A Study on the Integration of Online Learning into English Course Design

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ABSTRACT

The purpose of this study was to examine if the integration of online learning into sophomore general English class was effective to advance students’ learning performance regarding listening, reading, grammar usage, and vocabulary.

A needs analysis questionnaire was constructed and distributed to 76 sophomore who were taking a required Sophomore General English class in a northern university in Taiwan. These students were divided into an experimental group and a control group. For experimental group, Internet learning resources adapted from Studio Classroom, Live ABC, New TOEIC, and GEPT vocabulary test bank play an important role in the course design and learning activities in and out of class. Throughout the fall of 2011 and spring 2012, four thematic teaching units, each using a theme-based structure were given to both groups of students as they join Sophomore English class. During the initial stage of this course, Michigan Test, a well-established achievement test served as a pretest for examining the participants’ English learning performance was conducted; the posttest of Michigan Test was again given at the end of the following semester in 2012. A SPSS sampling t-test was run in this study. The Michigan Test results indicated that students in both experimental and control groups made progress in vocabulary, listening, and grammar learning. For the overall performance, with the assistance of the integration of online learning materials and the practices of online mock tests, the experimental group outperformed the control group by 1.10 points.

Key words: initial needs assessment, online test

I. INTRODUCTION

In Taiwan, English course has always been one of the major content areas from elementary school up to college level. Following with the advancement of technology, computer-assisted language learning in TESL (Teaching English as Second Language) field has become a teaching trend. To create a more interactive, learning at ease, self-paced, and authentic English learning environment for today’s Taiwanese students, many English teachers feel struggled to dominate the teaching-and-learning time with mainly lectures, instead, they are willing to provide a learner-centered, performance-based as well as self-motivated learning atmosphere in the school setting. In other words, learning English should not be “forced” or “required” responsibility which demand students to succeed in academic achievement only. Moreover, the increasing usage of Internet-driven or online learning as part of the formal instructional strategy and self-study learning tool help Taiwanese students to eliminate their “fear” toward leaning English. In order to have high competition ability in their future career or work environment, nowadays, Taiwanese students understand the importance of self-engaged motivation, autonomous learning and their association with online learning. To get more specific, for these so called “Internet generation” youngsters, the integration of online learning into English learning is, no doubt, a priority.

For non-English major, science-oriented college students in this study, communicative trainings of English are really important and the training usually takes integrated instructional approaches to achieve the goal. In an integrated/thematic, Internet-assisted approach to learning, students become active participants in the learning and assessment process. As Walker and Soltis (2009) stated students’ learning records on website and other progress of learning, all can be valuable tools when teachers designing their own curricula, many teachers find much enjoyment in thinking about new ways to integrate multiple or
various strategies into their class. As a matter of fact, integrated thematic instruction calls for a non-traditional approach to assessing the effectiveness of the instruction and student learning performance (Etim, 2005).

II. PURPOSE OF THE STUDY

This study was designed to explore if the integration of online learning into Sophomore English course was effective regarding participating students’ performance in listening, reading, grammar, and vocabulary.

III. LITERATURE REVIEW

It is not surprising to find that many of today’s foreign language texts are designed to be theme/topic-based materials and instruction in their chapters or units. The emphasis of foreign language learning has moved from a traditional approach to an integrated-skill communicative approach, including a variety of online learning strategy, in which learners acquire both linguistic and cultural competence (Lee, 2001).

Furthermore, with the assistance of Internet learning, a structured theme/topic-based five skill (reading, speaking, listening, writing, and communication) class could provide the learners more authentic reading materials as well as up-to-date global information from different forms such as online test and online learning resources. To be more specific, today’s college students need to be more equipped with wide reading through Internet and its practice of self-expression, which builds language fluency, large vocabulary, syntactical knowledge, and culture appreciation ability (Wang & Shih, 2007).

Education in the 21st century should be more inspiring and full of flexibility; however, it has been criticized for being overwhelmed by the “test-driven” orientation in English education (Chu, Wang, & Shih, 2013). Under the circumstances, students learn the materials unavoidably put stress on gaining good grades at the expense of students’ real interests and needs. However, as TESL teachers, one of the unavoidable missions still is to help students pass proficiency test in order to survive in today’s highly competitive society. With a new perspective, today’s English teachers feel that most students may enjoy learning at their own pace if only they have better or full control of the way they learn. Facing reality, taking proficiency test is necessary for their future, but they no longer have to be caught up in dilemma. English teachers serve as the facilitators who find out what students’ goals are and what topics they want to learn about, then built these into the curriculum as much as possible. Students would be motivated to learn as long as they think the material is worth learning. However, teachers should keep in mind that the existence of materials is to strengthen learning and teaching, not just enhance students’ workload in learning. Many studies suggested that teachers add issues about society and contemporary life in the class according to Taiwanese students’ needs and local culture to reach the ultimate goal of learning.

As we all know, students’ needs, abilities, and interests should be taken into consideration in the selection process of learning materials to reduce students’ learning burden and help students achieve the objectives set for each unit or lesson provided in the class. In order to motivate students, language teachers need to offer something authentic to them, and something that corresponds to their students’ practical needs along with passing tests. Apparently, English magazines as well as online English learning materials are good authentic materials which are worth being adapted to the classroom to bring the best out of each student.

IV. DEFINITION OF TERMS

Initial needs assessment. In the first week of the class, students will answer survey questions about their learning background, learning needs, and possible goals for the course to prepare teachers to write or modify their own goals and objectives (Graves, 2001).

Online test. Standardized GEPT, New TOEIC, and 5,000 vocabulary list adapted from GEPT website serve as the basis and test bank which facilitate a self-paced online learning and online mock test for college students in general (Wang & Shih, 2012).

V. RESEARCH DESIGN, DATA ANALYSIS AND FINDING

Part One: Implementation of Needs Analysis and Its Significant Results

At the first week of class in fall 2011, 76 sampling students in Sophomore English class were distributed a “needs analysis” questionnaire to understand the following questions: (1) age to start learning English, (2) motivation in learning English (3) motivation in learning online learning materials (4) difficulty in learning English, (5) with the assistance of online learning, the specific needs for them in learning English for a specific field of study (i.e. the professional subject taught in whole English), (6) with the assistance of online learning, the needs of using authentic English, (7) the needs for them in learning Internet English, and (8) perception about online learning and proficiency test. Seventy-one valid needs analysis questionnaires were collected.

As for the starting point, 40.8% of the sampling subjects started learning English at the 3rd grade in elementary school. Moreover, 22.5% began to study English since kindergarten. The answer for “having motivation to learn English” was encouraging to the researchers. 51 (71.7%) of the sampling students expressed that they have motivation learning English.
To probe for a more clear answer, 74.6% of these students voice out their opinions which further confirmed that they “have motivation in learning online learning materials.” Regarding the biggest challenge they face in learning English, 84% of them pointing out that they have had very limited vocabulary; they expect teachers help them enlarge the vocabulary span in Sophomore English class. To get more specific, 74.6% of those participants indicated that they need to enhance their language ability in taking a whole English class in their professional field of study. As we all know that Ministry of Education put emphasis on “Whole English Class for Learning Professional Subjects” as one of the most important policy enforced in Taiwan today. Sampling subjects here do have a strong need to get used to or pass these professional subjects taught in English. Table 1 showed that 53 among 71 participants indicated that they need to improve their ability in taking a whole English class offered from their professional subject or specific field of study.

Most importantly, as Table 2 showed, 62 participants expressed they need to improve communication skills in utilizing authentic English. In Table 3, 81.3% of these sampling subjects expressed clearly that they need to learn how to read materials (e.g. Internet reading materials including magazines or other articles) written in English. When the choice “somewhat important” is included, 97.3% sampling subjects believe there is a need for them to build up their reading skills based on the trainings learned in class, so they can read and understand English magazines such as Studio Classroom and other Internet learning materials now.

Many participants (78%) recognize that performance in English proficiency test plays a very important role in their future, especially for future career development in the work place. They understand proficiency test is associated with general language skills (i.e. reading, listening, grammar, and vocabulary). Moreover, students understand proficiency test is to examine how good their language skill currently is and how much efforts they need to put into the learning progress to strengthen these language skills. A need to integrate online learning materials into sophomore English class was indicated by the sampling students from this needs analysis questionnaire.

### Table 1. With online learning, be able to take a whole English class in professional subjects

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important</td>
<td>4</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>somewhat important</td>
<td>14</td>
<td>19.7</td>
<td>19.7</td>
</tr>
<tr>
<td>important</td>
<td>37</td>
<td>52.1</td>
<td>52.1</td>
</tr>
<tr>
<td>very important</td>
<td>16</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Table 2. With online learning, be able to communicate with others using authentic English

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important</td>
<td>1</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>somewhat important</td>
<td>8</td>
<td>11.2</td>
<td>11.2</td>
</tr>
<tr>
<td>important</td>
<td>33</td>
<td>46.4</td>
<td>46.4</td>
</tr>
<tr>
<td>very important</td>
<td>29</td>
<td>40.8</td>
<td>40.8</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
<td>100.0</td>
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</tbody>
</table>

### Table 3. With online learning, be able to read English Internet resources

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important</td>
<td>2</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>somewhat important</td>
<td>12</td>
<td>16.9</td>
<td>16.9</td>
</tr>
<tr>
<td>important</td>
<td>44</td>
<td>62.0</td>
<td>62.0</td>
</tr>
<tr>
<td>very important</td>
<td>13</td>
<td>18.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Part Two. Implementation Stage

Research procedure illustrated below:

Needs analysis

Conducting the research on 76 sophomore students

Experimental group

$\text{§Initial modification for course design}$

$\text{§Pre-test}$

$\text{§Reading materials: Textbook, handouts, authentic, and online i-learning materials}$

$\text{§Homework:}$

- Exercises based on the textbook
- Self-practice of the online mock tests assigned by the teacher

$\text{§Activity:}$

- Before-reading—briefing the structure of online test
- Turn-to-your-partner— for error correction and discussion
- After reading—exercises based on online reviewing test in class

$\text{§Post-test}$

Control group

$\text{§Initial modification for course design}$

$\text{§Pre-test}$

$\text{§Reading materials: Textbook, handouts, and authentic teaching materials}$

$\text{§Homework:}$

- Exercises based on the textbook

$\text{§Post-test}$

Data analysis

In this study, the researcher and her co-workers recognized that one of the most important features of course design for both groups was developing opportunities for students to fully understand what they know, how well they master course materials or how well they could use skills they were developing in the course and from the course. Vocabulary list and context provided from online Studio Classroom, Live ABC, Teacher vision (Tyler, 2005), New TOEIC and GEPT were added into experimental group.

The basic course design framework for both groups were stated below:

1. Syllabus checklist. A well-organized syllabus, included course goals, objectives, descriptions, required textbooks, homework assignments, assessment rubrics, class rules, weekly schedule, and a clear guideline for individual and small group participations in group activities, discussions, presentations, and individual test schedule was given to each student. From the first week of the class, each student of both groups understood clearly that this class required students come to class prepared.

2. Learner-centered, Theme-based Design. A theme-based, learner-centered instructional design served as the core. The learner-centered thematic teaching units were implemented in sequence, they were: (1) Technology Units – including “Internet Ethics” and “Internet as social media” units. (2) Culture Appreciation Units – including “friendship across culture” and “education around the world” units. (3) Contemporary Concern Units – including “global concerns” and “earth green” units. (4) Critical Thinking Units – including “controversial issues for debating” and “movie viewing for reflective thinking” units.

Part Three. Ongoing Process for the Application of Online Learning and Online Mock Test in Experimental Group

1. Online test integrated as part of class learning activity – in class online reviewing test which was composed by The Language Center in the university.

   (1) Schedule: two times in one semester; first one was given before midterm exam, second one was given before final exam

   (2) Content related to thematic units of sophomore English, GEPT, New TOEIC, and the format was presented as (A) vocabulary and structure (items 1-10), (B) cloze (items 11-15), and (C) reading comprehension (items 16-25). Items were selected from the aforementioned test bank as to help sophomore in the experimental group to be familiar with English proficiency test.

2. Online mock tests were given as self-learning practices. This part was assigned as homework which allowed students to finish it within a certain period of time.

   (1) Schedule

      (A) Four GEPT intermediate level mock tests open to test-takers (biweekly)

      (B) Two GEPT high-intermediate level mock tests open to test-takers (biweekly)

      (C) Two New TOEIC mixed level mock tests open to test-takers (biweekly)

   (2) Test contents cover both reading and listening sections

   (3) Test-taking procedure

      (A) Log in: http://easytest.lib.cycu.edu.tw

      (B) Select GEPT or New TOEIC test bank, then select “course code” to begin the mock test

      (C) Go over answer sheet to self-correct errors.
Part Four. Results of Pretest and Posttest on Learning Performance

This study applied SPSS sampling t-test. A noticeable increase was found on the sampling students’ listening, reading, as well as vocabulary performance. The total mean for experimental group improved 0.14 points for listening, 1.38 for grammar, 2.28 for vocabulary, and 0.03 for reading. For control group, they gain 0.03 for listening, 1.24 for grammar, 1.65 for vocabulary; they had regression on reading. As for the total mean, overall progress for experimental group improved 3.83 points; control group gained 2.73 only. The result turned out to be that experimental group outperformed control group by 1.10 points.

For experimental group, listening, reading, even the usage of grammar all improved. In the beginning of this study, both groups voiced out their serious concern for a lack of vocabulary; at the end of the study, the results revealed the fact both groups have improved their performance in vocabulary learning. The regression in reading score for control group revealed that the integration of online learning and online test was needed for this group; both online learning and online mock test help college students read more and prepare better in terms of English proficiency.

<table>
<thead>
<tr>
<th>TABLE 4. LEARNING PERFORMANCE IMPROVED IN THE STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore from Department of Chemical Engineering (Experimental group)</td>
</tr>
<tr>
<td>Sophomore from Department of Industrial Engineering (Control group)</td>
</tr>
<tr>
<td>Sampling subjects took pre-and-post test:</td>
</tr>
<tr>
<td>29 students</td>
</tr>
<tr>
<td>Total mean score improved</td>
</tr>
<tr>
<td>Listening mean score improved</td>
</tr>
<tr>
<td>Grammar mean score improved</td>
</tr>
<tr>
<td>Vocabulary mean score improved</td>
</tr>
<tr>
<td>Reading mean score improved</td>
</tr>
</tbody>
</table>

VI. CONCLUSION AND RECOMMENDATION

In this study, the repeatedly practice of online mock test and the large amount of time spent on reviewing online reading materials indeed help individual students in the experimental group to be more self-engaged in learning and better equipped with test-taking skills. The results of learning performance indicated that students in experimental group made impressive progress on listening, reading, grammar, and vocabulary; for them, the total mean between pretest and posttest improved 3.83 points. Additionally, the results of needs analysis enabled the teacher to be more informed while designing class learning activity, and put more emphasis on the use of online learning. However, limited by the number of sampling size of this study, more studies and an in-depth interview should be taken on both groups; more observations and follow up study should be done in the near future.

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REFERENCES