

# **SOCIAL SCIENCES & HUMANITIES**

Journal homepage: http://www.pertanika.upm.edu.my/

# Exploiting the Potential of Project-Based Instruction Benefiting from Authentic Atmosphere, Authentic Materials and Interactive Multimedia: An Attempt to Improve Students 'English Proficiency'

Agustina, L.\*, Handoyo, F. and Budiprayitno, B.

State Polytechnic Of Malang - Jl. Soekarno Hatta No.9, PO.BOX 04 Malang 65141, Jawa Timur - Indonesia

#### **ABSTRACT**

In this globalization era, especially in Indonesia, having the capabilities of English and technology is important for students to compete in the global employment market. The role of teaching strategy that is implemented adequately in the class would be really quite influential on the learning process. The purpose of this study was to explore the extent to which a project-based instruction programme could improve students' oral communication skills. The project was wrapped in a package of business meetings that are equipped with real-life cases related to business that learners were going to face. At this stage, the situation was made a lot like natural situation, including the costumes and the seats arrangement, aided with various interactive multimedia. The study is an action research using a total of 192 students from the Accounting Department of the State Polytechnic of Malang, Indonesia as its subjects. The study covered a period of two semesters. Methods of data collection included interviews, questionnaire, direct observation, and a pretest. Results of the study showed a great improvement on the students' oral communication skills. It was assumed that the project-based instruction programme has been implemented successfully.

Keywords: Project-Based Instruction, Authentic, Atmosphere, Materials, Interactive Multimedia

ARTICLE INFO

Article history: Received: 3 December 2013 Accepted: 2 April 2014

E-mail addresses:
lia\_alfan2d@yahoo.com (Agustina, L.),
sembloh1@yahoo.co.id (Handoyo, F.),
bambangbp@yahoo.com (Budiprayitno, B.)
\* Corresponding author

**INTRODUCTION** 

There has been growing awareness among those who are concerned with education that colleges in Indonesia should be more oriented to meeting the demand of more competitive workforce from prospective users. For this purpose, educational institutions should be able to produce professional human resources who can satisfy the demand of such workforces from global or multinational companies, in which the skills in international communication and technology are inevitable.

In this regard, teachers who are vey important elements in the implementation of educational policy should be able to innovate a strategy to make it real because the teaching strategy used by the teachers have a direct effect on how much their students will absorb the given instructional materials. A lot of studies have been conducted (see for example, Thomas, 2000; Solomon, 2003) to determine the effectiveness of task-based instruction in improving students' communication skills. Among other, a study by Lee (2002) proves the effectiveness of task-based instruction, which is synchronized with electronic interaction in enhancing students' communication skills.

This project-based instruction was designed to link and match students as graduate candidates to the job employment world. In relation to this, the researchers decided to use "business meetings" project as a classroom activities taught in authentic atmosphere and materials assisted with interactive multimedia. The project-based learning model was particularly chosen with the following purposes:

a. To alter the focus of the teaching and learning processes, which have been so far more teacher-oriented to the one which is more students-oriented.

- b. To integrate the issues and practices in the real world into a classroom instruction.
- To employ an innovative approach in evaluation. The kind of evaluation considered to be appropriate for the project-based learning is multiassesment an evaluation that focuses on both products and process.

The project-based learning will be effective if it is supported with the use of instructional technology (Erick, 2004; Blumenfeld *et al.*, 1991). As implemented in the study, the use of technology in teaching and learning processes refers to that involving the combination of utilizing text, graphs, animation and audio-visual for communication. Technology for the students is intended to increase the quality of the project outcome. The outcome should not only be some sort of written reports but also some presentation packages, which were presented through power point, flash, corel, photoshop and other kinds of software.

Furthermore, Newberry and Hughes (2006, 194-195) rigorously explain that project-based learning will:

• Help students develop skills for living in a knowledge-based world and society. Solving highly complex problems that require students to have the skills on reading, writing and foundation skills (teamwork, problem solving, research, time management, information synthesizing and using technology tools).

- Add relevance to the learning. By bringing real-life context and technology to the curriculum through project problems, teachers encourage students to become independent workers, critical thinkers, and lifelong learner. Students learn to take responsibility for their own learning. They will form the basis for working cooperatively and effectively with others in their adult life.
- Challenge students to high rigor.
   When working toward a solution to a
   problem, students often find themselves
   acquiring higher levels of academic
   skills and knowledge than if they were
   taught such skills in isolation.
- Promote lifelong learning. Exposure to activities, projects and problems teaches students to take control of learning, their first step as life-long learners. Projectbased learning promotes metacognition and self-knowledge.

Based on the above points, this study has the potential to bring about outcomes that have positive effect on improving the quality of instruction in the teaching and learning of English in Polytechnic, which in turn will improve students' oral communication skills.

#### MATERIALS AND METHOD

The researchers used the Action Research Method proposed by Kemmis and Taggart (1989) to illustrate the process from planning, action, observation and reflection that formed spiral moments.

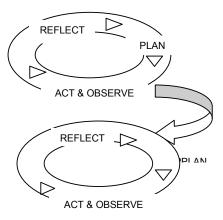


Fig.1: The Steps on the Action Research

# Research Subject and Setting

One hundred and ninety two (192) third and fourth semester students of 2012/2013 of the Accountancy Department of the State Polytecnic of Malang volunteered to be the subjects of study. The study was conducted in the language laboratory room at the institution. It took 37 meetings that were conducted twice in a week from 9 September 2012 to 05 July 2013, with each lasting around 90 minutes.

The project assigned the students to work in groups to perform as pseudo companies. There were eight classes with four groups representing four different companies in each class. Seven topics of business meetings held by the groups were set up as detailed in Table 1 below.

The situation of the business meetings that students held was made to resemble natural workplace situation, and this included the costumes and the seating arrangement that was aided with various interactive multimedia.

# Table 1 Seven Topics Of Business Meetings Held By The Groups Were Set Up as Detailed Below

#### NO PROJECTS Assigned

#### 1 "NEGOTIATION AND EATING OUT"

creating the soft data and presentation on Profile of a Company:

- a. History of the Company
- b. Vision and Mission
- c. Structure Organisation and the Job Description
- d. Sales and Product Analysis
- e. Marketing Strategies

# 2 "BUSINESSCOMMUNICATION AND SETTING UP BUSINESS 1" creating the soft data and presentation on:

- a. Budget estimation for a year
- b. Product in details and specifications
- c. Chanel and area distributions

# 3 "BUSINESS COMMUNICATION AND SETTING UP BUSINESS 2" creating the soft data and presentation on:

- a. The design, the quality of the product and the process
- b.the price decision
- c. the brand legalization
- d. the electric advertisement and brochure

## 4 "CREATING PROBLEMS AND SOLUTIONS" creating the soft data and presentation on:

- a. the source of a company's problems, such as; financial problem, corruption, fire, new directornew policies, hijacking, contamination effluent, vacuum position, etc
- b. the solutions taken

# 5 "WHEN THE PRODUCT COMING ON THE MATURITY STAGE"

creating the soft data and presentation on:

- a. modifying product
- b. developing human resource skills
- c. improving management
- d. doing efficiencies, product and sales analysis
- e. improving financial and marketing systems

# 6 DOING DISCUSSION & ARGUMENTATION ON "BUSINESS ETHIC

#### 7 "INNOVATION – EXPANDING THE BUSINESS"

- 1. creating the soft data (power point programme) on:
- a. The first agenda:
- 1. discussing the excess fund
- 2. discussing the project build
- 4. discussing the location planned
- 5. discussing the facilities planned
- 6. discussing the design planned

#### Table 1 (Continue)

b. The second agenda:

The problems facing during the project build (financial, natural disaster, material, transportation problems, etc.)

c.The third agenda:

Grand opening of the project

## Instruments

In order to facilitate monitoring of the implementation of the project-based instruction programme, several instruments were prepared, namely:

Table 2
The Instruments Used To Monitor The Implementation

Implementation		
NO	INSTRUMENT	FUNCTION
1	Pretest	to measure students' oral communication skills prior to the implementation of the programme
2	Project planning form,	for the students to write planned activities to complete each assigned project
3	Weekly report	for the teacher to record weekly and daily activities (progress report written by the students)
4	Observation check list	to monitor students' progress
5	Questionnaire	to obtain students' feedback on the project implementation

## RESULT AND DISCUSSION

The result of the pretest showed students' low oral communication skills, showing an average score of 64 (of the maximum score of 10). Fig.3 shows the students' performances in the pretest and Projects 1 to 7. The students' performances in

Project 1 were shown to be lower due to several problems they claimed to have encountered at beginning of the semester such as low vocabulary, being afraid of making mistakes, low self-confidence, and difficulties in understanding the authentic materials.

In order to cope with the problem regarding students' poor vocabulary, the researchers applied the technique of 'word memorization' in which students were suggested to memorize a list of new vocabulary taken from authentic materials that they have downloaded for the completion of the given project. Following word memorization activity, all the new vocabularies were directly implemented in the simulated business meetings. For a better performance of the business meetings, the students were suggested to have written preparation of the expressions to be used during the business meetings, and this was to be memorized as well.

As for the students' low self confidence, the researchers made attempts to boost their motivation to learn English. The students were convinced that mistakes in learning English were inevitable and that making mistakes should not be avoided. This is because making mistakes is beneficial for the students to learn from.

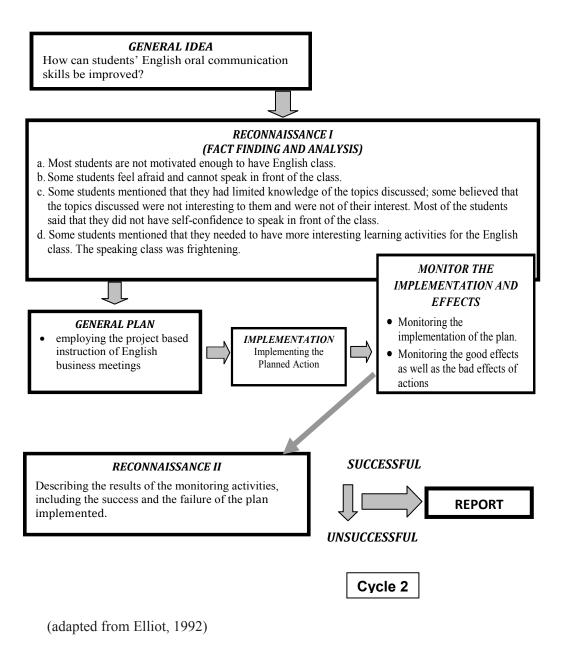
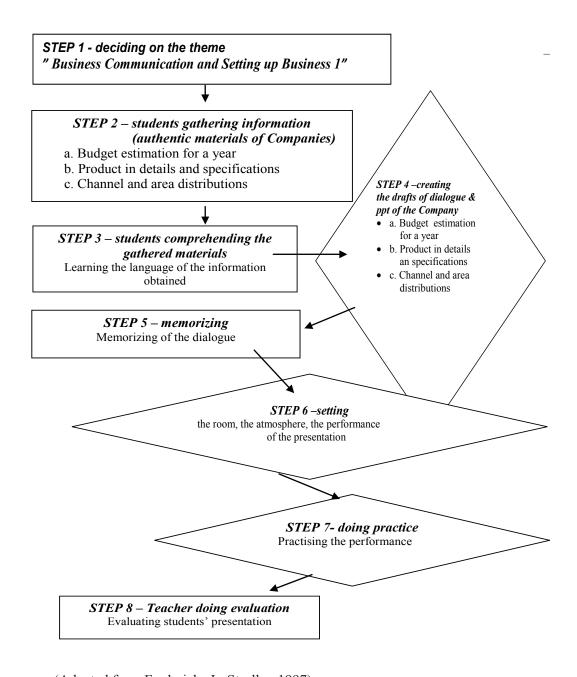


Fig. 2: The Procedure of the Classroom Action Research (CAR)



(Adapted from Fredericka L. Stroller, 1997)

Fig. 3: The Examples of the Steps Taken in Designing The Project

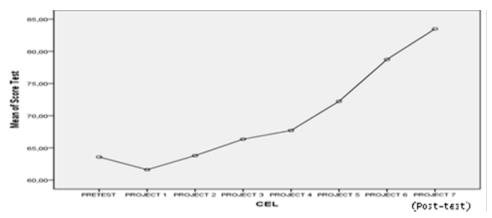


Fig.4: The Average Score of The Students'Improvement

It turned out that the 'word memorization' technique worked successfully, and this was proven by the students' improved performances in their subsequent projects (Projects 2 to 7). The students' increased motivation to learn English had apparently contributed to their improved performances, in that it reduced their being afraid of making mistakes. Thus, both teachers and students should have high motivation to reach their goals of learning, in this case, improving the oral communication skills. This is in line with Ur's idea (1996) that teacher's authoritative demand alone would not lead to higher motivation and better achievement. Teacher's authoritative demands should be accompanied with students' involvement in the decisions.

Another way to increase students' self-confidence and encourage risk-taking behavior in making mistakes during the simulated business meetings, the teacher-researchers attempted to have a closer relationship with students. Personal approach to students was done in order to attain a closer relationship. Consequently,

there seemed to be a closer relationship between the teacher and the students. In turn, the close and warm relationship between the researchers and the students increased students' motivation to complete the projects. Brown (2001) stated that students' increased motivation was also the result of students-teacher close relationship that was believed to be able to increase students' intrinsic motivation to learn.

As for students' problems in understanding authentic materials which they also found difficult to summarize, the researchers suggested the students to find simpler authentic materials. The difficulty level of the materials should be at the appropriate level and this could be detected from the number of difficult or new vocabulary items. Too many new vocabulary items may indicate materials that are too difficult to learn. Day and Bamford (2000) stated that a simple language should be considered as the solusion when language learners found problems with difficult language in the reading text.

However, the researchers kept on suggesting that the students should continue using authentic materials for their subsequent projects as it was thought to be important authentic material for them to improve their proficiency and help prepare themselves for real use of the language. This is in accordance with one of the principles of the project-based instruction, which focuses on questions or problems that drive students to encounter (and to struggle with) the central concepts and principles of real-life cases (Blumenfeld *et al.*, 1991; Stepien & Gallagher, 1993).

In an attempt to develop students' ability to comprehend a text and to summarize it, the researchers suggested them to simplify the gathered authentic materials to be presented in the business meetings. Besides looking up for the meaning in dictionary, students were also encourage to ask for the teacherresearchers' assistance in comprehending the authentic materials. This technique of simplifying authentic materials seemed to be very helpful for the students to complete their projects as it helped them to understand new topics, long text, and difficult text. The students would develop strategies to comprehend different kinds of text and to orally communicate the contents to others.

Moreover, simplifying authentic materials was followed with the students having written preparation for the simulated business meetings. This helped them elevating their speaking fluency since they had already equipped themselves with the correct contents to express and the control of grammar and vocabulary to be used in

during the business meetings. Students' increased fluency, in turn, positively affected self-confidence. This is very prominent since increasing students' self-confidence is believed to be very essential in building their intrinsic motivation to learn (Brown, 2001).

Toward the end of the year, the researchers were more convinced that a project-based instruction was a good instruction model. The strategy leads the students to become more independent learners, to be more creative, to be more innovative, to outcome a product, to enrich the students' knowledge, to synthesize the authentic texts, to identify, to elaborate, and to become problem-solvers. Furthermore, this particular model had good management as the students were supposed to work hard, push their egocentric to become more tolerant, to think of others, to work in team, to develop self-discipline and to develop more creative and dynamic strategies. This is in line with what Newberry and Hughes (2006) said that when students experienced a problem during the process of their learning, they were more likely to make connection and thus see the value in what they were learning.

A project allows students and teachers to focus and to study on the central idea in depth. Content is more meaningful to students because it is real world learning and they can look at their work in a way that is interesting to them. Students can collaborate with each other to explore ideas. Student ownership is the true drive of project work. The process of working on a project will help students display independence and

construct their own knowledge through questions that they have developed with the class.

An effective assessment programme that had been created in this study was using multiple strategies to demonstrate the growth and to finish product that should be closely correlated to the stated goals. The fact that the students gained significant progress from the beginning to the end of their academic year indicates that the implemented strategy has helped them improve their oral communication skills.

The decision to allocate the project based instruction programme within two semesters was appropriate and sufficient since the period was sufficient enough to identify students' increased self confidence and improved motivation. The questionnaire distributed at the end of the academic year, to determine students' impression on the implementation of the model, revealed that the students felt motivated and satisfied with the outcome of their learning. The study also received positive responses from the students regarding the evaluation process which emphasized not only on the final product but also on the process the students were going through to prepare for the business meetings.

#### **CONCLUSION**

When implemented properly, the project-based instruction is proven to be an effective strategy to improve students' oral communication skills. This is due to the following factors:

- a. The high involvement of the students. As the students act as the creators of the project, they tend to be committed to do their best. This has been confirmed throughout the project preparation and implementation as well the reporting of the project.
- b. The warm atmosphere. The teacher placed her position as the facilitator and was more concerned with improving students' motivation, desirable group dynamic, their creativity, responsibility, tolerance, self confidence and discipline.
- c. Scaffolding power. The strategy leads the students to develop from more dependent learners to become more independent ones.
- d. The implementation of multiassessment. This assessment focuses on both, the process, and the product.

#### REFERENCES

Bell, T. (1998). Extensive Reading: Why? And How? *The internet TESL Journal*, 4(12), 12.

Brown, H.D. (1994). *Principles of Language Learning* and *Teaching*. U.S.A.: Prentice Hall.

Brown, H.D. (2001). *Teaching by Principles*. New York: Addison Wesley Longman.

Blumenfeld, P., Soloway, E., Marx, R., Krajcik, J., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist*, 26(3-4), 369-398.

Day, R. R., & Bamford, J. (2000). *Extensive Reading* in the Second Language Classroom. New York: Cambridge University Press.

- Elliot, J. (1992). *Action Research for Educational Change*. British. Philadelphia: Open University Press Milton Keyness.
- Hughes, E., & Newberry, P. (2006). Project leads the way. Clifton Park NY. Retrieved February 10, 2007, from http://projects.coe.ugaedu/epltt/ index.php
- Kemmis, S. & McTagggart, R. (1989). *The Action Research Planner*. Deakin University Press.
- Lee, L. (2002). Enhancing Learners' Communication Skills Through Synchronous Electric Interaction and Task-Based Instruction. Foreign Language Annals, 35, 16-24.
- Oxford, R. (1990). Language learning strategies: What every teacher should know. Boston: Heinle & Heinle Publishers
- Project-Based Learning. Retrieved January 02, 2008, from http/www.Edu Tech Wiki.unigue.ch/en//project-based learning.
- Richards, J. C. & Renandya, W. A. (2002). *Methodology* in Language Teaching-An Anthology of Current Practice. U.S.A Cambridge University Press
- Stepien, W. & Gallagher, S. (1993). Problem-based learning: As authentic as it gets. *Educational Leadership*, *51*, 25-28.
- Ur. P. (1996). A Course in Language Teaching-Practice and Theory. U.S.A.: Cambridge University Press.