**Product at a Glance**

**Product Type:**
- CD-ROM or Online accessible reading and writing activity based game

**Language:**
- English

**Level:**
- Intermediate to Advanced

**Activity:**
This is an online language learning game. It promotes reading, writing, interacting with other players, and role-playing. Tasks are designed to develop reading comprehension and writing skills.

**Media Format:**
- Accessible online
- Full-colour manual and latest CD-ROM available from the designer on application

**Computer Platform:**
- Windows, Macintosh, Unix

**Hardware Requirements:**
- Mac or PC (Windows)
- Netscape or Internet Explorer
- CD-ROM drive
- 56K Modem (Cable or DSL preferred)
- Java 1.4 or later

**Documentation:**
A user’s guide can be accessed at http://www.costello-rpg.org

**Price:**
At the time of printing there was no apparent cost although the author indicates that the CD and manual may eventually be commercialised.
General Description

This software was designed by a native teacher of English working in Japan, for the benefit of EFL students in Japan and other Asian countries.

Costello is a text-intensive activity suitable for Intermediate and Advanced learners of English. Student interaction with the world of Costello stimulates deductive reasoning, inferring meaning and problem-solving. It is an online role-playing game designed for university students. It was based upon other MUD (Multi-User Domain) games and adapted to fit a certain need of the English as a Foreign Language (EFL) learning community. The designer claims that Costello helps users apply their English reading comprehension skills, as well as develop their basic writing ability. Players are required to read and respond to instructions and guidance, use English commands to operate the game, and interact with other players. Teachers can incorporate the game in their lessons either as a continuous activity or as a challenging activity for proficient students of English.

There are four environments to this courseware, (a) the teacher’s area, (b) the students’ gaming environment, (c) the homework report, and (d) the builder areas. These four distinct areas complement each other to stimulate either writing exercises or reading comprehension activities. Administrators (teachers) are provided with a full set of tools to keep track of students’ performance and provide technical support.

The game is divided into two sections. The first section provides training in operating the game, the second section is the actual game. New players begin with the training program of 26 tasks aimed at teaching familiarity with the basic commands. They can then progress to the game and interact with various quests, players and characters within the fantasy world of Costello. Players can also purchase equipment, pets, or gain special skills and magic powers. At the time of writing there were 30 levels and 63 quests of varying difficulties. As it is a multi-user application, new areas are continuously becoming available to explore.

To encourage students to read, the game is text intensive (see Figure 1). It also includes basic graphics and sound. To complete their tasks students must rely on their reading ability and their comprehension of the information provided to decipher the appropriate actions to take.

Technological Features

This game can be accessed either from a CD-ROM or via the online site at http://www.costello-rpg.org. The index page provides all the information necessary to learn the rudimentary aspects of playing with Costello, this includes: What is Costello? Before you Start, Starting the Game, How to Connect, Game Commands, Important Places, Characters, Mounts and Pets, Maps, Scores, Levels and Magic, Quests, Special Items, Common Questions, and Homework Reports.

The speed of the game response was more than adequate; however, the latest Macintosh OSX, Windows and UNIX version cannot be accessed from any computer without Java 1.4. Players may have to use the original version of the game connection software (also available from the site), install the CD-ROM, or download Java. This is only an aesthetic impediment and not an issue of speed delivery.
The game can be accessed quickly from the online source. As the objective of the game is for students to enter the world of Costello by reading about it and responding to the challenges posed, there are no set lessons. In order for students to receive a score they must complete quests. They can easily move from quests to quests. Once students have finished playing they simply “Quit” the game at any time. The game will automatically save and store all their data until the next time they wish to play again. When returning to the game, it will start at a default location (the Temple on the Hill of Costello) and not where the student’s character was last seen.

Costello is a one-screen activity within which the player interacts to manage the game. There are no other screens to access. The menu buttons include a pop up dictionary, a setting function and a link to the home page, a copy and a replay sound function. There are also icons for sound control and online mode (see Figure 1).

The game includes a pop up dictionary, which is self-explanatory in its usage. Students encountering unfamiliar words, can simply click on the dictionary function, type in the unknown word and read the definition provided in English.

As this is a text intensive game, the choice of font is of particular importance. Whereas the older version of the game solely relies on Courier 12 point, the CD-Rom version allows...
players to choose the font and size for the text. This improvement may encourage student participation in the game.

Sound is an optional setting. It is a voice recording of what is written on the screen. There are no other sound options or effects except for occasional background noises, such as a cat meowing. The text is read at an appropriate speed for a beginner of English to follow what is being read with what is on the screen. By clicking on the replay sound button, players can hear again the text they are viewing. The older version of the game does not have sound options.

One of the bonus aspects of Costello is the use of colour-coding that allows players to deduct meaning from the texts (see Figure 1). As in the example below, the story is written in orange. Non-vital information (such as the location of the player) is written in white. Pink indicates the possible exits to move to, and blue indicates conversations. The colour-coding improves the appearance of the screen and may be more appealing to students.

Costello relies on approximately 200 different commands to operate the game. No command menu is yet available on the online version. Its inclusion might facilitate the recall of important commands. However, the author has indicated that a command menu will form part of the new version of the Costello CD-ROM.

The side bar scroll is used to review previous text as the mouse scroll does not work on the Costello screen. Furthermore, it is not possible to view the whole history of a game session. It is not possible to back track and review what was previously typed or experienced up to the starting point of the game. This might be a minor disadvantage for students who might need to review their work to facilitate their comprehension with a particular task. However it is possible to save all data to a file on the Setting screen.

The technical features of the teacher’s area add to the educational features and general usefulness of the game. There are a variety of features that allow teachers to keep track of students’ performance. The “builder” area allows students to create their own area. Both of these environments will be dealt with in the next section.

Teacher Fit

Teachers will find this an easy game to operate and a suitable courseware to encourage students to read and write. However, as it is presented, this game itself offers few opportunities for writing, as it encourages primarily the use of command words. To maximize the writing experience, Costello needs to be used in conjunction with the Homework Report system available online (see Figure 2) or via teacher self-generated activity sheet.

Fifteen years ago, Underwood and Underwood (1990) commented that one aspect of computer education is the development of typing skills, and this is still true of many computer-based applications used today. A high degree of typing accuracy will assist the player in moving around the Costello world and allow them to focus upon the task of playing. However, should the player be a poor typist, this has the potential to lead to spelling or grammatical errors which might affect reading comprehension, including that of his/her own typed responses and this might lead to frustration. Students will need to be taught how to discover and correct their errors in typing, as a simple comma can render a sentence inaccurate and not activate the required function.
In relation to errors, this game was not designed to pick spelling mistakes but it was the intention of the designer that the program would notice basic article grammatical errors. Although the program does recognize and suggest how to use appropriate grammatical rules, it must be pointed out that this software allows the player to choose a language mode. Should the player indicate that he/she is English the computer may not recognize grammatical errors as it assumes that native users know what they are doing.

Furthermore, it is quite difficult to navigate within Costello because the directions are either cardinal points, or up and down. This can be confusing to a beginning player who is trying to move in the Costello World. It is therefore recommended that students draw maps of areas they visit. Designing maps will also encourage students to transfer their reading comprehension to spatial interpretation. This aspect not only consolidates their learning but it also assists their recollection of areas visited in prior sessions. Such a requirement could be used to promote discussions amongst class members so that they can share their experiences and improve their understanding of the directions provided.

**Administration Tools**

This is a great aspect of the courseware for teachers. Once teachers have been registered by the designer, they have complete access to the administration tool. It allows teachers to
view their students’ performance either within the game or within the homework section (see Figure 3).

At the game level, teachers are able to view students in action. Teachers can read the students’ work, check their score and location and assist and communicate with them in real time. At the homework level, teachers can award a grade for each student’s report. In the teacher’s area, it is possible to view and/or check the overall performance of either an individual student or the performance of the class (see Figure 3). They can also access a database of students’ performance over the period of the course, grade the reports and create statistics about class performance in general. Finally, the game keeps a record of students’ playing time.

An extra advantage of the teacher’s section is that teachers can write their own questions to be included in the Homework report. This is extremely useful for teachers wishing to expand upon the students’ creative writing skills or to encourage them to venture into more difficult areas.

Through the option of writing their own questions, teachers might be able to specify which genre students will need to practice.

**Builder’s Area**

The builder area allows teachers and students to participate in creating their own Costello Village or environment. A template guides the students with the various tools to describe...
the environment as well as providing instructions to enable future players to interact in their environment. Students are required to write scene descriptions and a special folder is available for the teacher to comment on the written outcome. Once an area is created, it is sent to the designer of Costello who decides upon the appropriateness of a suggested environment.

**Overall Methodology Approach**

The structure of the game uses a constructivist approach. The tasks, the quests, the homework and eventually the opportunity to create an area, all follow a scaffolding strategy to lead the student from basic reading ability to advanced reading comprehension (Gromik, 2004). The appropriate use of this game also develops various other skills such as mapping, inferring meaning, problem solving and creative writing.

**Activities**

The Calico Courseware Evaluation Outline (n.d.) suggests three major types of activity classification. These are instructional, collaborative and facilitative (p.2). It is the opinion of this reviewer that Costello can be used in such a way as to meet the criteria of each of these classifications.

Costello is primarily a game. Students read about and interact in a MUD environment. Therefore at the Collaborative level, students participate in discussion forums and are encouraged through classroom activities to complete peer group writing. At the Instructional level there are no drill exercises or text reconstruction activities, but there is a tutorial segment during which new learners are trained and players do have to infer meaning from the text provided.

The development of improved reading and writing skills are essential to the success of students and as can be seen from Figure 1, the player is provided with many opportunities to develop their reading comprehension, to improve interpretation, to make connections and to deduce meaning in order to operate the game. The journey through the world of Costello requires both information gathering skills and text interpretation.

**Learner Fit**

Costello is a multi-layered game which students investigate at their own pace to complete various quests. Before beginning the game, new players must create a game account. This is an easy process where students provide information about themselves and their character. They also select the order in which the information is to be filed. Once all the information is provided the player proceeds to task training. This provides players with a rudimentary experience of how to operate the commands, what to expect from the game, and the need for reading accuracy and typing information (see Figure 4).

During the training, there are 26 tasks to complete. They increase in difficulty, requiring more comprehension and typing skills from the student. Each task clearly explains what command is reviewed. The student then has to demonstrate aptitude with the command under review before proceeding to the next task. Once the tasks are completed the player is ready to begin the game as an adventurer.
As a guided study, the training session provides straightforward tasks to complete. As this area trains new players, they need to read the full text version in order to fully conceptualize the purpose and potentials possible within Costello world. For example, after gaining enough points from completing the Puzzle Void quest, characters can begin to fly. As this progression of skills is not self-evident, teachers might consider discussing these options with students to stimulate their investigation of the game.

![Figure 4: Task Training](image)

This is a journey through the world of Costello, not an investigation. There is no real urgency for students to solve any mystery or crime. They simply have to find quests to achieve. It is important that teachers supply extra activities to provide challenges and record results. Less motivated students may respond to activities specific to their interests rather than making the prescribed journey.

**Keeping Scores**

Accumulating points helps to stimulate motivation and investigation. Scores are allocated in both the game and the Homework Reports. In the Homework reports the score is allocated according to total words counted. Considering that the Homework report encourages extensive writing, the more a student writes the more points he/she receives.

Scoring in the game is a little more complex. There are four kinds of scoring level. 1) Gold coins to purchase or sell necessary equipment from other characters, or to be stored in the Costello Bank. 2) Quest points, which are given once a quest has been fully completed. 3) Experience points are given at the end of a quest, and 4) Exploring points. These various scores entitle a player to move up levels and eventually gain skills and magical powers (see Figure 5).

Costello is a fantasy world in which players are encouraged to use their reading comprehension skills to journey in this world. But Costello is a dangerous place to journey in and
although players gain exploring points for their boldness, the script will warn players when venturing in more challenging areas. The warnings are provided first as hints and as the player comes closer to danger, the warnings are more descriptive and sometimes poignant. Characters must gain skills and weapons to be able to take on more serious challenges. In Costello an adventurer traveling and not heeding the warnings is sure to find a miserable ending.

![Figure 5: Scores](Image)

To operate the game students need adequate writing skills. Costello does not aim to develop writing skills to the same extent that it develops reading skills through its reading environment. Players cannot interact with all characters at all times. Some characters are just props, some attempt to lead the player in a particular direction while others provide information. Some of the interactions can be frustrating for the players. For example it is possible to ask Cos (one of the main characters) different questions, but some characters such as Cos do not respond to everything that the player may say to them.

There are four possible forms of question response or feedback (see Figure 6) from the game and characters. In the first option, the game does not respond. In the second, the game either indicates that nothing is known about this action or that it is not a choice. In the third option, some information is provided and it is up to the player to deduct clues to continue playing. The last form of feedback indicates that a character is willing to divulge all necessary information and indicates the next step to follow. It will be up to the student to either learn the necessary commands to make interaction more productive or to learn how to communicate with characters and request assistance or information from them.
General Comments

Costello appears to have been designed upon sound methodological teaching and learning strategies. It provides students with the opportunity to read at both the sentence and the context level as recommended by Nunan (1999) and Richards (1990). The writing activities target both interaction specific and extensive writing. These activities require that the player be accurate, write appropriately and interpret effectively the written information (Richards, 1990).

A weakness of the game is that while a dictionary tool is available, the script describing the Costello world can be at times difficult for learners of English. In addition it might take some time for students to learn how to formulate commands that elicit the most information from the various Costello characters.

The true value of Costello is that it provides a wide range of reading genres, from menu lists to directions and from character interaction to prose. The written text describing Costello is accessible by intermediate and advanced EFL learners. The ambiguity within the text is what stimulates attentive reading. The advantage of this game is that students gain confidence with their reading skills, develop their comprehension skills and progressively venture into more linguistically challenging environments. Through both reading and writing activities, students are stimulated to use their inference skills and reading fluency as well as extending their knowledge of vocabulary and grammar.
It has been suggested by Chapelle (2001) that CALL resources should be able to adapt to the linguistic ability of learners. Costello provides a range of graded reading activities from which the learners can develop a variety of skills, which seems to address this need.

As Costello is a free journeying fantasy world, the learner is in control of the areas he/she wishes to visit and which quests to undertake and complete. This game promotes self-paced study, an approach which Hubbard (1992) considers important when considering Software. Costello can be used independently or for teamwork. Considering that the program automatically saves all game data, the player can quit and return to the game at any time. The student can be in complete control of the game and work with minimal intervention from the teacher if they so desire.

Classroom Application
There are many approaches to integrating Costello in the English learning classroom. It is primarily a reading comprehension focused courseware. The software designer recommends that it be used in conjunction with the homework reports provided at the Costello website. However there are two possible approaches for incorporating this courseware into a curriculum. The first is to let learners access the game during their own time. The second possible approach is to integrate Costello as part of a creative reading/writing course.

In selecting teaching methods, Richards (1990) suggests recognizing the role of the teacher and the learner. With this software, leaving students to their own device may not be the most productive option as it would limit educational support to the learner. Expecting students to participate in Costello as part of their homework, would take the fun out of this courseware. Such an approach would also reduce the development of reading and comprehension skills. A more conducive strategy to language teaching and learning such as recommended by Chapelle (2001) would not only include Costello as part of the curriculum and encourage purposeful interaction between teacher and student, but it would also provide support and guidance about learning strategies to undertake in the quests set in the game and provide support for the learning of the language skills necessary to understand the world of Costello. Students do need a learning environment in which they are supported to identify, correct and progressively develop the sophistication of their reading and writing skills (Nunan, 1991).

Costello would be best suited to use in a computer lab. However, it would be valid to provide Costello as a motivational tool for more motivated students, in a general classroom setting when only a few computers are available.

A practical classroom evaluation
This reviewer integrated Costello as part of his curriculum. A group of 4 intermediate English learners were invited to take part in an evaluation of Costello.

Students volunteered to participate in four 90 minutes lessons to trial Costello. Each lesson was divided into two 45 minute sessions. In the first half of the lesson students played the game. In the second half they provided comments about their performance and their perceptions and opinions about the game.
In the first two weeks the group was in agreement that this was a fun and beneficial game. However during the last two lessons, group members began to indicate that although they still saw great learning benefits by playing the game, they found the presentation non-captivating and the activity repetitive. However, through this game, these students were able to realize the importance of reading carefully and paying attention to hints to deduct meaning, the need for typing accuracy and the ability to recall previous information gained from other characters.

Also, it was noticed that students took notes about where to find requested items, but in the discussion time it was revealed that none had thought about making maps. The benefit of making maps about each area was suggested during the last session. This suggestion seemed to invigorate students with a new learning strategy and they provided positive feedback for making maps to clarify their understanding. Some even suggested that it helped them better visualize the Costello Village. Integrating Costello in a more communicative environment both at and away from the computer could bring out more learning opportunities for students.

Conclusion
The Costello World achieves the objectives for which it was designed. Through this game, students gain experience in reading and deciphering meaning. Costello is a very stimulating environment for students to journey in. This game provides an excellent opportunity for students to independently challenge, practice and apply their comprehension skills as well as their basic writing skills.

However, as this review has suggested, it will be up to the teacher to capitalize upon and consolidate what students have learned. The Costello World is a great resource to complement other language teaching strategies, which provides a new environment for the teacher to assess and catalogue students’ performance.

References