

The role of industry in implementing Work-based Learning Pedagogy

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Work-based Learning (WBL) models being implemented across the globe highlight the importance of the role of industry in making the work-environment conducive to learning. This paper discusses various parameters that contribute to build a favorable ecosystem for successful implementation of WBL pedagogy. The findings are based on practices followed by critical observation of an integrated Work-based Learning model based on M.K.Gandhi's Nai Talim principle of 'Learning through Working' (M.K.Gandhi 1968) implemented in the state of Maharashtra, India. (MKCL 2001)

In this system, the open universities in collaboration with industries offer work-based degree courses to suit the nature and needs of the businesses (Sawant 2017) and admit the youth especially from the economically weaker sections of the society at affordable fees. The businesses/industries offer paid internships to the students for performing at the workplace.

The interns build the theory based on the work performed. The seniors in the industry assist the interns in synthesizing knowledge through daily reflection sessions by accessing eLearning study materials. The interns record their reflections through blogs and undertake evidence-based comprehensive assessment sessions on the eLearning platform on the work content and related course modules.

The interns thus obtain two types of credits viz. work credits given by the industry appraisers and knowledge credits earned on the eLearning platform leading to the award of a degree at the end of three years.

It is in this context and in view of the crucial role of the industries offering real life work-environments, the key aspects of the WBL ecosystem desirable at the workplace are discussed and analyzed.

Keywords: Work-based Learning, Role of industry, Pedagogy, WBL Ecosystem

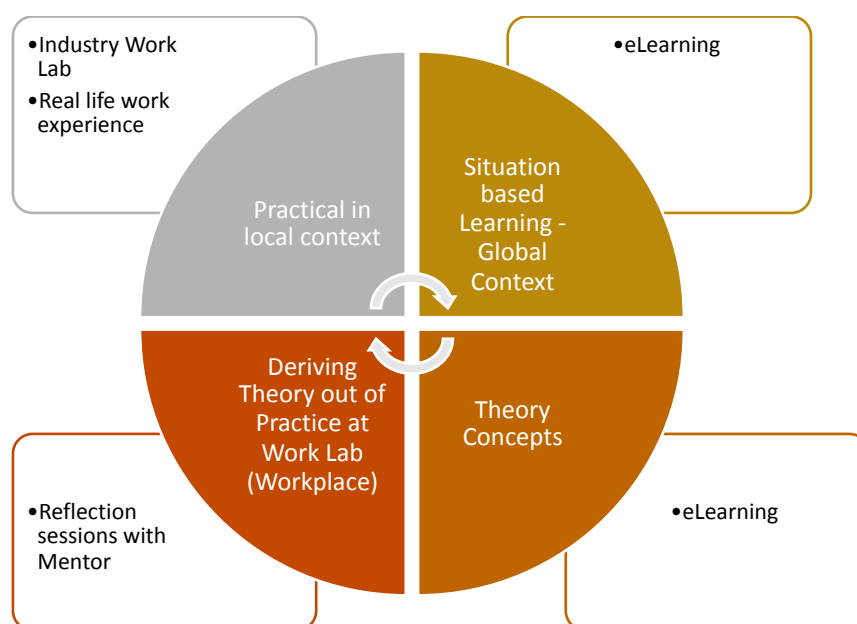
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Introduction

Work-based Learning (WBL) model under study attempts convergence of working and learning. (Vinoba, 955) Industry is involved in the academic proceedings of undergraduate WBL students, without compromising on the business objectives, goals and processes within the industry settings.

From the student's perspective the WBL model under study is as follows: *Figure 1*

Figure 1: WBL model

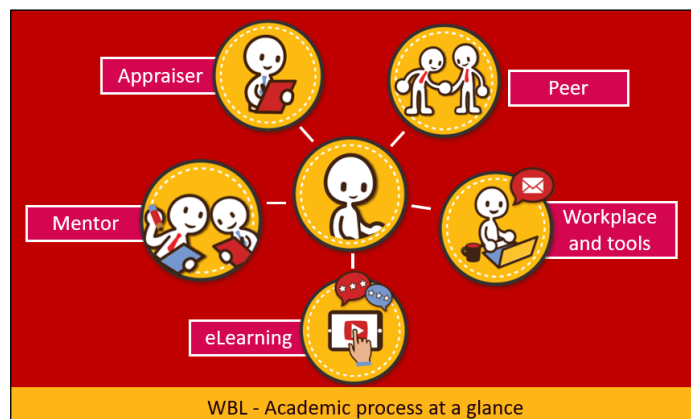


(Revati N 2017)

WBL students gain hands-on practical skills in a local context through exposure to real life work experience provided by industry. Their connection with global context and best practices is established through situation-based eLearning modules before and after office hours. eLearning content covers theoretical concepts and eAssessments linked to the curriculum stipulated by the University. Finally, the derivation of theory out of practice at the work-lab i.e. industry workplace is enabled through reflection sessions conducted by mentors (senior professionals/ industry experts) from the industry.

Various components contribute to the WBL pedagogy. (Figure 2)

Figure 2: WBL Academic process at a glance



The WBL ecosystem including real-life workplace, peers, appraisers, mentors and eLearning environment contributes to offer 'Learning through Working' experience for WBL student.

It is in this context, the role of industry in creating WBL ecosystem within the workplace and its key parameters is discussed.

Methodology

Research literature provides examples of WBL pedagogies. Joseph Raelin in his book – Work-based Learning (Raelin, 2008) conceptualizes a model of WBL that combines explicit and tacit forms of knowledge with theory and practice modes of learning. The significance of the students' own reflections is emphasized in the model, and it is considered important to articulate the tacit knowledge that many workplace practices are based on. Michael Eraut (Eraut, 2004) provides an analytical framework that focuses on factors that affect learning in the workplace. He identified both - learning factors (confidence, support and challenge) and context factors (allocation of work, relationships at work and expectations of performance).

From conceptualization of both these models and the WBL model under study, it can be derived that the role of industry offering real-life workplace for implementing WBL is crucial and it comprises of role of actors involved, the processes and policies adapted by industry.

Further, in order to ensure confident, committed and performing WBL students (SFIA: Levels of responsibility 2003-2020) with a sound exposure to formal theoretical knowledge, it is necessary to implement enriching academic processes within the workplace.

Focus of this paper, therefore, is to document the role of industry in terms of key parameters essential for setting the WBL environment within the workplace.

Process that led to documentation of key parameters of WBL ecosystem within the workplace and further analysis was as follows:

1. **Mock interviews:** Mock interviews of Third Year students were conducted.
 - a. *Rating analysis:* Analysis of ratings was done and it was found that the performance of the students varied significantly.
 - b. *Work Lab-wise analysis of ratings:* This led to further study of data and it was observed that the students who performed well in the mock interviews and those who did not, belonged to different work-labs.

2. **Identifying WBL implementation practices at a work-lab where students performed better in mock interviews:** It was decided to identify, observe and if necessary conduct surveys to document the practices followed by company within the workplace as a part of WBL implementation. This exercise was planned for the organization where students performed well in the mock interviews.

3. **Key parameters of WBL Ecosystem:** During observations, few key parameters forming a WBL environment within the workplace were identified. This yielded interesting findings. Key actors, processes and functions or tools of the WBL environment within the workplace are documented based on the findings.

4. **Student Survey:** Further, a survey of students was conducted to understand if similar practices were followed by other companies, where the students did not perform well in the mock interviews.
5. **Comparative Analysis:** Comparative analysis was done to check if WBL environment is to be recommended for replication.

Mock interviews

Mock interviews were scheduled for third year students pursuing WBL degree program. The interviews were conducted by senior professionals (senior general managers and general managers).

Primary objectives of this exercise was to give a close-to-real kind of experience of interview to the students. Researches state the importance of conducting mock interviews and job-search seminars for undergraduate students. (Reddan, 2008) Students develop a reasonably high level of confidence in preparation for “real-world” scenarios.

This is particularly found to be essential for WBL under study, because WBL students complete their tenure of association with the industry / organization offering work-lab as they receive the degree. While the industry/ organization has a choice to retain the students who would have attained three years of work-experience, it is not mandatory for them to continue any student.

It is in this context and in order to ensure the readiness of students for real-life interview experience, mock interviews were conducted.

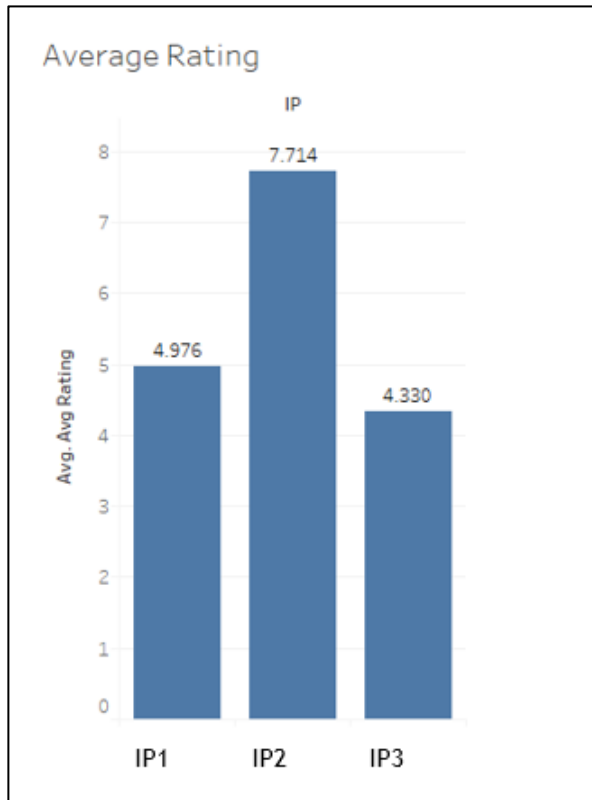
Findings and Outcome

Analysis of ratings received in the mock-interviews was done.

Rating parameters were:

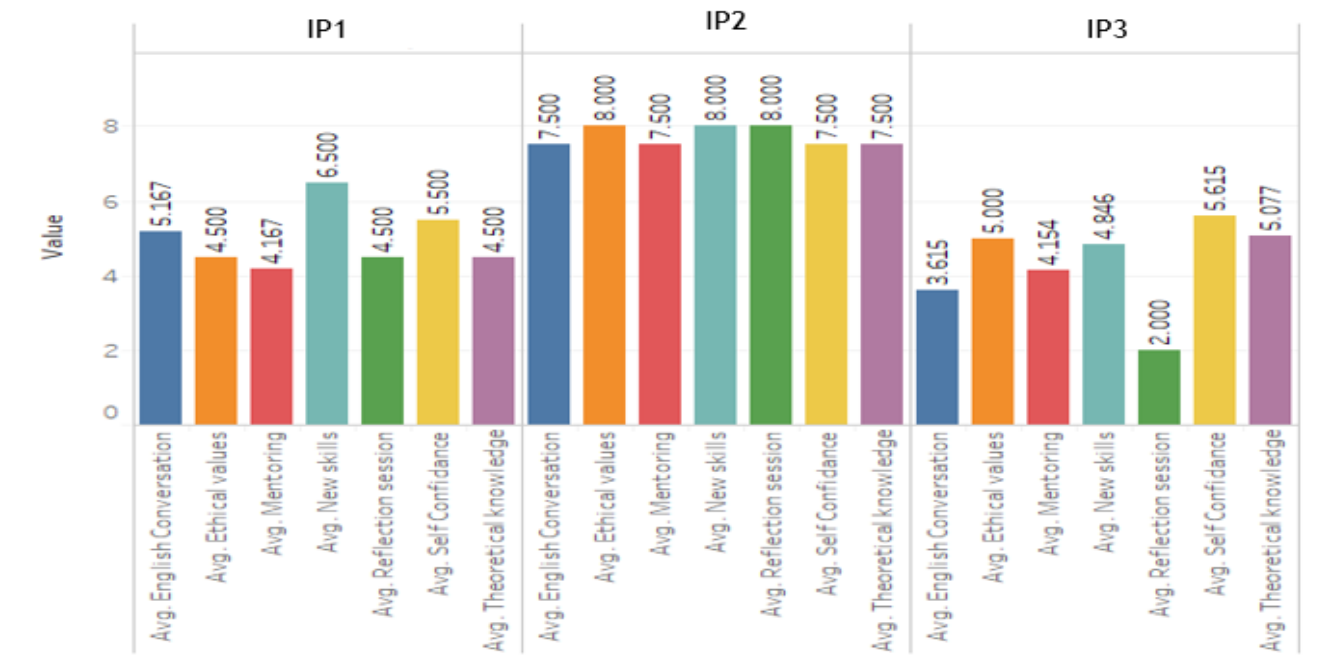
- English Conversation Abilities
- Ethical Values
- Exposure to Skills (New Skills)

- Interactions with the mentor
- Self Confidence
- Theoretical knowledge



IP: Industry Partner (i.e. Work-Lab)

Figure 3: Work-Lab wise average ratings of students



IP: Industry Partner (i.e. Work-Lab)

Figure 4: Work-Lab wise Average Interview Scores for each parameter

Qualitative feedback

Qualitative feedback was also received from the interview panel members. Few students lacked confidence while appearing for the interview and were not able to establish even the eye-contact with the interviewer. Few of them were unable to explain the work they are doing. Clarity about the job role they are looking for was found to be missing in some cases. However, some of the students were extremely clear about their current job role, their strengths and their aspirations. They did well in the interview. They were even aware of the way they were learning. They could mention that their course is based on 'WBL pedagogy'. However, though were not able to express it in further technical terms.

Few interviews were conducted over phone and mixed observations were received from the interviewers on the similar lines of face-to-face interviews.

This feedback and the analysis of ratings of mock-interview led to investigate if the students who did well and who did not, belong to different work-labs. Since the eLearning input was

same for all, it was hypothesized that difference in performance could be related to workplace environment.

It led to further inquiry of WBL ecosystem at the workplaces of the students who performed well in the mock interviews.

The findings of this inquiry may lead to a probable hypothesis that in case of availability of WBL ecosystem at the workplace with certain key parameters, the performance of the students as expected by the industry for recruitment is assured after three years.

While such a hypothesis needs to be closely inspected and validated by a structured research, the current analysis creates a worthwhile base for establishing such a correlation.

Key practices implemented at Work-Lab

Work-reporting

A format for reporting every-day work is shared with the WBL students. It is observed that students perform the tasks satisfactorily however are not able to form complete and precise sentences for reporting the task in English language. Hence, initial format of work-report is in form of 'fill in the blanks'. This is on the basis of the scaffolding technique so as to help students report facts about the tasks, their individual roles in completing the tasks etc. Gradually the students are given sheet with open ended questions and are asked to fill up the work report under broad headings such as: Tasks allotted, Role performed, Skills attained, Time taken, Steps followed, Challenges faced etc. (The Writing Process: A Scaffolding Approach, 2015)

The objective of using this format with leading questions at a broad level is to assess if the students are able to explain the tasks completed in a professional and theoretical language.

Qualitative analysis of the work-reports on following parameters was done.

1. Specificity in explaining the task
2. Clarity about the method
3. Clarity about expected output
4. Clarity about purpose
5. Clarity about challenges

6. Specificity in explaining the solution
7. Is the skill mentioned by the student related to the work or task
8. Meaningful Expression

Every day reflection

Senior members of work-lab conduct reflection sessions with the students every day. The attendance to the sessions is mandatory for all students.

Reflecting on work-reports – Peer exercise

A peer exercise in the form of questions & answers is conducted during every day reflection session. (Rivers, 2017)

The objective of the exercise is to check if:

- Students can ask meaningful questions
- Students can answer questions reasonably well
- Students can understand the work done by others

The work reports submitted by the peers are circulated. Every student is given access to two work-reports. Minimum two questions are to be asked by each student after going through the report in detail. Fact-based and obvious questions such as – ‘how much time did it take to complete the task’ or ‘what was your role’ are discouraged and discarded. Students are expected to ask questions so as to learn new things.

Initially the students are required to be prompted. However, after following the practice for more than 1 month, meaningful questions are asked by peers For ex. - In what way your work is linked to the business of the company? Which step in this process could have been avoided?

Enrichment activities

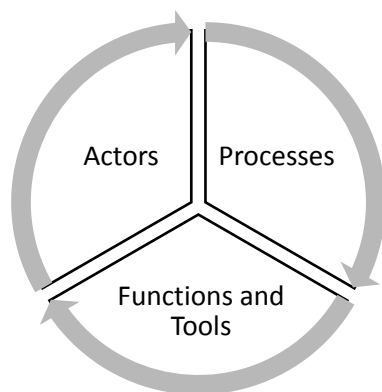
Special activities in order to offer a joyful environment to WBL students are conducted. These include:

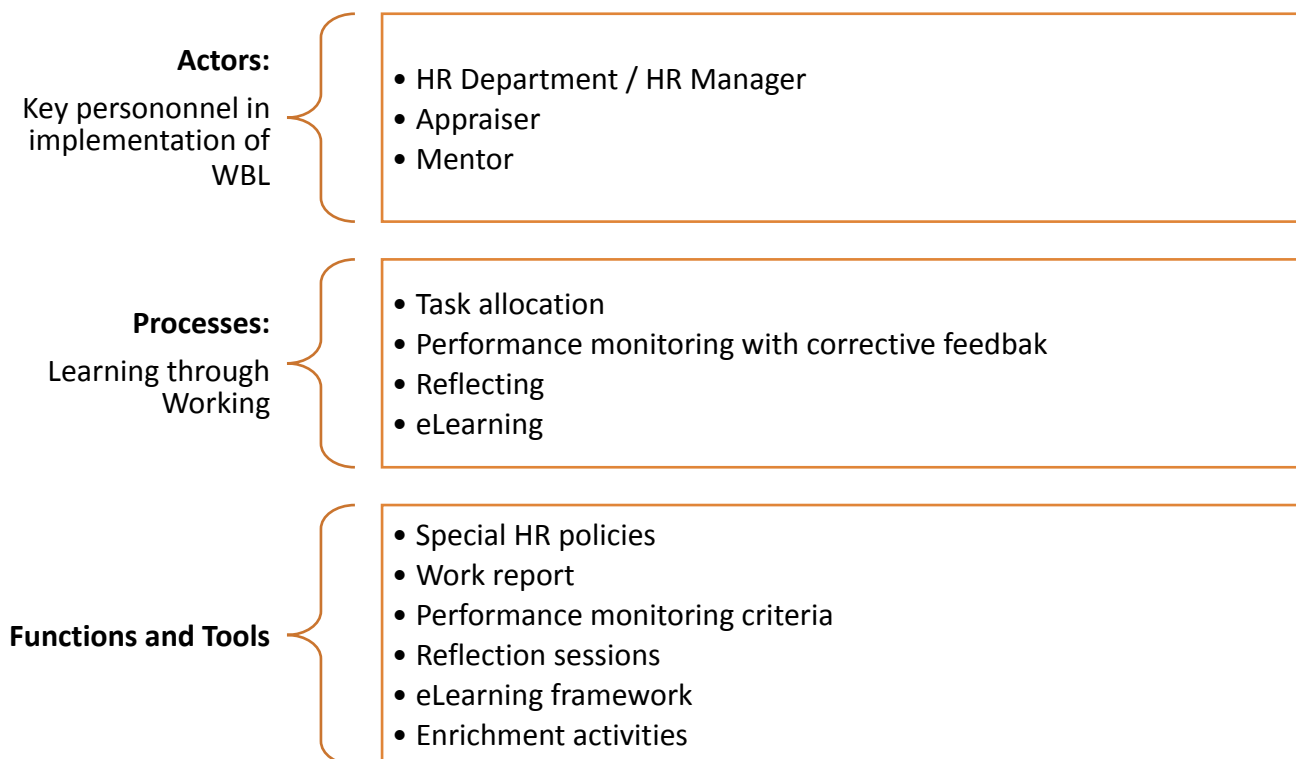
- Reading sessions
- Spoken English sessions

- Involving students in organizational events
- Fitness activities
- Sports competitions
- Presentation competitions
- Giving responsibility to conduct few activities for employees of the organization

WBL Environment within the workplace: Actors, Processes and Functions

After analyzing findings of all the key practices implemented within a work-lab where students performed better in mock interviews, it is observed that WBL ecosystem is an interplay of actors, processes and functions & tools within the workplace.





Outcomes and impact of implementing aforementioned processes

Actors perform various functions and use tools to execute processes leading to successful implementation of WBL .

Mentioned below (Table 1) the inter-links along with few examples of functions performed and/or tools used and their impact.

Table 1: The inter-links along with few examples of functions performed and/or tools used and their impact.

Actor:	HR Department / HR Manager
Process Example (1) :	Special cadre for WBL Students / Interns
Function / Tool	Outcome/ Impact
<ul style="list-style-type: none"> • Special HR policies (Ex. PF, Holidays, Special timings for eLearning) 	<ul style="list-style-type: none"> • Students (undergraduate, between the age group 18 – 20), get a blended environment of learning and working. Many may suffer from homesickness because of migration. Such relief policies help in building their commitment towards learning and working • Importance of WBL implementation at organization level gets highlighted
<ul style="list-style-type: none"> • Uniforms 	<ul style="list-style-type: none"> • Policies like Uniforms benefit students coming from different backgrounds, mostly from underprivileged sections of the society. Such policies also give organization-wide recognition to WBL program
<ul style="list-style-type: none"> • Special events such as sports, Cultural events, Picnics etc. including Enrichment Activities) 	<ul style="list-style-type: none"> • Special events help students showcase their talents. This is necessary because the students do not get a traditional college environment.
Process Example (2) :	Task allocation
<ul style="list-style-type: none"> • Rotation within teams 	<ul style="list-style-type: none"> • Students get an exposure to various departments/ functions of the organization • Students get diversified work experience during the three years of internship

Actor:		Appraiser	
Process Example (3):		Performance Monitoring with corrective feedback	
Function / Tool		Outcome/ Impact	
<ul style="list-style-type: none"> • Work Reports 		<ul style="list-style-type: none"> • Every day interactions • Personal mentoring and guidance • Friendly and caring relationship • Special project assignments • Posing challenges • Involvement in the student’s learning • Encouraging reflections 	

Actor:		Mentor	
Process Example (4):		Reflection	
Function / Tool		Outcome/ Impact	
<ul style="list-style-type: none"> • Reflection Sessions 		<ul style="list-style-type: none"> • Helping students derive theory out of practice at the workplace 	

Conclusions

There is a scope for determining a positive effect on the performance and overall development of the students, provided they are given a WBL ecosystem within the workplace that ensures ‘Learning through Working’. Appropriate use of work-based learning management system can help in replicating the key practices for implementing WBL effectively. The key challenge here is to ensure motivation and commitment of actors involved. Continuous training, retraining, orientation of appraisers and their inputs in order to further streamline the WBL processes in the organization is crucial for the successful implementation of WBL.

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