

Best Practice - I

1. Title: Internalization and dissemination of ICT based delivery, assessment and resources sharing.

2. Objective of the Practice:

Institutionalization, Internalization and Dissemination of Moodle and MOOCs as a Teaching, learning and evaluation tool among faculty members was the main objective behind this practice. The university decided to train the teachers during orientation and refresher programs organized by HRDC. The target was to use HRDC platform for providing hands on experiential learning opportunity to participating teachers such that perceived ease of use and perceived usefulness of tools are enhanced as per Technology Acceptance Model. The secondary objectives were to bring-in ICT component and novelty to otherwise traditional refresher and orientation courses. In short, the practice wanted to make teachers and ultimately the students across region and country to make use of Moodle and MOOCs.

3. The Context

Resistance is the first challenge faced by any technological advancement and academics is not an exception to it. Using the developments of ICT tools in the interest of teaching-learning-evaluation process has always been a challenge for the University. The amount of diversity of teachers in terms of discipline of study, geographical location, awareness of technology, etc. can be attributed to it. The major challenge in ensuring the use of Moodle and MOOCs by teachers in their day to day execution was to instill the faith in the tools and belief in their own abilities that they can handle the technology and operational part of it. Another important challenge faced was the availability of technological infrastructure which differ from institute to institute depending on the kind of programs it offers and the location of the institution. In the context of these challenges, the University has successfully developed a practice of creating awareness of Moodle and MOOCs among teachers using various training programs organized by its Human Resource Development Cell.

4. The Practice

In view of the inherent reluctance of teachers in accepting and effectively using the ICT tools in teaching-learning-evaluation processes, a separate program targeted at Moodle and MOOCs would have easily made them disinterested in it. So, it was decided to make Moodle as a platform for conducting the refresher and orientation programs. This was expected to give them actual hands on practice on the capacities of the tool, its application in their institutions and confidence to use it with their students. It was also thought that Moodle will be used as the beginning step and once they are comfortable, picking the fast learners amongst them to propagate MOOCs in the capacity of Swayam Mentors. Thus, the HRDC platform was efficiently used to identify the resource persons responsible for taking the tools to the last mile learner. The biggest challenge was to convince the users that the Moodle system is feasible and adaptable. The HRDC programs are planned such that each participant gets information, makes own Moodle site, gets resources, understands course assessment and

experiences peer learning on the new platform. Instead of learning Moodle, the participants learn their domain topics on new platform and in new environment. Since the entry to platform is compulsory, the trainers and facilitators at HRDC make it sure that the user is made comfortable in using the tool and looks forward to making Moodle the part of their teaching and evaluation plan at their respective institutions.

Strategies adopted by the University:

- The core team of Moodle trainers (HRDC Full Time faculty members) are given proper training.
- The programs are announced to be conducted using Moodle
- The course coordinators communicate and motivate participation from Rural participants to ensure outreach expansion.
- To ensure effective training, the participants are asked to bring in laptops wherever possible.
- The dashboard is monitored, and the mentors are motivated to create awareness and use the platforms in their teaching, learning and evaluation.
- The participants are provided constant guidance/support even after completion of their program.

Besides making faculty members aware about the use of MOODLE and MOOCs through Orientation and Refresher Programs at UGC-HRDC, the University also adopted a strategy of conducting ‘MOOCs Awareness Programs’ at various PGTDs and affiliated colleges of the University. This was primarily to expand the outreach of the drive as many senior teachers have already had completed their Orientation/Refresher programs and many junior teachers are either not eligible yet for the same or do not get selected for the same on account of limited seats. Many unaided institutes offering professional programs do not nominate their teachers for orientation/refresher programs. Hence, the strategy for conducting workshops at their location was adopted which yielded the desired results.

In the recent years, the University has started taking this practice to the next level by making MOOCs a compulsory component of the program and allowing credit transfer. This has started in 2019-20 by implementing it in MBA program and is underway in the revised curriculum for BE program.

5. Evidence of Success

The practice of internalization and dissemination of ICT based delivery, assessment and resource sharing has yielded the desired results in recent past. The teachers of various affiliated colleges have been made aware of these tools and were trained to implement them using internal resources only. The University did not have to involve any external resources for the same. It is evident from the feedback that many teachers have started using MOODLE and are now encouraging students to take MOOCs for value added learning. Some important numbers in this regard are produced here:

SN	Particulars	2018-19	Total 2014-19	Annexure
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				Numbers
1	Total number of Programmes conducted by HRDC	17	78	Annexure I
2	Total number of Courses in which MOODLE was taught	11	21	Annexure II
3	Number of Institutions implementing MOODLE	15	15	Annexure III
4	Number of Teachers implementing MOODLE based Teaching, Evaluation and resource sharing	56	749	
5	Feedback and reactions from students and teachers regarding MOODLE	63.3%	63.3%	
6	Number of SWAYAM Mentors	58	58	Annexure IV
7	Number of Awareness Programmes Conducted by Swayamcorrdinator and Mentors	25	25	Annexure V A and B
8	Number of students undertaking swayammooocs	300	App 3000	

6. Problems Encountered and Resources Required

Few of the most common still important problems faced while executing this practice can be mentioned as:

- ✓ Creation of Moodle and MOOC expert team for program planning and execution.
- ✓ Orientation of domain specific resource persons, their time and attention.
- ✓ Preparation of Moodle suitable academic resources and assessment questions.
- ✓ Lack of or low initiative from experienced but non tech savvy teachers
- ✓ Perceived scarcity of resources at participant's institution.

The Resources required for this practice are both intellectual and technology infrastructure level.

- ✚ HRDC need the full-time trainers well conversant with Moodle and MOOC platform
- ✚ The support team of teachers is also required who can use the platform and train others on the platform.
- ✚ The training hall must be equipped with internet ready computer systems.
- ✚ Trainees must have a smartphone for place independent usage of platform.

7. Brief note on MOODLE and MOOCs:-

Moodle is an acronym for "Modular Object-Oriented Dynamic Learning Environment." It is an online educational platform that provides customized learning environments for students. Educators can use Moodle to create lessons, manage courses, and interact with teachers and students. Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning

environments. One can download the software onto own web server use it directly on cloud for free.

A Massive Open Online Course (MOOC) is a web-based platform which provides unlimited number of students worldwide with a chance of distance education with the best institutes in the world. It was established back in 2008 and gained momentum in 2012 as a popular learning tool.

This practice is based on The **Technology Acceptance Model**, version 1. (Davis, Bagozzi&Warshaw 1989) (TAM). It is an information systems theory that models how users come to accept and use a technology.

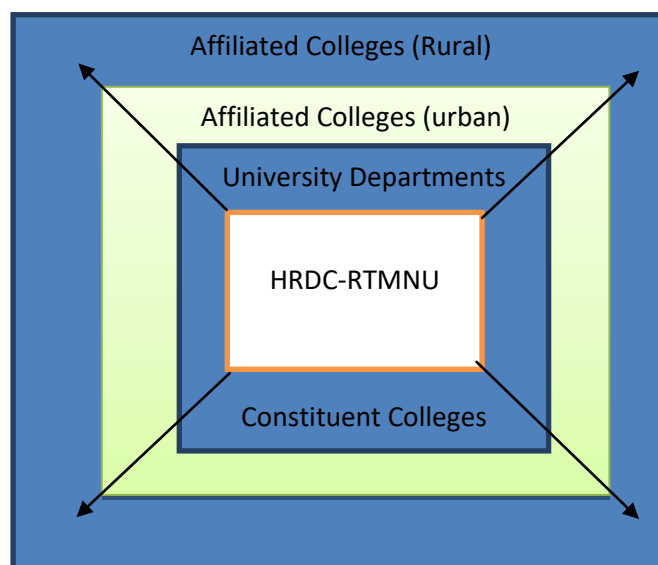
The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably:

- Perceived usefulness (PU) – This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". It means whether or not someone perceives that technology to be useful for what they want to do.
- Perceived ease-of-use (PEOU) – Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989). If the technology is easy to use, then the barriers conquered. If it's not easy to use and the interface is complicated, no one has a positive attitude towards it.

External variables such as social influence is an important factor to determine the attitude. When these things (TAM) are in place, people will have the attitude and intention to use the technology. However, the perception may change depending on age and gender because everyone is different.

7. Any other information which the university wants to share:

The ripple effect model for Internalization and Dissemination of Moodle and MOOCs is depicted below:



Best Practice - II

1. Title: Seeding the culture of Research

2. Objectives of the Practice:

Research is one of the most important activities to be carried out by any University. The RTM Nagpur University has recognized this mandate of higher education. The most critical problem faced by the faculty members/students of the University is funding of research owing to the technological and financial constraints of various funding agencies. The University has pioneered the concept of developing research culture amongst its faculty members and students by providing seed money from the funds of the University. The practice of providing seed money to teachers for research aims at –

- a. Engaging teachers and students to unearth research and consultancy opportunities by providing them financial assistance.
- b. Tapping the opportunities to connect local resources, methods, people and organizations to external world via university platform.
- c. Promoting and encouraging the extensive value based research practices useful for societal purposes.
- d. Nurturing the research culture in the University and overcoming the hurdle of funding for junior teachers.
- e. Enriching the research publication tradition of the University by providing financial assistance.

2. The Context:

Funding has always been experienced as a major constraint in research activities of any University. There are many teachers whose research proposals could not be accommodated by funding agencies on account of either non-availability of funds or the research proposals being in the context of local problems. Such researchers are deprived of opportunities and the research problems of local context remain unattended. In order to resolve this deadlock, the University floated this scheme of

funding the research by junior teachers and the preference is given to the research proposals having local territorial significance.

In order to ensure financial sustainability of the scheme, the University has decided to make a budgetary provision of minimum Rs. 1 Crore every year for this scheme. The prudential use of such a provision for the said purpose is ensured through the rigorous screening of research proposals. Moreover, the stringent norms for scrutiny of bills and invoices towards utilization of seed money ensures the effective use of this scheme. A cap of Rs 3.00 lakhs for proposals from science and technology and Rs. 2.50 lakhs for other proposals has been put on funding individual research projects.

3. The Practice:

The University has successfully institutionalized this practice with a well-defined mechanism and laying down standard norms and procedures for sanctioning and disbursing this 'Seed Money' to researchers.

- a. The University Development Section has been assigned the job of inviting application every year from the intending faculty members. This is done at the beginning of every academic session.
- b. The proposals such submitted, are primarily scrutinized by the administration to ensure that every applicant is eligible for the grant and has complied with submission of all requisite documents along with the research proposal.
- c. The shortlisted proposals are then placed before the 'Screening Committee' constituted by the Hon'ble Vice-Chancellor constituted for the said purpose. This committee has senior faculty members/researchers representing various faculty/subject of studies having a notable research experience. The function of this committee is both to screen and approve the research proposals submitted by the faculty members and also to monitor the progress made by the researcher and to ensure proper utilization of the funds. This committee scrutinizes the proposals on various technical/academic parameters and shortlist the eligible ones for final presentation.
- d. The Principal Investigators of the shortlisted research proposals are required to make a presentation before the 'Screening Committee' on the specified date and time. The proposal may be accepted without modification or with modification or may be even rejected. Similarly, the amount of the research

grant also is sanctioned by this committee. While sanctioning the proposal, due care is taken to give appropriate weightage to the proposals dealing with research problems pertaining to local issues which ranges from low Gross Enrollment Ratio in higher education of the region to commercial exploitation of local resources for ensuring self-employment/enhancement of income and in between issues like gender equality, good governance etc.

Each research proposal is for a duration of two years. During this period of two years the researcher is called upon to make presentation on the progress of his/her research. Care is taken to ensure that there is equitable distribution of the research funds amongst all the faculties of the University, without compromising with the relevancy and quality of the research.

4. Evidence of Success:

The practice of funding the research projects of faculty members of the university and colleges which was started in the year 2014-15 has yielded impressive results as indicated in a table here. So far 104 research projects have been sanctioned encompassing vivid problems of the society and covering all the faculties of the University. The total amount of funds sanctioned in the last five years is Rs 2.37 crores. Some of the projects are doctrinal in nature and some are of empirical in nature. The faculty members have experienced and shared their intellectual enrichment by conducting the research projects which in turn has helped in improvement of their classroom teaching.

1.	Number of Departments & Colleges benefitted	49
2.	Number of Teachers benefitted	136
3.	Number of Projects Sanctioned	104
4.	Total Amount of Research Grant Sanctioned	Rs. 2.37 Crores
5.	Augmentation in Equipments	Rs. 78 Lakhs
6.	Augmentation in Library Resources	Rs. 10.52 Lakhs
7.	Number of Research Publications	190
8.	Number of Consultancy Assignments captured	40

Although it is just a beginning, the University has been able to connect to the local organizations and using local resources because of this practice. The University is in the process of extending this scheme to the teachers of its affiliated colleges to ensure synergy effect of collaboration.

5. Problems encountered, and Resources Required

Financial Resources: This is the most important and crucial resource required for effective implementation of this scheme. Since the University is not receiving any separate grant for this scheme, the University has prudently decided to allocate a provision of Rs. 1 Crore for this purpose from its 'General Fund'. This has definitely put a burden on the 'General Fund', but, the University has decided and been reasonably able to execute certain cost-cutting measures to minimize this effect. Further, the University has a plan use the augmented resources for collaborative research/consultancy which will generate an additional revenue and help in sharing the burden of 'General Fund'.

Intellectual Resources: Depleting strength of the senior faculty members due to retirement and stoppage of recruitment for a long time has created the problem of providing mentors to the junior teachers. In order to maintain and improve the quality of research, the University has a mechanism to constantly monitor the progress of each project and help the Principal Investigator by making an arrangement of industry experts/retired professors, if required.

Administrative Problems: The University has ensured a separate desk with dedicated officers in its 'Development Section' to ensure that the administrative delay does not hamper the research progress and result in quality compromise.

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