Economic Literacy and the Web Based Active Learning Approach

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ABSTRACT

Economics remains an abstract subject to many undergraduate students. Some students perceive Economics to be boring and inapplicable to their lives although economics is a basic course in every faculty that offer business or management study. The investigation used the economic literacy tools as proposed by NCEE America to test the comprehension of basic economic concepts. The result of the investigation showed that there is the relation between comprehension of basic economic concepts and the grade of economics in class. The paper discusses web based active learning activities as an alternative to traditional method to enhance students' achievements in and after their study.

Keywords: active learning method, web based, economic literacy, economics, NCEE

Some Backgrounds of teaching learning conditions

Nowadays enrolments in university and higher education are increasingly composed of a wider variety of students. Prospect students are displaying varying degrees of academic readiness and ability to learn since they come from different high school with different region. The traditional requirements have been focused on standardized entry test, high school rank and grades. The target of the number of student body has made some higher education facing no choice but to accept prospect students with varying academic ability background. A student's background can influence the faculty member's ability to deliver course material.

Faculty members now find that their teaching is becoming subject to both internal and external pressures to change. The range of abilities of students is increasing. Students come from many different educational systems and different regions, each with its own set of expectations and degrees of success.

Economics course and Economic Literacy

Economics is the study of how individual, organization and people use their scarce resources effectively to fulfill their needs. ***The Quality of Assurance Agency for Higher Education*** (*www.qaa.ac.uk*) stated that the purpose of learning economics is that student able to solve their economic problems in daily life.

Economics is a required subject in every faculty that offers management or business studies. Moreover economics is an introductory subject that becomes basis knowledge for any other knowledge that study about business or management. University should provide the teaching learning process that makes student not only pass the subject but also be able to make use of the knowledge for their daily life either in or outside class. Salemi (2005), in one of his research argue that as an introductory subject the purpose of the economic course is

- To equipped student with basis knowledge about economics before they proceeds to other subjects.
- To broaden the comprehension of economics before they applied basic economics concept in their daily life.

Economic Literacy at Widyatama University

The Council for Economic Education (NCEE) with *EconomicsAmerica network of affiliated state Councils* and *University-based Centers* proposed the important of economic literacy. The importance of economic literacy is based on the argument that young generations that enter labor force will not play their function at job if they do not have the comprehension of economics in real life. For example the problem of credit card bankruptcy rises because they do not understand the concept of saving and investment, global economic climate or because they do not understand profit concept.**http://www.councilforeconed.org/cel/**

NCEE (*National Council of Economics Education*) or now the *Council of Economic Education* is an institution that actively campaign the important of economic literacy. NCEE offers many programs to promote the economic literacy in USA and all over the world. NCEE programs comprises three main area : EconomicsAmerica®, EconomicsInternational®, dan EconomicsExchange®.

Economic Literacy is a comprehension of basic economic concepts that comprises of twenty basic economics concepts (standards) as stated by NCEE. The twenty basic economic concepts are covered in the economics course either micro or macroeconomics. Student is economic literate if they can applied the basic economic concepts in their daily life which is differs with situation at class (*Robinsohn* ,1975).

The investigation about economic literacy at Widyatama University start by the examining the data of the number of student pass the economics course which are microeconomics and macroeconomics. It showed that almost 70% student pass the course. If we take further look almost 40% student got only C which is only satisfactory. it can be inferred that it not easy to get pass the course with grade A or B.

Table 1. The number of student Pass in Economics Course

Year	**Pass (%)**	
	Macroeconomics	**Microeconomics**
2005/2006	71.1	76
2006/2007	70	68
2007/2008	73	76
Average	71.5	70

Source: Academic data Widyatama University 2009

Table 2: The Percentage of Student Pass Economics course

Year	Pass	Grade C
2005/2006	76.50%	35%
2006/2007	70.50%	36%
2007/2008	77%	41%

Source: Academic Data Widyatama University 2009

This research investigate whether the student that already took the economics subject at Widyatama University have the basic comprehension about basic economics concepts (economic literate) and how is the relation between the grade they had with the comprehension of economic literacy.

The research was designed to evaluate student understanding of basic economics concepts as outlined in the Voluntary National Content Standards in Economics, developed and published by NCEE in 1997. The survey examined student familiarity with basic economic principles, knowledge about the Indonesian economy, and understanding of some key economic terms. The respondents were asked 20 questions of National Standard Economic Literacy from the NCEE (National Council of Economic Education). The investigation covered 253 respondents. The result of the investigation revealed that the average questions that can be answered correctly are about 13 out of 20 questions asked.

The content standards covered by the research reflect the essential principles of economics. The research found that only 65% questions can be answered correctly. It means that student comprehension of basic economics concepts such as scarcity, allocation of goods and services, role of competition, role of money, and specialization and trade is only about 65%.

To gain more information, the investigation is proceeded to define the relation between grade on economics subjects with the ability to answer the 20 questions correctly (economic literacy). Using regression method the result showed that the grade of economics course is significantly affect the ability to answer the economic literacy questions. The higher the grade the higher the ability to answer the questions correctly

From the above conditions then it is an important matter to evaluate the teaching & learning process especially in the subjects of economics. One method as an answer is promoting the active learning method.

Description of Active Learning

As discussed above the students' background can influence the faculty member's ability to deliver course material. It is argued that faculty member should promote the active learning method as one of the alternatives. Pedagogic techniques that promote positive student attitudes toward economics are worthy of consideration.

Teaching is more than simply transmitting content or material of the knowledge. Teaching is training students to be successful in their careers. Lecturer should view students not as "empty vessels" that absorb knowledge, but rather as active participants in the learning process. Students should become independent learners and be self motivated.
Active learning is just one attempt to enrich students by expanding their ability to deal more successfully with the world in which they live. There are claims that active learning approaches reduce student anxieties and their avoidance of economics.

Ziemnowicz and Woods (1997) define that active learning programs may help reach a broader spectrum of individuals:

- Active learning involves learning from the process and sharing knowledge with others.
- Active learners accept responsibility and accountability for their own learning by being actively rather than passively engaged in the learning process (Baylor University,1995).

Based on the above definition, the role of the faculty member changes in that:

- Active learning combines theory and practice.
- This pedagogy is less a product than a process.
- It is egalitarian because the responsibility of learning shifts from the instructor to the students.
- It attempts to have students take charge of their own learning while at the same time having faculty function as allies and facilitators, not guardians of expertise.

Implementation of Active Learning in Economics

Researches on cognitive learning suggest that although individual students learn in different ways. Learning that emphasizes understanding and the acquisition of knowledge—requires active participation on the part of the learner (Shuell 1986). From that perspective, current teaching practices in economics, which rely heavily on "chalk and talk" (Becker and Watts 1996), appear less than optimal. Siegfried and Fels (1979) and Becker (1997) emphasize that to be effective teachers need to employ a *variety* of teaching strategies that promote active student learning.

Leidner and Jarvenpaa (1995) identify four roles that IT can play in the context of education

- automating the delivery of information to students
- collecting timely feedback on students' responses to the class material
- allowing students to share and explore information together, involving them in a process of discovery
- devolving authority away from the lecturer, so that he or she can guide the learning process while it occurs in different locations, rates and group sizes

Academic programs and instructional delivery must accommodate various learning styles and become student centered. Following are the approaches of active learning method in order to address different learning styles which can increase the relevancy of the study of economics.

Schmidt (2003), promotes Active and Cooperative Learning Using Web-Based Simulations since networked computers permits a richer simulation design, allows more complicated decisions by the students, and facilitates reporting results for later discussion. The Web is an ideal technology for such simulations because computers already have Web-capable browsers, with which students are familiar, and information on creating Web sites is readily available.

Simkins (1999), using the web to promote active-student learning in economics. The Web provides a useful tool for learning economics when used as part of an overall active-learning teaching strategy.
Web provides an additional teaching tool to engage students actively in the learning process, its use in economic education is likely to improve cognitive learning and generate broader student interest in economics. Web in economics accomplish the goals for three reasons:

Firstly, the Web is a rich source of economic news, data, and information that can make economics relevant and understandable for students in ways that lectures and textbooks alone cannot. Instructors can use up-to-the-minute data and examples to illustrate economic concepts and provide additional sources of information from across the world.

Secondly, The Web also makes possible new learning environments that give students with different learning styles additional entry points into economics and multiple ways to practice economic concepts. For example, students who learn best by actively experimenting with economic concepts can practice those concepts via an on-line stock-trading game, macroeconomic simulations, or Web-based tutorials.

Finally, the Web provides new opportunities for collaborative learning. Becker (1997, 1359) lists "the need for active student involvement with classmates in the learning process" as one of the key elements in increasing students' performance and interest in further study of a subject. The Web is a natural tool for increasing student–student as well as student–instructor interaction through the use of on-line chat, discussion boards, or listservs. Manning (1996) and Agarwal and Day (1998) describe the educational benefits of using these tools in economics courses and their positive effect on student performance and attitudes toward economics.

Rationale for implementation Web based Active Learning

Following Leidner and Jarvenpaa (1995) the implementation of IT in education need us to take closer look at the ability of Widyatama University student to engage in Web based Teaching learning either as a complement or substitute to the traditional method.

The data of the entry test of the university is important information that can be a good answer in promoting active learning using web based. The entry test at Widyatama University covered the test of the basic knowledge of computer & internet. The result of entry test (USM) at Widyatama university shows that average computer & internet score is increasing in every academic year. The prospect students able to answer correctly almost 80% of the questions asked in 2007/2008 academic year.From this information the ability of students to engage in the process of computer based or web based teaching learning method cannot be doubted.

Table 3.Average computer & internet Score at Widyatama USM

Academic Year	%score answered
2005/2006	55
2005/2006	65
2006/2007	55
2006/2007	60
2007/2008	75
2007/2008	80

Following Britain & Liber, 1999, the data above interred us that there is low possibility of technophobia and the students tend to see computers as opportunities for increased efficiency and solution to all human problems (technophilia).

Complements or substitutes?

The implementation of web based teaching learning method would depend on the institution. Most of the researches have reported web based method as a complement for the traditional method. Research shows that teachers and learners prefer the blended learning approach, which mixes the traditional face-to-face teaching with online collaboration (Motteram, 2006). Generally, a collaborative blend brings cohesion to the components and learners by providing face-to-face, electronic tutoring and mentoring facilities (Clark, 2003). The blend is determined when the desired content and learning outcomes have been clarified.

Poulter & Chalmers (2005) stated that there are some factors to consider before implemented the web based teaching learning method either as a complement or substitutes to the traditional method:

- *The resources available.* The transition to online teaching is an opportunity to try a new teaching style, and this will take an investment of time and preparation.
- The *learning approach.* We have seen that the Web enables new possibilities for *active* learning. For example, student groups can collaborate on a document and have their contributions monitored by the lecturer and to research the material. Each student has his or her own Web page to facilitate interactions with other students. The Web would be special importance in the service learning group projects.
- *The student audience.* Part-timers, distance learners and others who have difficulty attending at arranged hours will benefit more from online documents and asynchronous online discussion. Students' access to and familiarity with computers are also factors to consider.
- *The importance of transferable skills.* Students may be looking to develop IT skills, online research skills or group working skills as part of their degree.

CONCLUSIONS

One measure of organizational success is the extent to which colleges and universities can make their graduates more employable, self-sufficient, and socially adept. Lecturer as a faculty member is responsible for the success of graduates in the learning process. The research and experiments about teaching method is interesting to many academic communities.. The academic community is still exploring the possibilities of the implementation of web based step by step (Hinde, 2003). As Poulter & Chalmers (2005) stated, the familiar process of hypothesis, experimentation and sharing results among peers is a long way from its final assessment of the usefulness of the Web for learning.

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