

Design of online English learning project for university students using Story-Centered Curriculum

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Abstract: We have developed an online English learning program to be used as a survival kit for university students, especially those who are interested in studying abroad. The system we are using is meant to aid learners in dealing with problems and situations that naturally arise in a study abroad student's daily life. This is done by using a story-centered approach, which gives the learner specific tasks to complete, and links all the created missions through a comprehensive and sequential story. The format we use is aimed at giving students easily managed chunks of a unit to progress through each part of the story. Each unit can be broken down into shorter segments. The goal and the objective of this content is not just language learning in and of itself, but rather to use language to accomplish a real-life goal.

Key words: Instructional Design, E-learning, Story-Centered Curriculum

INTRODUCTION

The ultimate goal of language learning for many people is to be able to communicate (from chatting to persuading and negotiating) with foreign people, rather than earning high marks in school exams and the TOEIC. Communication is necessary when one has a goal to be achieved (called a "*mission*" in our program).

Traditionally, language education tends to cause stress for the learner by forcing them to try and use perfect grammar and achieve complete language accuracy. We understand the importance of accuracy. However, in real life speaking smoothly and responding promptly is more important to accomplish goals through communication in a foreign language, even if it is not completely accurate grammatically.

We have developed an online English learning program to be used as a kind of *survival kit*, for the purpose of achieving the mission by communicating with others in English in real world situations. Therefore, our emphasis is not on the accuracy of grammar and usage, but rather achieving a natural flow of communication and accomplishing the given mission.

This learning content is designed for public use via the internet as well as in a strictly academic environment which can be stressful when learners are forced to study to get credit. Hence, the key point is for language instruction to motivate learners and help them to be proactive in their learning. Also, in designing our program, we thought that our approach should not be restricted to role play and simple quiz question and answer. Instead, goals are task-based, learners become familiar with the appropriate real life situations, and finally improvise and have conversation using their own original story. To this end, we have applied Roger Schank's Story-Centered Curriculum (SCC) approach.

BACKGROUND

We believe a language learner's real need is to survive in real world situations using language rather than passing language exams, so we examined how to keep learners motivated.

The motivational design model called ARCS consists of four different categories of motivational conditions: attention, relevance, confidence, and satisfaction. Learners' attention must be acquired, and then they must be exposed to content which is relevant to them. However, that presents a challenge to designing content as each learner has a unique background and interests. For example, many business people's main ESL interests might be communicating at work, whereas students' might be to study abroad and participate in a home stay.

Thus, we decided to develop the learning content according to different groups and their real interests and needs. To satisfy learner needs, we plan to make categories for business English, English for international students, and travel English. In this analysis, we focus on the content for current or potential exchange students (we call it "Schoolish").

The following are the primary features of the target demographic for Schoolish:

Learner Characteristics: University students, particularly those who are interested in studying abroad.

Pre-requisite skills: Beginner to pre-intermediate.

Learner needs: To survive in a school environment where they are required to use English with other students and professors, for a broad range of student-based situations.

Performance Objectives: A learner will be able to communicate smoothly with other students, teachers and others in their school life. They will also maintain a positive attitude when speaking in English.

TASK ANALYSIS AND EVALUATION STANDARDS

Based on R.M. Gagne's approach to task analysis, the following components are used to achieve the performance objectives of Schoolish.

A. Verbal information:

A learner is able to memorize new words, phrases and grammar rules, and can correctly identify them.

B. Intellectual skill:

A learner is able to apply verbal information (e.g. writing passive sentences using grammar rules).

C. Motor skill:

Speaking up and communicating naturally, as well as responding quickly.

D. Attitudes:

Staying motivated and speaking in a confident and assertive manner.

We note that each component could be a requirement to attain each successive skill, especially in language learning, and therefore that it could be natural for an instructor/learning content provider to create specific learning materials to satisfy each goal. For example, a learner may not even be able to introduce themselves using appropriate vocabulary ("introduce," etc.), phrases to use ("my interests include...") and grammar. However, is the traditional approach of teaching a list of words and phrases the most efficient way for learners to learn how to output natural language in daily life and real situations?

Recently, there have efforts in the education system to improve language learning and take a more integrated approach, but there still remains too much focus on memorizing words and over-analyzing grammar.

Also, such an approach without the proper context causes learner motivation and language output to suffer. Learners may not clearly understand the purpose of why they need to acquire new language through such a compartmentalized way of instruction. We want to develop content for learners that encourages them to be proactive without the unnecessary pressure of working for credit. The objective of staying motivated and having a positive attitude is difficult to maintain without the right motivation. Then what kind of instructional design should be adopted?

To answer this question, we researched the Goal-Based Scenario (GBS) and Story-Centered Curriculum (SCC) paradigms developed by Roger C. Schank. The core concepts of GBS are "authenticity," "learning by doing," and "learning by making mistakes." Learners are provided with a realistic situation in this method, and they are

encouraged to proactively achieve their goal, which is usually only reached after making some mistakes. GBS is optimized for automated e-learning without the aid of an instructor. Unfortunately, this results in initial curriculum development costs running high.

SCC has a similar concept to GBS, but it is not fully automated and employs the use of instructors. This both minimizes initial development costs and enhances the reality of the curriculum. Thus, to achieve a good balance between learner motivation and the effectiveness of the buildup approach, we have developed a realistic, sequential story-based system that includes the benefits of the buildup approach as well. The goals (missions) that are provided to learners are what they are likely to encounter in real life. To achieve the goal, words, phrases, and grammar are provided in each unit of the story. By doing this, learners can acquire all four skills discussed above (from verbal information to attitudes) in an integrated manner. The above components in and of themselves are not goals that individuals have from a practical usage standpoint.

Additionally, the SCC approach offers an evaluation component that GBS doesn't have. Since the missions are to be accomplished through communication, tutor/instructor evaluation needs to be done through synchronous discussion with a learner. Four aspects are evaluated in order of importance:

1. How well is the learner able to accomplish the given mission?
2. Is the learner able to communicate and respond to the tutor quickly, smoothly, and naturally?
3. Is the learner able to use the new language (words, phrases and grammar) correctly?
4. Finally, the learner's attitude is also evaluated at the end of the whole story.

STRUCTURING THE STORY-CENTERED APPROACH

In contrast to traditional learning, which is subject-oriented, an SCC is designed to introduce to the learner a planned sequence of real-world situations. It is also designed to motivate learners to learn by applying knowledge and skills in an integrated fashion. A realistic story, which is the core of SCC, provides such motivation even when the given tasks are challenging.

SCC consists of the components shown in Table 1.

Table 1

<p><i>Role:</i> A learner is assigned a role in the story.</p> <p><i>Story:</i> A learner is given a situation which often presents a problem to be overcome.</p> <p><i>Mission:</i> Each situation offers a mission(s) to complete.</p> <p><i>Resources:</i> Resources are provided to solve the mission(s) so that the learner has additional tools at their disposal.</p> <p><i>Coach:</i> Coaches play the expert role, providing one-on-one coaching, feedback, and advice to the learner.</p>

Through these mechanisms, the SCC provides accelerated experiential learning.

SCC is different from role play. For both SCC and role play, a learner is given a specific role. In a typical role play, a learner memorizes and reads a given passage. On the other hand, with SCC a learner needs to create his/her own story/lines based on their own background. Resources are also given to help them create the story. In this case, the goal is not learning language itself, but rather to solve the given mission in the story. Language is a tool here to solve the mission.

Also, SCC is different from project-based/problem-based learning. Although realistic projects are crucial to a successful SCC, the curriculum is not just a collection of unrelated tasks. Rather, it is a carefully crafted sequence in which each unit builds on the last, and extends knowledge and skills. This is done while remaining in the same overarching story. A rich and realistic context promotes the acquisition of knowledge to be used, as well as learner motivation.

In summary, SCC is based on the following assumptions:

- * Learners learn best by doing.
- * Learners learn best by making mistakes and getting feedback ASAP.
- * Learners retain knowledge best when it is contextualized and related to something they actually have to do.
- * Learners learn best based on their real-life interests and needs.

Story-Centered Curriculums were originally used in graduate schools and high schools with classes ranging from sixty to ninety minutes in length. However, in our online application, learners can complete individual parts of a program unit in just ten minutes. To satisfy people with busy schedules, we designed our program so that learners can advance in short (but regular!) amounts of time. The format of each study unit is as follows:

First step. (5-10 minutes) Model dialogue (called "Ready? - Listen to the story- ")

A learner listens to an audio dialogue and is given a specific situation. Dialogue is spoken at a natural speed so that learners can improve their listening ability.

Table 2 shows an example dialogue, which is the third unit out of 60 units in one story:

Table 2

Jen: So what classes are you thinking about taking?
Kay: Well, I haven't decided yet... I'd like to study marketing, finance, and IT. Oh, and an English reading class since I'm an exchange student.
Jen: You want to take all of those?
Kay: Yeah. I'm also interested in Business & Career Planning.
Jen: Well, I heard the prof of BCP is picky but the class is fun.
Kay: Picky? Like how?
Jen: Well, I heard that if you don't give him the answer he's looking for -
Kay: Yeah?
Jen: He'll say you are wrong... But that's just what I heard.
Kay: Jeez... Also, I'm concerned about IT because I didn't take any related courses in Japan. Do you know anything about it?
Jen: People say it's very practical. And the IT prof is Indian and speaks really fast.
Kay:... Now I'm worried about my English ability...

Besides the audio button, there is a tab box which includes four tabs, shown in Figure 1.

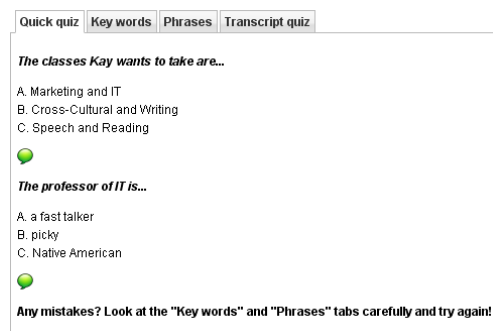


Figure 1

Each learner's listening ability and learning curve is different. We referred to the idea of "Mastery Learning", which presumes that all learners can learn when they are provided with the appropriate time and assistance.

First, a learner is instructed to open the first tab (Quick quiz) and listen to the audio and do the quiz without looking at the key words list and phrases list. If a learner passes the quick quiz, one is instructed to move to the fourth tab ("Transcript quiz"). If not, one is instructed to check the second and third tabs and listen again and again as they like. The fourth tab show a transcript with fill-in-the blank questions. By having both a "Quick quiz" and "Transcript quiz", a learner is given a chance to check both broad and detailed listening ability.

Good students finish this step within 5 minutes; some could take 10 minutes. But by having such assistance (Key words and Phrases tabs), we give them the necessary prerequisite skills to different level of students to move to the next step.

Again, Good students finish this step within 10 minutes; some could take 20 minutes. But by having such assistance (Key words and Phrases tabs), we give them the necessary prerequisite skills to different level of students to move to the next step.

Learners are required to complete the missions in the live lessons by speaking with a coach using their own story.

Third Step. (10 minutes) Live lesson with a coach (called "Go! – Live lesson! Make your own Story!")

During the online live lesson, a coach plays a given role and a learner plays a role of an exchange student. But the discussion is based on the mission and is basically ad-libs. The coach encourages students to show learner's own answers to their missions and self-correct by accessing the courseware's resource support features. Only in the final iteration of each task will the instructor make direct corrections and give final feedback so that one do not ruin the natural ad-lib conversation environment and let learners "learn by mistakes". At the end of the live lesson, a learner will have a better understanding of when, why, and how they should use the language in real life.

Keep in mind, though, that it is not the job of the coach to teach the words, phrases, and grammar that are generally used in a given lesson. The role of the coach is to play a part in a given situation, but the discussion is heavily improvised. He or she will also provide instantaneous feedback as well as evaluate how well the learner is able to complete the mission in their own way.

DESIGNING THE STORY-CENTERED APPROACH

The design is comprised of several steps, including determining goals, supplying resources, creating a story, and more. We have referred to Roger Schanks approach to design our program.

Step 1. Determining Exit (Performance objective) and Entrance (Prerequisite skill(s))

Since the SCC is inherently goal-based, setting a goal which is desirable to the learner is the first step. In our contents the primary goal is for "a student who has an opportunity to study abroad as an exchange student or to learn at a language school to be able to communicate with friends and instructors, and survive college life."

Step 2. Providing supplemental material (lists of activities, events, and accompanying, missions, and learning points - words/phrases/grammar) for the resource box

Activities that a person who has a specific goal will do in a real life should be listed, such as in our contents, "participating in the campus tour" and "talking with a friend about exams". An activity can be broken down into a few sub-activities such as "registering at the reception desk" "walking around the campus" and "asking questions about the campus". Also Problems that might come up during the activities should also be listed to enhance the reality of the situation (such as being late for the campus tour).

Based on the list of activities and problems, we set missions and sub-missions. Missions should be challenging as well as realistic and performable. They are going to be made so that a learner can reach the performance objective defined in Step 1 after completing all of the missions.

After specifying the missions' and sub-missions' learning points (key words, phrases and grammar points) – which are related and helpful to solve the mission - should be listed. Those lists of learning points are the basis for the "Resource box" introduced above.

Although the concepts of SCC and traditional instructional design are different, the process here is similar to the task-analysis of traditional instructional design. This is the necessary step to prepare for creating a realistic and fun story.

To make this list authentic, we interviewed three people who have study abroad experience and two foreign instructors who have experience teaching university students to determine the appropriate activities, events, and situations.

Step 3. Creating a story dialogue with mission and learning points

After making the list, the next step is to create scenarios, missions, and performance support materials representative of the tasks which are to be accomplished. We have decided to create a story where the main character is a Japanese exchange student.

A story-centered curriculum starts by determining what the story will be by looking at the results of Step 2. Then, within the context of that story, faculty must decide upon simplified mini-stories and sub-tasks. In the case of Schoolish, there are 15 story sections with 4 units each.

Using the ideas of a story-centered curriculum, we decided that the learner would be an exchange student from a Japanese university, named Kay. It is her first experience living abroad, taking classes and exams, going to parties, and making friends over the course of one semester. She would have to cope with various events that might occur, such as adjusting to American culture, sharing a living space, and failing an exam. The curriculum is focused on key activities such as:

The curriculum is focused on key activities. When creating dialogue, this checklist is used:

- Make sure the missions and learning points are fun, natural, and authentic
- Simple, plain English
- Focus on aspects which are practical and use key skills, and ignore the rest
- Avoid overly complex tasks; break down into smaller parts
- Tasks proceed in chronological order, based on real-world situations
- Each section of dialogue contains several learning points

Step 4. Creating and supplying performance support materials

Support materials are to provide additional phrases and grammar points to help learners complete the mission. Together, they make up the "Resource Box." The concept of the Resource Box was introduced in Section 4. Again, it is designed to facilitate learners in accomplishing missions. Each sub-mission has one Resource Box.

As Rogher Schank says, "The simple idea here is that it is the job of the faculty to set up a reasonable story and a set of goal-based scenarios within that story and to be available to help as needed, but it is not the job of the faculty to provide information that is readily available elsewhere." For our English learning material, we could not find the proper outside resources on the internet. Therefore, most of the content is our original creation. We also carefully made each Resource Box a "reusable" one as much as possible, so that we could use it for other curricula/stories.

The resource box is a collection of short exchanges and phrases that can be used in situations similar to what is being told in the story dialogue. Depending on the mission, material may vary in formality and degree of use. The learner decides how much of it to use or review before progressing to the live lesson. Also, the more sections that learners decide to utilize, the more familiar they will become with certain situations or phrase patterns, and how to communicate under those circumstances, as much of the content is flexible enough to be used in different scenarios and for different demographics.

REMAINING ISSUE AND FUTURE DEVELOPMENT PLAN

Further consideration should be given to live lesson coaching strategy, including determining each unit's evaluation standards and feedback guidelines.

When an integrated story has been created, it is the job of the course designers to determine:

- How to make a live lesson a place for "learning by doing" and "learning by mistakes,"
- The evaluation standards on a set of tasks to be accomplished,
- How students are to be given proper feedback which is helpful for their future.

We are now designing the live lesson strategy carefully.

Also, we have started developing content using a learning management system to satisfy our needs to achieve the design outlined above:

- * synchronous lesson infrastructure for the live lesson.
- * quiz infrastructure (multiple choice, fill-in-the blank, etc)
- * User-friendly interface

We did not want to create such an infrastructure from scratch. To make the project sustainable as well as effective for learners, we needed to minimize the cost of development. For those reasons, we decided to use an open source learning management system.

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