruah T.D, 2011, Improving Student Retention through Technology in India, *The Asian Society of Open and Distance Education*, 9(2) pp15-25
2. Fozdar B. I., Kumar L. S.and Kannan S., 2006, A Survey of a Study on the Reasons Responsible for Student Dropout from the Bachelor of Science Programme at Indira Gandhi National Open University, *International Review of Research in Open and Distance Learning*, 7(3)
3. Gaba Ashok K. and Sethy, S.S., Learners' Perception towards Information and Communication Technologies: A Case Study of Indira Gandhi National Open University, *Indian Journal of Open Learning*, 2010, 19(3), 143-157
4. ICTs for Higher Education Background paper from the Commonwealth of Learning , UNESCO World Conference on Higher Education, Paris, 5 to 8 July 2009
5. Jamtsho S. and Bullenb M., 2007, Distance Education in Bhutan: Improving access and quality through ICT use, *Distance Education*, 28 (2), pp. 149–161
6. Mikre, F., 2011: The Roles of Information Communication Technologies in Education, *Ethiop. J. Educ. and Sc.* Vol. 6 No 2
7. Srivathsan K.R., Pro Vice Chancellor, IGNOU, Documented Oct. 19, 2010,<http://vedyadhara.ignou.ac.in/wiki/images/7/7f/Invitation-ODTEL-102k9.pdf>, Retrieved in July 2012
8. Tait A., 2003, Reflections on Student Support in Open and Distance Learning, *International Review of Research in Open and Distance Learning*, 4(1)
9. Thorpe M., 2002, Rethinking Learner Support: the challenge of collaborative online learning, *Open Learning*, 17(2) pp