Instructional Design: Using the ADDIE Model to Build a Writing Course for University Students.

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　この小論は高松大学における英作文コースを開発するために使われたインストラクショナルデザインプランの梗概を述べたものである。このデザインのために The ADDIE model が採用され、そのことについてはスミス＆レーガン著「インストラクショナルデザイン」（1995）の中で大要が述べられている。焦点は次の5点－分析、設計、開発、実施、評価－である。分析の結果英作文の基本的な技能を習得し発展させるための機会を大学生に与えるプログラムを実施する必要があることが証された。著者はこの分析に基づき綿密に考え抜かれた実施計画を開発した。完全な設計は当小論において詳説されている。

Abstract

　　This paper is an outline of an instructional design plan that was used to develop an English composition course at Takamatsu University. The ADDIE instruction model for this design is outlined by Smith and Ragan (1995) in their book entitled *Instructional Design*. The focus is on 5 points: Analysis, Design, Development, Implementation and Evaluation. The analysis proved that there was a need to implement a program that would give college students the opportunity to learn and develop basic compositional skills. The author developed a carefully thought out plan of action based on this analysis. The complete design is detailed in this report.

Analysis

　　This instructional design setting is a Japanese university College of Business Management. It is a local private university with just over 410 students. There are 2 English instructors who are native speakers of the English language and 3 English instructors who are Japanese. There is a limited amount of diversity among the students in their educational background. They are 84 percent Japanese students and the rest are exchange students from China. All of the Japanese have been educated in the Japanese primary and secondary education system. The Chinese students have been educated in the equivalent public school system in China.

　　Native English instructors working in the Department of Business Management, teaching a course in writing, found that the nearly all of the students have poor essay

writing skills. While being able to construct sentences fairly well, they seem to have great difficulty in organizing and developing their ideas into the form of an essay that has an introduction, body and conclusion.

Moreover, when asked to do research for essays, a large majority of students complained of not being to find any information on the topics that they were supposed to study. When quizzed on basic library research techniques, instructors found that most of the students had no training in conducting library research.

The problem was brought to the attention of the head of English teachers in the Department of Business Management, who immediately saw it as a problem and asked the native instructors to design a course that would bring the students to the level that they should be at in order to learn these skills so they could apply them to the real world business environment.

Since this realization occurred just before a planned bi-annual meeting of all full-time and adjunct faculty. The topic was loosely discussed at this conference. The native speakers, working as instructional designers decided to do a Problem-Finding, Problem-Solving model analysis (Smith & Ragan, 1999, p.35), since the meeting and the agenda space would facilitate this type of analysis.

1. The recognition of the problem was unanimous. The problem affects all instructors who work in the last semester with graduation students preparing for individual research projects that must be completed for graduation.

2. The cause of the problem seems to be related to poor training at earlier level of education, coupled with the lack of emphasis at the undergraduate level of higher education.

3. The solution to the problem is most definitely learning.

4. Instruction is offered only by some instructors who teach in their seminars to students preparing to complete their graduation research papers. However, out of a total number of instructors present, only 3 said that they formally taught these skills.

The instructional designers were shocked that this seems to be such a problem for everyone, yet no one seems to have tried to do anything about it. The eagerness for

this situation to be resolved was apparent in the meeting and some basic learning goals were established.

In order to better assess the problem. A 4 step approach was conducted:

Step 1. Examine the high school curriculum established by the Japanese Ministry of Education for writing. A careful examination was made in both the course of study for English as well as the course of study for Japanese. This proved to be inconclusive at best. The Japanese Course of Study for English composition published by the Japanese Ministry of Education (1998) only goes as far as instruction teachers to prepare students to write sentences using proper grammar patters. As for Japanese, the instructions are extremely vague, especially compared to most standards written for most states in the US. There is simply general advice to prepare students to be able to "express themselves in Japanese."

Step 2. Since Step 1 was inconclusive, it seemed that to determine the learners' background was to interview senior high school teachers about the local course of study. Telephone interviews were conducted with teachers from each of the 5 major senior high school types in Japan: Academic schools, commercial schools, technical schools, agricultural schools and fishery schools. The questions focused on what background the students had in writing and what techniques or standards, if any, were used to teach writing. The general outcome was:

1. Reading is more of an emphasis than writing.
2. Proficiency in writing and reading the 2,000 basic Japanese ideogram characters before graduation is paramount at all levels.
3. All schools require composition only as a part of homework for the trimester break periods. Academic schools only occaisionally require students to write compositions longer than 1 paragraph 1 to 2 times a trimester beyond that.
4. There is no standard form or style that is taught for composition.

Step 3. It was determined that since the writing course had already elicited several examples of recent student works, writing samples from 46 Students were examined by the instructional designers in order assess the gap between the desired and current achievement as outlined by Smith and Ragan (1999). It was determined

that the writing course had already elicited several examples of recent student works. They exhibited the following characteristics after being judged by the two instructional designers:

1. Three of the students used separate paragraphs.
2. None of the students had what would be considered a proper introduction to the topics.
3. Four of the students had what would be considered a proper conclusion to their essays.
4. Blatant plagiarism was evident in more than half of the samples.

Step 4. The instructional designers distributed a questionnaire to the faculty at the college to find out what kind of writing, staff at the university require for their students. Only 5% of the staff said that they gave writing assignments for their students and none of them said that required any standard form to the students. Half of the instructors that gave writing assignments had a required length to student reports. More than 90% of the instructors agreed that students should be able to do all or most of the following:

1. Conduct library research.
2. Conduct Internet research.
3. Develop their ability to organize information.
4. Write research and include opinions, ideas or proof of synthesis

Design.

The main design goal is little less complex than one might imagine from a writing project of this type. Clearly, the four concerns of the majority of instructors which are listed above, would have to be the main goals of our course of instruction. Since it was found that all of our students come from a very similar background and have basic sentence writing skills that one should find in a sentence construction, we want to focus more on the cognitive strategies of being able to develop an idea for writing.

However, there is still a place in any language class for developing mechanics of sentence construction such as syntax, grammar, structure, etc. So, we include this

in our set of goals. There is also the idea the principles outlined by R. Gagne and B. Bloom (Smith & Ragan, 1999).

R. Gagne (1965) divided learning into 5 categories: Verbal or declarative knowledge, intellectual skills, cognitive strategies, attitudes, and psychomotor skills. We have divided our learning goals around these categories to try and hit all aspects of the learning curve and to put educational value behind our goals.

We also use correlate our goals to corresponding competences as outlined by Benjamin Bloom (Bloom, 1956). These include: Knowledge, comprehension, application, analysis, synthesis and evaluation. These give our goals validity and by asking if we are fulfilling these competencies, we can justify not only our goals, but also the concrete tasks that we assign for learners in order to achieve the goals. Then, in the evaluation phase, we can use this list to find out give validity to not only our evaluation of lessons and courses for future application, but also for simply making tests to see if the students achieved the goals that we set for them.

Learning Goals and Type of Learning:

Objective	Standard	Gagne's Domain	Bloom's Taxonomy
Learners will be able to identify a research topic and 3 sub-topics	Criteria established by Takamatsu University, Dept. of Business Management	Cognitive Strategies	Synthesis
Learners will be able to write a 5-paragraph essay with an introduction, 3 sub-topics to include their own synthesis with opinions,ideas and a conclusion.	Criteria established by Takamatsu University, Dept. of Business Management	Declarative Knowledge Intellectual Skills	Sythesis Evaluation Application
Learners will be able to use the library to research printed information on their topics	Criteria established by Takamatsu University, Dept. of Business Management	Procedural knowledge (declarative knowledge)	Knowledge

Learners will be able to use the internet to find information about their topics	Criteria established by Takamatsu University, Dept. of Business Management	Procedural knowledge (declarative knowledge)	Knowledge
Learners will be able to use proper mechanics of grammar, syntax, etc.	Criteria established by Takamatsu University, Dept. of Business Management	Intellectual Skills	Application
Learners will be able to stand in front of the class and discuss their research topics.	Criteria established by Takamatsu University, Dept. of Business Management	Declarative knowledge	Comprehension

Development.

We will worry about the criteria that were established at the English of instructors in the Department of Business Management, since there are not other standards established for this. Since this will be a required subject for all freshmen, the department wants to establish a standard course that can be taught by any of the full-time or part-time instructors

The two native instructors have been assigned to the task of developing this course. There are three reasons for this: 1. The native speakers have more experience in this field due to the nature of the education system abroad, where they both were schooled. 2. The native teachers are free on Thursday afternoons, and this will allow them a space of time each week to work together as needed. 3. Because they are considered the university's "experts" in the field of English, they will be able to make the printed and computer materials and the added step of getting those materials checked if they are created by the Japanese instructors of English will be eliminated.

Additionally, both of the native instructors have already been teaching a self-designed elective course in English writing prior to this becoming a topic for instructional design. Some of the materials and procedures already developed will undoubtedly be used for this project.

The native English instructors will be responsible to develop materials used for this course. Furthermore, they will develop an education program for other instructors. As Smith and Ragan (1999, p.331) clearly state:

..the presence of plans and materials that are suitable for instructor use is not
where the production process ends. Without appropriate training, instructors
may deliver poor instruction, regardless of the quality of the materials.

Corresponding with the procedures listed below, the native instructors will develop a course of instruction and teachers manual for anyone who will plan on teaching this course. This manual will serve as the text for the training course for the instructors. It will be considered both a course- level guide and a lesson-level guide.

Smith and Ragan (1999) give an excellent example of Instructor guide contents. With only slight modifications on their example, Our course will include a course- and lesson-level explanation of the entire 15-session course:.

Course-Level contents:	Lesson-Level Contents:
Course title	Lesson title
Course goals	Lesson goal
Target audience	Lesson objectives
Course objectives	Lesson Purpose
Course purpose	Place of Instruction
spaces needed	Equipment needed
Equipment needed	Materials needed
Materials needed	References
References	Lesson plan--Outline of each
Schedule--general synopsis of	session.
each session	--detailed lesson
	plan for each
Time allocation	session.
	Time allocation

In addition to the manual, the instructional designers will produce the following materials for use by the instructors:

1. PowerPoint presentations to be used in the classroom for each of the sessions in the procedure phase.

2. Short quizzes that can be used for reviewing the material.

3. Software that can be used to keep records of student results on final presentations and the final exam.

Procedure.

It was decided that English would be the medium through which these objectives

were taught. The reason behind this is that all students, regardless of their department, are required to take English their first two years of college. Since the emphasis on English is communication and since the business world is mainly English (Bryson, 2001)

The course consists of 14 regular sessions and followed a review and by a test day. Each session is 90 minutes.

Session 1.

1. Explain to students that they are going to conduct all of the goals listed above in the goals section.
2. Emphasize that students will be doing research, writing a report and presenting it to the class.
3. Outline the steps of the course.
4. Describe the evaluation procedures.
5. Students assigned to study groups for use outside of class.

Session 2.

1. Tour of the library conducted by the library staff.
2. Make sure that the students take notes.

Session 3.

1. Review of library tour.
2. A short quiz about the library.
3. A trip to the computer room.
4. A presentation in the library on how to use search engines.

Session 4.

1. Review of computer room tour
2. A short quiz about the computer room.
3. How to write a bibliography. What parts of a book to write down in order to write a bibliography later. Also mentioning to make a note of important homepages that students visit.

Session 5.

1. Review of bibliography.

2. Short quiz on main points of bibliography.

3. Introduction to finding a research topic. Students will have to pick a topic related to American culture that they are interested in. They can choose holidays like Thanksgiving or Christmas. They can choose cultural topics like American parties, dolls, weddings, etc.. The instructor will emphasize that they should pick something that they are interested in doing research about.

Session 6.

1. Instructor will check students to make sure they have picked topics that fit into the criteria established earlier. Discussion will be about narrowing topic and choosing subtopics .

2. Students will have an opportunity. Half of the students will go to the library and the other half will go to the computer room. Students will be required to find both library printed materials and Internet information about their topics.

3. The instructor will split his/her time between the library and computer room. Helping students to find information and assisting them in modifying their if they cannot find printed materials and Internet information.

Session 7.

1. A short meeting with students to answer questions and help with any problems.

2. Steps 2 and 3 of session 6.

Session 8

1. The instructor will give a lecture about the writing process. Emphasis will be made on all of the parts of 5 paragraph research paper and how to make sentences into paragraphs and paragraphs into a report.

2. Syntax and grammar will be reviewed.

3. The instructor will get the students started on their reports and assign them as homework.

Session 9.

1. Review of all of the parts of the report.

2. Instructor will check students who have completed their homework and advise

as necessary.

3. Instructor will give a lecture about the techniques for presenting research and give an example.

Session 10.

1. Instructor will check students who have completed their homework and advise as necessary.

2. The first group of students will present their research to the class and answer questions from the instructor and other students.

Session 11.

1. The second group of students will present their research to the class and answer questions from the instructor and other students.

Session 12.

1. Students will practice making outlines for a possible 5 paragraph essay. The instructor will give them a set of 3 topics such as. My family, My hobbies, My future. Students will think of three sub-topics for each topic and make an outline for a short essay.

2. Students will choose one of the outlines from step 1 of section 12 and write a short essay about it.

3. The instructor will check all student essays and give them advise as needed.

4. The students will have homework to find bibliographic data and write a short report from a selection of 3 topics.

Session 13.

1. Instructor will check homework and give advise as needed.

2. Instructor will explain the test to be carried out the next week. (Steps 1 and 2 of section 12--closed book)

Session 14. Review Day.

Session 15. Test Day.

Implementation.

Since the main goals of this project are to teach cognitive skills of being able

to conduct research, and having the ability to organize information for application to a successful report, instructors will use a variety of these approaches. "General Approaches to Teaching Cognitive Strategies" as outlined by Presley, Snyder and Carglilia-Bull（1987）seem appropriate.

The first phase of implementation will be teacher training to take place over 1 week during the 2 month spring recess. All English instructors will attend 5 sessions of 3 hours each.

To allow for the individual styles and preferences of individual instructors in the process of education, emphasis will be on use of a variety of these approaches.

1. Discovery and guided discovery: These are direct instructional techniques, to include the PowerPoint demonstrations and lectures.

2. Observation: In this step, the instructors will use modeling. They will show the students how to do the steps required and then watch the same students complete the task themselves.

3. Guided participation: Instructors and students will work together to complete the tasks. This method will be required in some stages of our plan. Especially during the topic selection stage and the library/Internet research phases, this method will be recommended.

4. Strategy instruction in books and courses. This method includes having some set procedures that the students will follow to complete student tasks. This method will be used after students completely understand each phase of the process that is the goal of this class, they will be an outline of a task they must complete and as a check of their knowledge of these skills. We will utilize this method after students complete their research papers and before the final exam as homework.

5. Direct explanations, largely teacher directed. This method utilizes concrete examples, modeling and practice. This is a very teacher-centered approach that will try to be discouraged for the most part, but this is a typical teaching style in the Japanese education system and there will certainly be both instructors and students who will feel comfortable with this method. It will be

emphasized that this method be used along with a mixture of other methods that are more student-centered.

6. Dyadic Instruction.　This method involves a one-on-one intervention between student and teacher to complete instruction.　This method will be highly emphasized in our course.　Especially review sessions for advancement to each step of the final writing project and final exam, this method will be utilized. Instructors will get together with students on an individual basis to check that they have 1) Chosen a good topic, 2) completed the research phase and 3) need their papers checked before final submission.　On top of this, the instructors will make them available during office hours for any additional advice.

7. Self-instruction training.　In this project, students will be assigned to study groups in order to help each other.　Japanese students are very used to working in groups.　This method is especially useful in our situation and gives students a chance to learn from each other.

The second part of the implementation phase will be to instruct the students the course we have developed here in the classroom starting from the Spring term in 2004.

Evaluation.

The evaluation phase is split into two parts.　The first phase will be the evaluation of student work.　Based on each of the objectives in the "Learning goals and types of learning" listed above, students will be rated by their individual instructors based on the A, B, C, F system as established by the university.　An A is excellent work, a B is average, and a C will mean that the student needs improvement.　An F would mean that the student failed to complete more than 65% of the work.　This is the grading policy according to the university's published policy on grading in the Takamatsu University Bulletin (2003).

It is important at this part to point out that the evaluation system for students is rather simple when compared to their American counterparts.　The fact is that Japanese schools do not use a complex evaluation system for passing and failing a

course. There is no such thing as a grade point average and student marks are rarely if ever looked at when they seek employment.

With this aspect in mind, we must consider a system that is a bit more complex in order to evaluate this instructional design project. Students will be evaluated at each stage of the course. In turn, this evaluation will be used by the department in order to find out how they might need to modify the program in the future.

A summative evaluation will be conducted as outlined by Smith and Ragan (1999, p.352). Those authors explain that in order to evaluate the effectiveness, appeal, and efficiency of instruction, a collection, analysis and summary of data on students is essential. In our case, we want to know if the students were able to complete all the steps of this process.

In order to assess whether students were able to complete the tasks that are stated in our goals, the designers first built into the course an exam after the main research report project is completed. In order to complete the exam, students must demonstrate the abilities that they should have learned in order to fulfill the requirements of the research report. (See the "Procedure" section above.)

The test itself does not allow for students to show they can complete the research skills previously learned. However, in the homework leading up to the test, students will demonstrate a mastery of these abilities. (See the "Procedure" section above.)

Instructors will give the students a 1 to 5 grade for their abilities in each of the following sections:

Student Name	Student could choose a topic and 3 sub-topics.	Students could conduct library research.	Student could conduct internet research.	Student could write an organized 5 paragraph essay.
Give a score of 1 to 5.				

1 = poor

2 = Can understand the basic concept but needs work.

3 = Can undertand the concept and after consideration and minimal guidance can complete the task.

4 = Can understand the concept and can complete the task and with time for consideration can complete the task alone.

5 = Has an a very good grasp of this concept and can complete the task with ease.

Further evaluation will take place from the standard evalutions of the course by the students, as administed by the department. These questions are universal to every course evaluation at the university, not just this one. However, the instructional designers will have access to this data for this project.

Related questions are also answered on a scale of 1 to 5. 1 is low and 5 is high. They include:

1. Were you satisfied with the content of this course?

2. Do you find this course applicable to the field of business management?

3. Were you able to understand your instructor's explanation?

4. Did you find the course interesting?

5. On a scale of 1 to 5, what is your general feeling about this course?

Final Evaluation.

The instructional designers when developing this project felt that they should make the cut-off average 4 on the scale of 1 to 5 for each of these questions on both evaluations. However, being at a Japanese university makes the situation a bit unique. While it is strongly felt that this number should be the benchmark, the designers forsee a potential problem.

Merry White, author of The Japanese Educational Challenge (1988), points out that in Japan, what sometimes seems the obvious answer to a problem, is still sometimes intentionally knocked down for a variety of reasons which may or may not be explained.

This is one of the enigmatic parts of the Japanese culture. If one considers the curriculum standards and how they are specifically left vague. You can see how the Japanese system sometimes works in ways that Americans might not seem as logical. Japanese leave their laws very vague in order to allow for this

In order to prevent this from happening, the instructional designers have decided

not to set a benchmark or cut off. Rather, it would be much more practical in a Japanese university, to make all final evaluations and decisions a topic for discussion at the next bi-annual meeting of the Department of Business Management after the course is complete with the data and information accumulated and graphed by the native English teachers working as the instructional designers.

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