

# ONLINE PRACTICUM MONITORING SYSTEM FOR LYCEUM OF THE PHILIPPINES UNIVERSITY BATANGAS CAMPUS

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**Abstract**— The main objective of this study to make the monitoring procedure trouble-free by developing a system which would be accessible through the internet. Students will have their own user accounts which will give them the capability to upload reports and on-site pictures thereby minimizing the time and effort spent in going to and from the company's location to the university and vice versa. Similarly, the practicum coordinator of the college will be given their own accounts to access, download and check the updates submitted by the students.

The system will be capable of generating reports of submitted requirements in real-time given that all data are to be stored in a database and the process is done online.

This Online Practicum Monitoring System will be used as a tool to assist the students of all colleges and the college practicum coordinators in their tasks through the use of a web- based software.

The authors deem that this software will be able to address the problems identified and eventually make the monitoring task more convenient.

*Practicum Monitoring System; Online System; Monitoring System*

## I. INTRODUCTION

One of the most important goals of Lyceum of the Philippines University is to provide quality education and producing graduates equipped with the knowledge and skills needed to succeed in their chosen fields. This can be achieved through excellent instruction, facilities and provision of quality programs.

Lyceum offers an assortment of programs in which an On-the-job Training or Practicum course is incorporated. This training style pairs "on-the-job training" of a student with the applied learning at the college. This provides opportunities for students who have the motivation and academic ability to get started on a career path while they are still in school. It allows students to earn school credits, learn a trade and eventually get employed. The training involves the cooperation of three participants namely the Students, the Site Supervisors and the Practicum Coordinators.

However, once students are enrolled in the course, they are to submit training reports on a prearranged schedule in compliance to the requirements. This is done until the needed number of hours is completed by the student. In the process, the practicum coordinator is faced with the difficulty of monitoring the students' performance and on-time submission of the said reports especially if the number of trainees is large and that their locations are not in close proximity.

In this regard, it is the main objective of this study to make the monitoring procedure trouble-free by developing a system which would be accessible through the internet. Students will have their own user accounts which will give them the capability to upload reports and on-site pictures thereby minimizing the time and effort spent in going to and from the company's location to the university and vice versa. Similarly, the practicum coordinator of the college will be given their own accounts to access, download and check the updates submitted by the students.

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## II. OBJECTIVES OF THE STUDY

This study aims to develop an Online Practicum Monitoring System for the benefit of the Lyceum of the Philippines University, Batangas Campus.

Specifically, this study has the following objectives:

1. To design and develop an Online Practicum Monitoring System to help the practicum coordinators perform a hassle and trouble-free monitoring of the requirements submitted by the students enrolled in the OJT course.
2. To provide help for the practicum coordinators in monitoring students' performance undertaking OJT without actual onsite visitation using the developed software.
3. To help the students in minimizing the time and effort spent in submitting the practicum requirements.

## III. LITERATURE REVIEW

Jain (1999) and Doeringer (1995) described formal educational training as mainly theoretical, obtained by academic diplomas and degrees, where individuals proved their ability academically but not practically. Informal on-the-job training (OJT) has been practical, and has prepared an individual to use acquired knowledge efficiently and confidently. OJT helped the worker build their skills on past experiences and knowledge. Cook & Morgan (1998) has identified OJT as a central feature of contemporary manufacturing. The organization has achieved their objectives by using the innovative abilities of individuals more effectively. Well trained individuals knew the extent, potential and strength of their jobs, and they have built on their knowledge and experience through OJT. Campbell (1990) described OJT as giving the employees normal working situations as designed to change the skills, attitude, and knowledge that has been directly related to the performance demands of the task. Training had to provide the individuals with the capacity for improvement and job satisfaction. Barton (2001) explained that employees have not been valuable in the abstract, but rather as a capacity of the jobs they execute, a direct expression of the human capital investments that came from the demands placed on the employee.

It is the responsibility of supervisors and managers to utilize available resources to train, qualify, and develop their employees. On-the-job training (OJT) is one of the best training methods because it is planned, organized, and conducted at the employee's worksite. OJT will generally be the primary method used for broadening employee skills and increasing productivity. It is particularly appropriate for developing proficiency skills unique to an employee's job - especially jobs that are relatively easy to learn and require locally-owned equipment and facilities.

An analysis of the major job requirements (identified in the position description and performance plan) and related knowledge, skills, and abilities form the basis for setting up an OJT plan. To be most effective, an OJT plan should include: the subject to be covered; number of hours; estimated completion date; and method by which the training will be evaluated.

To have a successful OJT program, supervisors need to assign a coach to each employee involved in OJT. It is the responsibility of the coach to plan training carefully and conduct it effectively. (<http://www.doi.gov/hrm/pmanager/ed6b.html>)

On the Job Training (OJT) is a method of providing individualized occupational skills training for Dislocated Workers and Low Income Adults. The goal of the OJT program is to place participants in occupations that will enhance their prospects for long-term employment and will ultimately permit them to become self-sufficient.

It is a "hire-first" program in which the employer, either public or private, enters into an agreement with the Career Center to hire, train, and retains the individual upon successful completion of the training program. Through this program, businesses may be reimbursed up to 50% of the new employee's wages while they are in training. Because it is a "hire-first" program, OJT is only available to participants whose goal is immediate employment. (<http://www.valleyworks.cc/ojt.htm>)

School-based Apprenticeships and Traineeships (SATs) allow high school students – typically in Years 11 and 12 – to enter into a contract of employment with an employer and undertake structured training both on and off the job while continuing to be enrolled at school. Students spend some time at school, some time at work, and some time at training.

The students work towards nationally recognized vocational qualifications. A supervising registered training provider such as TAFE (Technical and Further Education) or a private training organization provides the formal training required for the student to complete the qualification.

School-based apprentices and trainees participate in paid employment for at least 48 days each year. At work, they learn skills under the guidance of an employer. School-based apprentices and trainees are paid only for the time spent at work. Their wage is calculated as a percentage of the full-time apprentice or trainee wage as outlined in the relevant agreement or award.

There are more than 700 different apprenticeships and traineeships that can be delivered as school-based arrangements ranging from rural to retail; business to building; hospitality to hairdressing; and automotive to arts.

Depending on the type of traineeship and when the young person commences, many students can complete a school-based traineeship while still at school.

School-based apprenticeships provide a head start into a full-time or part time apprenticeship and career. Young people may complete up to a third of an apprenticeship while they are still at school. (<http://education.qld.gov.au/publication/production/reports/pdfs/2008/sat-agenda.pdf>)

Apprenticeship opportunities continue to be driven by the needs of employers who hire the apprentice and provide the on-the-job portion of the training. The curriculum is either developed statewide or authorized by the individual trade associations. Our apprenticeship faculty members keep up to date with modifications in their field through professional development offered by the trade associations. Apprentice completers are among the highest skilled and highest paid workers within the Fox Valley workforce. (Ronald Toshner, 2009)

SNAP is a secondary school program designed to give students an opportunity to become registered apprentices in a designated trade while they are still in school. While working on an employer's jobsite, students earn secondary school credits through Career and Technology Studies (CTS) as well as "time credits" towards a Journey person certificate in their chosen trade and they will also be paid. ([http://www.ece.gov.nt.ca/Divisions/Apprenticeship/App%201/PF\\_SNAP\\_Program.htm](http://www.ece.gov.nt.ca/Divisions/Apprenticeship/App%201/PF_SNAP_Program.htm))

The Official Domain Registry of the Philippines (dotPH) accepts internship that will give the intern/trainees real project at work. to be accepted, the dotPH internship requirements include: the currently enrolled in an academic institution; the College/University Transcript; College/University class schedule, current and upcoming semester/s.

Internships are full-time in the summer and part-time during the University year. A fully evaluated OJT program typically lasts 10-24 weeks. (<http://dotph.domains.ph/careers/internship>)

The paper entitled "ON-THE-JOB-TRAINING: EASY TO DO IF YOU HAVE THE RIGHT PROGRAM" by Patrick A. Pulley of Southern Illinois University Carbondale presented the data collected from an actual study and creation of an on-the-job training program at a manufacturing facility located in the Midwest. The purpose of the said paper was to present a proven program of OJT development, training and techniques that has provided the skills and knowledge for job task completion. The author believed that the identification of the systematic creation of an OJT program may assist other business and industrial facilities in preparing their workers to be productive employees. (<http://wed.siu.edu/Journal/VolIIInum2/article3.htm>)

The Intern Placement Tracking (IPT) system of Boise State University is a web-based practicum monitoring system designed to keep track of students placed in internship programs with various agencies. The BSU School of Social Work implemented IPT in order to more effectively track student placements while providing students a valuable tool allowing students to research prospective field agencies. This system allows both Boise State University and field agencies to communicate with students working in practicum. Because of this, it is essential for all those involved to keep all information current.

([http://www.idbsu.edu/socwork/fieldwork/ipt/IPT\\_Instructions/Agencies/12.htm](http://www.idbsu.edu/socwork/fieldwork/ipt/IPT_Instructions/Agencies/12.htm))

"An Evaluation Model for Practica", by Gordon Welty Wright State University Dayton, OH 45435 USA presented an evaluation model which is applicable to practica and field placements. In this paper, the author distinguished between the practicum or placement and the program where the practicum is located; the two (i.e. practicum and program) will be called a "system." He conceptualized evaluation in terms of categories which characterize the system which is being modeled in the evaluative effort. These categories include (a) Input Variables, a set of qualitative or quantitative variants which describe the intended system change as well as record the initial state of the system; (b) System Preconditions, relatively invariant system elements without which the system could not exist; (c) System Process, a set of system elements which effect or describe the transformation of initial system states into terminal system states; (d) Output Variables, the set of variables descriptive of intended system change as well as a record of the terminal state of the system; and finally (e) the System Goals, which represent the standards against which system performance is to be compared. ([http://www.wright.edu/~gordon.welty/Practica\\_83.htm](http://www.wright.edu/~gordon.welty/Practica_83.htm))

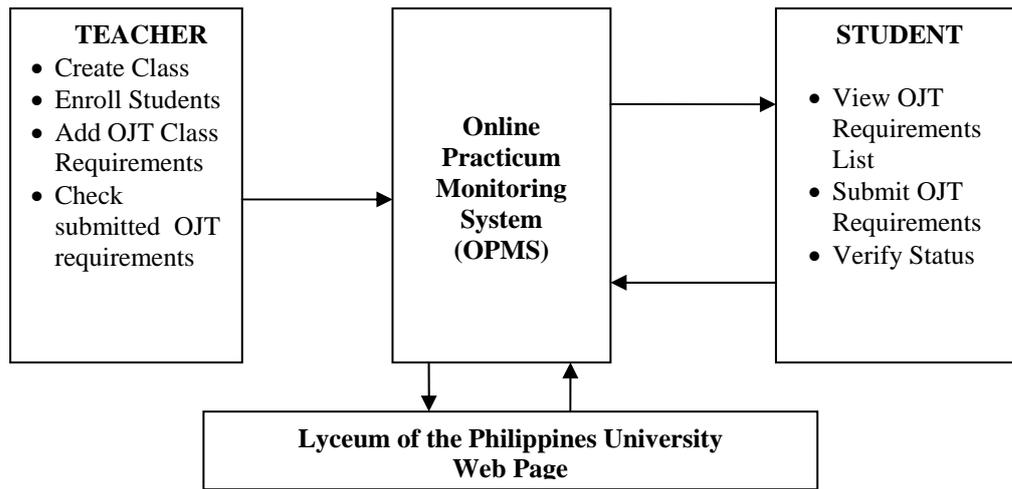


Figure1. Research Paradigm

The paradigm shows that the Online Practicum Monitoring System is a link within the Lyceum of the Philippines University – Batangas official web page. It also shows that Online Practicum Monitoring System is not a stand-alone application and can be accessed only through the web page. Within the Online Practicum Monitoring System, teachers assigned to handle the subjects can create classes, enroll students, add class requirements and check submitted requirements. Students in turn, are enabled to view OJT requirements list, submit OJT requirements and view their status for deficiencies.

#### IV. METHOD

Systems Development Life Cycle (SDLC) was used in order to come up with this Online Practicum Monitoring System for LPU Batangas. The Systems Development Life Cycle (SDLC) is a conceptual model used in project management that describes the stages involved in an information system development project from an initial feasibility study through maintenance of the completed application. Various SDLC methodologies have been developed to guide the processes involved including the waterfall model (the original SDLC method). This model describes various phases involved in the system development.

Requirement Analysis and Design. Analysis gathers the requirements for the system. This stage includes a detailed study of the existing practicum monitoring. During these phases, the software’s overall structure was defined. For the requirement analysis, Data Flow Diagram and Entity Relationship Diagram were used. Data Flow Diagram is widely used in processing object-oriented system analysis. It is also useful in supplementing the data oriented analysis. This helped in understanding the existing system and provides an excellent tool for communicating with users. Entity Relationship Diagram was used to graphically represent the relationship between entities that use the data. Implementation. In this phase, the designs are translated into code. ASP.net was the programming framework used to create the Online Practicum Monitoring System for LPU Batangas.

#### V. RESULTS AND DISCUSSIONS

This part discusses the results obtained from the development of the Online Practicum Monitoring System through the presentation of Screen Shots.



Figure 2. Login Page

Figure 2 shows the Login Page where the user is prompted to enter his username and password. Inputs are validated so as to keep the system secured from unauthorized access.

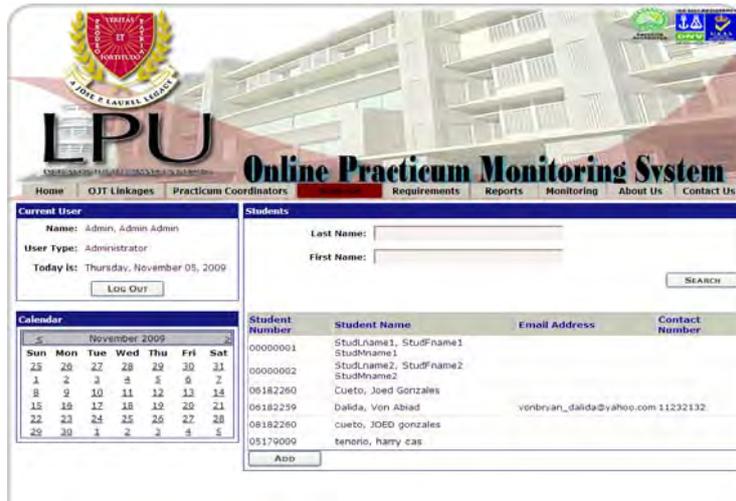


Figure 3. Administrator's Page

Figure 3 shows the Administrator's Page where the system administrator can add the faculty coordinator accounts and perform other maintenance tasks.

### VI. REFERENCES

- [1] Campbell, C. (1990). "An overview of on-the-job training"
- [2] Cook, R. G., & Morgan, K. (1998). "The associational economy: Firms, regions and innovation".
- [3] Gordon Welty, "An Evaluation Model for Practica," presented at the Workshop on Practicums in Graduate Programs: Values, Concerns, and Learning,
- [4] <http://wed.siu.edu/Journal/VolIIInum2/article3.htm>
- [5] <http://www.businessdictionary.com/definition/monitoring.html>
- [6] <http://www.businessdictionary.com/definition/on-the-job-training-OJT.html>
- [7] <http://www.doi.gov/hrm/pmanager/ed6b.html>
- [8] [http://www.idbsu.edu/socwork/fieldwork/ipt/IPT\\_Instructions/Agencies/12.htm](http://www.idbsu.edu/socwork/fieldwork/ipt/IPT_Instructions/Agencies/12.htm)
- [9] <http://www.valleyworks.cc/ojt.htm>
- [10] Jain, P. (1999). "On-the-job training: a key to human resource development"
- [11] "Management Information Systems Second Edition" by Effy Oz.
- [12] "Management Information Systems: Managing Information Technology in the Networked Enterprise Third Edition" by James A. O'Brien
- [13] "Managing Effective Organizations An Introduction" by Steers et.al
- [14] Patrick A. Pulley, "On-the-Job-Training: EASY TO DO IF YOU HAVE THE RIGHT PROGRAM"
- [15] Ronald Toshner, (2009), Performance Monitoring Report: Apprenticeship
- [16] "Software Engineering A Practitioner Approach Sixth Edition" by Roger S. Pressman
- [17] "Successful Software Development" by Scott E. Donaldson and Stanley G. Siezel.
- [18] "Systems Analysis and Design Sixth Edition" by Kendal, Kenneth E. and Kendal, Julie E.