

Internship Course Design

Ex-Post Facto on Curriculum Development of Educational Technology Study Program

Riche Cynthia Johan, Rudi Susilana, M. Ridwan Sutisna and Didi Supriadie
Universitas Pendidikan Indonesia
{riche, rudi_susilana, m.ridwan.sutisna}@upi.edu, cintadidi@gmail.com

Keywords: Internship Course Design, Ex-post Facto, Educational Technology Competences.

Abstract: Professional practice training program, known also as internship course, is the field application of knowledge and skills that educational technology students have obtained on campus. Educational technology experts must be able to perform their role as professional educational technologists who have several competences. However, the professional practice training program is not in line with the expected competences as professional educational technologist. The objective of this research is to produce relevant structured program and competences formula which are appropriate for students of educational technology program based on their outcome competences. An ex-post facto method was used in this research and the data was collected from last year of finished professional practice training program. This research used Association for Educational Communication and Technology (AECT) standard as a guideline and framework, especially the 2012 AECT standard consisting of five aspects: content knowledge, content pedagogy, learning environments, professional knowledge and skills, and research. Each aspect is explained within the framework of creating, using, assessing/evaluating, and managing ethics. The results of this research are: 1) Matrix of educational technology competences; 2) Course design of professional practice training program; 3) Model of practice that can be used to improve the existing program.

1 INTRODUCTION

Indonesian people today and in the future, are technology-cultural society. In other words, technological developments have occurred in such a way that is widespread and have affected all aspects, especially education.

Responding to these facts, educational technology program needs to develop more meaningful curriculum, more useful in order to develop student competencies which is relevant to competences of educational technology graduates both theoretically and practically. For educational technology students, professional practice training program is an application of the knowledge and skills that have been obtained on campus.

Therefore, professional practice training program in the Educational Technology program is intended to train students in real situations, and the field experience is also suggested to give some feedback for curriculum adjustment and development. It is

also to be used as an early analysis for developing the design of work practices in the field of educational technology.

There are symptoms that lead to the lack of accordance between the training program and expectation of gained competences. The existing program tends to be various and is only based on the need of institution and gained ability of student.

Generally, "Professional practice training program can be described as an attempt to increase the mastery of professional competence through practicum in the real environment" (Miarso, 2004). Narayanan et al. (2010) view internships as a knowledge transfer process, and distinguish between internship antecedents, processes, and outputs. Strengthen the opinion, Tovey (2001) has investigated what makes the internship experience valuable for the student, supervisor, or faculty member. It can be concluded that these three opinions completed each other. To make a good internship program which can increase the mastery

of professional competence, it needs support from every person involved, starts from antecedent's phase. One of most the most crucial part of antecedent's phase is the program formation.

2 LITERATURE REVIEW

2.1 Educational Technology Profession Practice

Practice of Professional Educational Technology in Indonesia is increasing after the existence of Functional Position of Instructional Technology Developers which have six main tasks: (1) Analysis and assessment instructional technology model/system, (2) Instructional technology model/system design, 3) Instructional media production, (4) application of instructional system/model and utilization of instructional media, (5) Control of instructional system/model and (6) evaluation of implementation system/model and utilization of instructional media (Ministerial Regulation of the Utilization of the State Apparatus, 2009). Instructional technology is the theory and practice of design, development, management, utilization, and evaluation of instructional process and resources (see in figure 1).

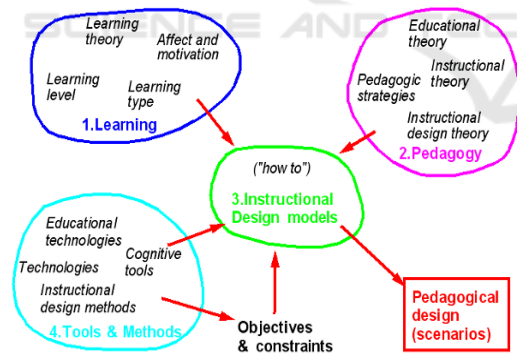


Figure 1: Competence of education technology according to AECT, 2008.

Along with the rapid development of science and technology, especially in the field of educational, communication and computer science, the definition of educational technology according to Association for Educational Communication and Technology (AECT) also shifted. “Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources” (AECT, 2012). All of these new changes

and developments have influenced the development of the field of educational technology competence and the environment as illustrated in Figure 1.

Based on Figure 1, it can be seen that education, especially learning and learning, has been transformed recently, especially at the turn of the millennium beginning of the 21st century. The paradigm in learning now leads to changes in school services and teacher's role. Responding to this fact, students of educational technology must be able to master their professional competences in order to keep up with the changes. Therefore, to facilitate the fulfilment of these competences, in 2012 AECT has been made further action. The Association made formulation of the standardized competences for a professional educational technologist. According to the AECT formulation, in the table 1 is the map of education technology standardized competences.

Table 1: Competences of educational technologist profession according to 2012 AECT standard.

	Standard 1 Content Knowledge	Standard 2 Content Pedagogy	Standard 3 Learning Environments	Standard 4 Professional Knowledge & Skills	Standard 5 Research
Creating	X	X	X		
Using	X	X	X		
Assessing/Evaluating	X	X	X	X	X
Managing	X	X	X		
Ethics	X	X	X	X	X
Diversity of Learners			X		
Collaborative Practice				X	
Leadership				X	
Reflection on Practice				X	
Theoretical Foundations					X
Method					X

2.2 Professional Practice Training Program

Educational Technology Study Program has developed Professional Practice Training Program. This program is an Intra-curricular activity which held in eighth semester that must be followed by all students. The activities are more practical-applicable in applying concepts and principles gained from lectures. The allocation of time required for the practice is equivalent to sixteen (16) meetings and equal to 4 credit hours for each meeting. Activities of professional practice training program must include: theoretical discussion activities, preparation and program planning, review and panel discussion, implementation of the program activities and will be ended with a seminar of program results and activity report.

Clark (2003) stated that the educational value of internships can be enhanced through academic assignments, in which the internship can offer some enhancement for student competences development. Therefore, the professional practice training program should be academically supportive.

The implementation of professional practice training program for students of educational technology is intended for the professional forming in the field of educational technology. Therefore, the implementation of a well-programmed training is very important. It is also aimed to anticipate the student perception of the value that they will receive after the internship program. Cook et al. (2004) said that students perceived the value of internships largely in the social and people skills, and only weakly related to improved academic skills.

Thus, in the implementation of professional practice training program it is necessary to have a plan or design in order to achieve the expected objectives. So that, we offer a design that can be implemented in an integrated, directed, and guided way. These designs include patterns of briefing, orientation, real practice and report preparation. These activities must involve two instances: the campus and the institution coordinated by the program organizing unit and implemented sustainably.

3 RESEARCH METHODS

This study used ex-post facto method because the variable is not manipulated nor treated by the researcher and it used the data that already existed as suggested by Kerlinger (1964) that in ex-post facto research the variables have already occurred and the researcher only use the existed data. The design of this research will be using six step Lodico et al.'s way (2006) of ex-post facto implementation.

The data collected for this research was taken from 2017 period and the proposals analyzed were picked up randomly for this research. The proposals were analyzed and interpreted comparing to 2012 AECT Standards. Based on the data analysis and then use the 2012 AECT Standard as comparison, we mapped the internship design that has been done and draw the whole figure 2 about the design of internship program.

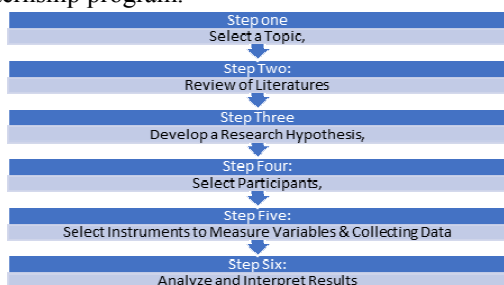


Figure 2: Lodico steps of research (2006).

4 RESULTS AND DISCUSSION

4.1 Matrix of Educational Technology Competences

According to Association for Educational Communications and Technology (AECT) in 2012, in more detail suggests the following competency standards for educational technology (see in table 2).

Table 2: Matrix of educational technology competence according to AECT standard, 2012.

<p>1. Content Knowledge Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.</p> <p>1.1 Creating Content Knowledge 1.2 Using Content Knowledge 1.3 Assessing/Evaluating Content Knowledge 1.4 Managing Content Knowledge 1.5 Ethics of Content Knowledge</p>
<p>2. Content Pedagogy Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy</p> <p>2.1 Creating Content Pedagogy 2.2 Using Content Pedagogy 2.3 Assessing/Evaluating Content Pedagogy 2.4 Managing Content Pedagogy 2.5 Ethics of Content Pedagogy</p>
<p>3. Learning Environments Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.</p> <p>3.1 Creating Learning Environments 3.2 Using Learning Environments 3.3 Assessing/Evaluating Learning Environments 3.4 Managing Learning Environments 3.5 Ethics Learning Environments 3.6 Diversity of Learners</p>
<p>4. Professional Knowledge and Skills Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.</p> <p>4.1 Collaborative Practice of Professional Knowledge and Skills 4.2 Professional Leadership Knowledge and Skills 4.3 Reflection on Practice of Professional Knowledge and Skills 4.4 Assessing/Evaluating Professional Knowledge and Skills 4.5 Professional Knowledge and Skills Ethics</p>
<p>5. Research Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.</p> <p>5.1 Research Theoretical Foundations 5.2 Research Method 5.3 Assessing/Evaluating Research 5.4 Research Ethics</p>

4.2 Field Experience Practice Program (Internship)

The 2012 AECT standards has been analyzed and then combined with four aspect of systematic design that is input, process, output and outcome. This combination can be elaborated by this illustration in figure 3.

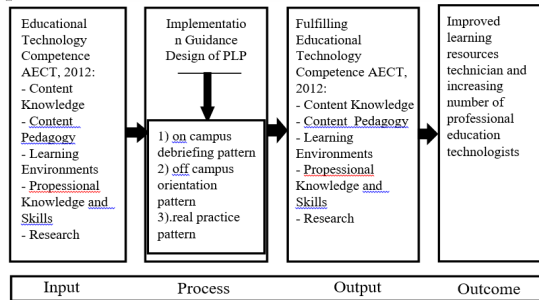


Figure 3: Design of educational technology work practice

The input of the internship program is the students with their attained competences from lectures in campus. Their skills and knowledge are the input. While the process implementation of internship stages consists of three main stages: campus orientation, off campus orientation and real practice stage.

The above pictures are the ideal procedure retrieved from expected situation and competences of 2012 AECT Standard. Its achievement has not been measured yet. The recent professional practice training program runs with the following activities:

4.2.1 On Campus Briefing (1 Week)

This briefing activity is the first part of PLP activities which held on campus organized by faculty of education technology program. Focused on the refreshment of knowledge and professional skills, as well as developing values and attitudes suitable with the conditions and situations in the real field.

The briefing activities are divided into two sessions. The first is a 4-day briefing that all the students get the same lectures on general professional practice training program which invite the institution representative (1 of 4 day). The second session is 2 days of briefing for each group of the training student, discussing the program that they proposed.

4.2.2 Field Orientation (1 Week)

This is an introduction activity about the institution where the internship will take place. This orientation includes the following activities: a) Collecting information on organizational and personnel management of the institution, b) Subject matter orientation, c) Collecting and analyzing information of problems related to educational technology field, d) Discussing alternative solution of the problem, e) Arrangement and discussion of professional practice training program that will be implemented during the internship period.

4.2.3 Real Practice (8 Weeks)

Practical activities in this field provide hands-on experience for participants to implement the program that has been planned in the first stage. This professional practice covers the integration of educational technology competencies such as Content Knowledge, Content Pedagogy, Learning Environment, Professional Knowledge and Skills and Research with the work tasks of the institution.

Students' achievement of the program is mostly evaluated from this real practice stage. The evaluation is not only about the program but also about the personality such as discipline and socialization.

4.2.4 Internship Report (2 Weeks)

Report preparation activity is an individual activity of student participants that describe and discuss the activity during orientation stage and real practice. This activity is held for 2 weeks until signed by the supervisor and the head of the institution where the actual practice, the format of the report in outline adjusted to the pattern offered for its contents, covering the discussion of the briefing activities, orientation and field practice that has been implemented by students of the participants

4.3 Best Practice in Professional Practice Training Program

The following programs presented in Table 3 are reviewed product design of the programs of 30 professional practice training program of educational technology in 2017.

Table 3: Programs of 2017 educational technology professional practice training (PLP).

NO	PROGRAM	INFORMATION
1	Program/ Training Need Analysis	Need analysis to be able to decide form and type of training / program needed by institution.
2	Content Analysis	Content compatibility analysis with the delivery form used and the suitability of existing needs in the field. Includes adequate material coverage and material sequence accuracy.
3	Development of training curriculum	Development of training curriculum in the form of curriculum development of existing training programs.
4	Training Design	Create a new training program design. Or as a form of improvement to existing designs.
5	Media Design	Create a media product design. From start making GBPM, storyboard script to its usage guide.
6	Development of Learning Materials	Development of teaching materials is mainly done in module form. Specifically, not touching content development but rather on the development of structure and delivery and providing advice to content providers.
7	Media Development	Conducting the process of developing media learning from the existing content theme. Media development is mostly done in the form of digitized content and video-making or presentation of computer-based presentation.
8	Observation of Learning Activities	Observing the learning process in the implementation of the training system at the institution.
9	Development of Online Learning Activities	Development of online activities by changing the atmosphere of learning from conventional to online. They include providing learning content that was previously copied and pasted into a download system, or by creating an online-based evaluation instrument.
10	Testing Learning Resources Implementation	Testing the various types of learning resources that already exist. Compatibility, attractiveness to effectiveness.
11	Management of Training	Training Administering and managing the implementation of the training.
12	Training Evaluation	Evaluate the implementation of the training. Make a problem or evaluation instrument to process the result of evaluation and analysis and report on the implementation of the training
13	Information System-based evaluation database Management	The values and attainment of existing training participants in management through an internet-based information system with centralized database systems and automation of analysis and reporting.
14	Others	It was varying according to the institution specific instruction. Various institution orientation and requirement, made it possible that student will be given other task irrelevant directly to the subject of educational technology.

The programs above are proposed in the first week during on-campus briefing and fixed in second

week as field orientation ended. Most of the programs are good and relevant with educational technology. However, there are some programs which are irrelevant directly with educational technology and which occur during discussion in the field orientation stage. So far, this is uncontrolled due to institution requirement of work. Programs such as administration, public relation, or any general office works in specific case become major and dominant at internship program despite the more educational technology relevant programs has been arranged. Besides, the perception of student mentioned by Cook et al. (2004) must be countered. Meanwhile other opinion by Clark (2003) must be supported.

That is why it is important to have the same idea between faculty member, students and the internship institution. That is how the first day meeting was conducted in which all three representatives participated in the first session of on campus orientation, which becomes very important. That is one of the best practices which should be noted and simply as an example to follow.

5 CONCLUSIONS

Professional practice training program is an intra-curricular activity which held in the eighth semester that must be followed by all students. The process of the activities is more practical in applying applicable concepts and principles derived from lectures. The effectiveness of the program implementation requires guidelines that can direct the implementation of activities in a structured and systematic way, through the fulfilment of the following points: 1) Matrix of education technology competence, 2) Course design of professional practice training program, and 3) Model of practice that can be used to improve the existing program.

REFERENCES

- AECT Standards, 2012. *Standards*. In adopted AECT Board of directors July 16, 2012. Bloomington, IN•47404-3745
- Clark, S. C., 2003. Enhancing the educational value of business internships. *Journal of Management Education*, 27(4): 472–484.
- Cook, S., Parker, R. S., Pettijohn, C. E., 2004. The perceptions of interns: A longitudinal case study. *Journal of Education for Business*, 79: 179–185.

- Kerlinger, F. M., 1964. *Foundations of behavioral research*, Holt, Rinehart, & Winston. New York.
- Lodico, M., Spaulding, D., Voegtle, K., 2006. *Methods in educational research: From theory to practice*, Jossey-Bass. San Francisco.
- Miarso, Y., 2004. *Menyemai Benih Teknologi Pendidikan*, Kencana. Jakarta.
- Narayanan, N., Olk, O., Futami, F., 2010. Determinants of Internship Effectiveness: An Exploratory Model. *Academy of Management Learning & Education*, Vol. 9, No. 1, pp.61–80.
- Ministerial Regulation of the Utilization of the State Apparatus, 2009. *Functional Position of Technology Learning Developer and Credit Score*.
- Seels, B. B., Richey, R. C., 1994. Instructional technology: The definition and domains of the field. Washington, DC. *Association for Educational Communications and Technology*
- Tovey, J., 2001. Building connections between industry and university: Implementing an internship program at a regional university. *Technical Communication Quarterly*, 10 (2): pp.225–239.

