Americana

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Title	Americana
Target Audience	ESL(Intermediate Level)
Platforms	Windows 95, 98, or NT
Publishers	American Language Academy
Contact Information	1401 Rockville Pike Suite 550 Rockville, MD 20852
	U.S.A.
	Email: software@ala~usa.com
	URL: www.ala~usa.com/software
System Requirements	33 MHz 80486 or greater processor, 16 MB of memory, 16 MB free hard disk space, SVGA 640X 489, 16 bit color or better, 8 or 16 bit sound card, high density floppy drive, double-speed CD-ROM drive, headphones with built-in microphone or external speakers and microphone.
Price	Single user US\$95.00; 5 Pak US\$330.00 (\$66.00 per user)

Overview

Americana is one CD in the English Mastery Series of CD-ROM software titles designed to develop listening comprehension, speaking, reading comprehension, and writing, as well as related skills such as pronunciation, spelling, and vocabulary of young adult intermediate ESL (English as a second language) learners. Besides a central focus on developing learners' English skills in these areas, they are introduced to American history, culture, and folk songs. The underpinning pedagogical framework that seems to have guided the design of this program stems from the belief that improving learners' reading, writing, listening, and speaking skills requires situating them in a comprehensive, fun, informative learning environment. To implement this intent, the program provides prospective users with texts that cover many aspects of American culture and history. While studying with these texts, learners are given ample opportunities to interact with 400 different exercises in which they can read, and if they choose, listen to native speakers' voices, repeat after them, record their own imitations, and compare the two versions. Additional practice with computer-generated crossword and audio puzzles and cloze exercises are also available, all of which integrate aural and visual presentation. Americana is primarily designed to be used for self-study, but it can be used as supplementary material for a class.

General Description

Overall Structure of the Program

Each of the units included in the Americana CD-ROM, although providing different content, is similarly organized. The program comprises six main units, each having ten lessons and seven different exercises which involve reading, speaking, listening, and writing. The content of these units centers around American history, culture (customs and institutions), sports and entertainment, and American folk songs. When users select a specific unit, they can choose one of the lessons and are free, to begin with, whichever exercise they wish, although the logical sequence is to start with the AudioLab first and proceed from there. Each lesson has a short narrated text about a given subject that runs for approximately one and a half minutes and is about 250 words long. There are seven exercises built around this short text. Clicking on the desired lesson takes the user to the actual presentation or text in which he or she will see a picture reflecting the theme of the lesson. The picture covers the whole screen, and on the right side is a list of the available exercises, with navigation buttons at the very bottom.

Evaluation

The evaluation of Americana will be carried out in the light of technological, pedagogical, and theoretical perspectives relevant to second language acquisition. Drawing on the aforementioned perspectives will help to highlight the strengths and weaknesses of this program. First, I will present a discussion of the program's strengths based on each perspective, followed by an account of its weaknesses.

Technological features

In some of its design aspects, Americana exploits the current capabilities of computer technology to make its language learning environment feasible. The lack of certain state-of-the-art technical features, however, limits the program to some extent, thus reducing its potential effectiveness.

The program offers a user-friendly interface due to the simplicity of its design, consistent intuitive navigational metaphors, and overall attractiveness. Another appealing feature is the layout and design of the screens. They are clear, uncluttered, well displayed, and supported by meaningful color and graphic resources. Well organized and consistent environments are the two conditions that Plass (1998) and Tripp and Warren (1990) contend are needed to increase the effectiveness of the computerized learning environment. This is because it is presumed that in such an environment the user's level of confusion and disorientation is greatly decreased.

The program's visual presentation is also enhanced. To communicate the desired message and provide a meaningful context, the program visuals are simple and clear and most notably avoid overuse of color and clutter. Muter (1996) argued that the overuse of color clutters up the screen and creates confusion. The capability of the computer to present audio material has been exploited in the program to some extent. The quality of the prerecorded speakers, the soundtrack, and the playback quality of the user's recording are high. As noted by Brett (1995), users are best able to devote their time and mental

resources to learning tasks when motivated by a clear visual presentation and high-quality sound.

Special consideration has been paid to the navigational aspect of the program. The program uses simple, consistently placed, intuitive navigational buttons. Some of them are presented in words and icon-based, while others are solely words. The navigational buttons occupy the right side of the screen from top to bottom. The top part is reserved for the exercise buttons, which change according to the exercise visited, while those at the bottom remain unchanged. These include the Exercises, Help, and Exit buttons. Another characteristic of the navigation employed is that movement is initiated entirely by the students so that they have complete control over the pace of their learning experiences.

Another technical feature that has been incorporated into the program well is the recording feature. The presence of this feature allows users to record their pronunciation of the words and phrases that appear in the text and compare it with the pre-recorded native speaker model. Murray and Barnes (1998) view recording facility as a promising feature in connection with computer-assisted language learning (CALL) because it enables users to practice speaking and monitor their efforts while being exposed to various modes of processing, including listening, reading, matching, and repeating.

Americana offers on-line help that provides guidelines for proper use of the different features and exercises contained in the program. The on-line help is written in a language that intermediate ESL learners can handle and has an appealing visual presentation. It can be requested at any point in the program. By requesting help, users can acquire information about the installation process, an overview of the program's features, and the types of activities included. Also, Americana includes a tracking device or capability that recodes users' progress as they work with the program. Tracking records provide the following information: the day and time users started a session, the amount of time they worked on a lesson or exercise, scores in the form of percentages that show which questions users answered correctly, and the type of unit and name of the lessons and exercises worked on. The tracking feature allows users to monitor their progress.

In addition to its many technological strengths, Americana has some technical shortcomings. Some of the features currently included need further improvement, while other features should be included. One of the features that could be enhanced is the sound controller. The program does not provide any control over the rate of speech. Users cannot slow the speed of the audio track, nor can they vary the interval between natural phrase breaks to provide more time to process the input. According to O'Malley, Chamot, and Kupper (1989), second language learners are assumed to have difficulty understanding the language spoken at typical conversational rates by native speakers, so while they are learning, they need to be able to reduce the audio track speed to maximize their comprehension.

Navigation is another area that needs improvement in several aspects. Because of the absence of a return button, users cannot go back to a previously visited point. To retrace their steps, they must exit their current location and reenter the program. Likewise, the software does not allow users to start where they left off in a previous session. In other words, the program lacks a save feature that allows users to stop at any point, save their progress, and return to the same point later.

The program, indeed, provides comprehensive on-line help, but it is only in the form of text. It would be more helpful if the program offered audio help that delineated

each feature's function. The true potential of today's technology is exploited by including multimedia annotations for some of the vocabularies that appear in the text. The software defines the concrete vocabulary items in multiple modalities: printed text definition coupled with a static picture and pronunciation of the target word. For example, if users decided to click on the word "pumpkin," which appears in the Thanksgiving lesson in Unit One, they would read the definition (large round orange-colored fruit, used as a filling for pies), see a color picture (an illustration of a pumpkin), and hear the word pronounced. Easy access to different types of annotations in different presentation modes is reported to aid second language vocabulary acquisition (Al-Seghayer, 2001; Chun & Plass, 1996). The only problem associated with current multimedia annotations is that when the user clicks on the available picture, it appears on top of the text and covers most of the definition that appears at the top of the window. This interrupts the reading process. Thus, it would be more beneficial if the picture appeared in a separate window to be displayed next to the text, not on top of it. Best of all would be the simultaneous display of pictures with the definition and sound when the user clicks on the highlighted words. In the present arrangement, users may overlook the provided pictures. In addition to the electronic glossary, relevant informational background and specific sociocultural explanations accompanied by visual illustrations should be incorporated.

A graphic comparison facility or spectrograph should be added to the self-recording and comparison feature to make it more effective. The currently embedded recording feature lacks a graphic comparison facility, making it difficult for users to perceive the difference between their own recorded speech and that of the native model. Additionally, users rely on their subjective auditory judgment when comparing their recorded speech to the native model. In these circumstances, according to Chun (1998), results are enhanced when a visual, as well as auditory display of intonation, is presented.

Other technical aspects that should be considered are providing a more meaningful contextual environment by including more pictures and capitalizing on the digitized video to facilitate the instructional activities. Each lesson starts by showing one static picture which reflects the main theme of the lesson and occupies the whole window. For example, if the user chooses to study the lesson about Chicago (lesson 10 in Unit One), he or she will see a color picture of a section of Chicago. No further picture is used, although the text talks about some features of the city that could be visually presented, such as the geographical location of Chicago, O'Hare Airport, and other points of interest mentioned in the text under study.

Related to this, the digitized video has not been exploited in Americana. Video clips could provide a much more dynamic representation of American culture and history than the static pictures which have been used. In other words, a given message is expected to be effectively conveyed and remembered if there are more paths for retrieval. The dual coding theory of Paivio (1986) attests that when both verbal and visual materials are presented, learners can construct referential connections between the mental representation of the two systems, verbal and visual, and thus learn more effectively. It should be emphasized that the visual aids utilized should have pedagogical reasons for being incorporated in the program, otherwise, as noted by Berry (2000), they can confuse and disorient learners.

Another feature that is not fully exploited in Americana is feedback, both immediate and of varying types. Feedback is only included in TestLab exercises, where users are provided with textual feedback in a pop-up window, whether the responses are

right or wrong. The program not only indicates that the answer is right or wrong, but also provides a clue to users who have supplied the incorrect answer and reinforces users' correct responses. For example, when users respond correctly they read, "You got it. They arrived at the wrong time of year and could not prepare for winter." When their response is not correct, they read statements such as, "That's not correct. Please choose another answer. Check the first paragraph again," or "No, please try again. Think of farther north." Also, users are allowed only two attempts and if they still fail to supply the correct answer, the program instructs them to click ok or press enter to see the correct answer, which is highlighted. As Robinson (1991) indicates, the implementation of such feedback helps learners discover their own mistakes. This is assumed to considerably improve achievement, as compared to employing feedback that discloses errors. This immediate, informative textual feedback, whether users respond correctly or incorrectly, is provided in only one exercise out of seven. It would be more beneficial if the program incorporated similar interpersonal feedback in every exercise and not only in textual form. It should also be in the form of an audio response, with rising intonation to encourage another try.

Pedagogical Activities

Americana consists of six main units, each of which has ten lessons. There are seven instructional activities within each lesson, offering a variety of activity types. The ensuing activities provide opportunities for users to build on the textual information presented in the target text. When ready to continue, users select from a list of exercise types, which are based on the text content. It should be noted that these exercises are presented within the framework of the specific micro-skills associated with listening, speaking, reading, and writing.

The first exercise is AudioLab, in which users can listen to the content of the chosen lesson's text without seeing the text on the screen, then do some related exercises. These exercises include listening to a small segment of the text (sentence or phrase), repeating what they hear, recording themselves saying the same segment, and then comparing their voices with the original. The second exercise, WordLab, allows users to do some vocabulary exercises for the same lesson's text. There is a variety of options, including consulting the definitions of the highlighted words, listening to the pronunciation of each word, repeating after the prerecorded words, recording their pronunciations, and comparing their recorded speech with that of the native model. The third exercise is SoundSort, which is designed to provide additional listening comprehension practice. Users are expected to hear, in mixed order, the segments of the text they have practiced in AudioLab, and then they are asked to rearrange the segments in the correct order using only aural clues. The fourth exercise is CrossWord, which is a computer-generated crossword puzzle game that combines aural and visual clues. It is developed to help users practice recognition and spelling of the new vocabulary they have just encountered in the text. The fifth exercise is AudioWrite, which provides users with opportunities to practice listening as well as dictation and spelling practice. They listen to the whole text without seeing it on the screen and then they hear it again in sentences or phrases and type what they hear. The sixth exercise is TextLab, which is a vocabulary exercise or a fill-in-theblank exercise. Users are given a limited time to read the whole text. When the designated time is over, some of the words are replaced by blanks. Users are expected to fill in the blanks with the appropriate missing words. The last exercise is TestLab, which is a

reading comprehension test. The questions included in this exercise are designed to test the user's general understanding of the lesson text.

Americana makes use of active engagement in its extended employment of various interactive activities. There is further opportunity to practice the previously encountered material in a wide range of activities including dictation, fill-ins, and vocabulary challenges. Five features make the incorporation of a wide variety of activities more interesting. First, the instructions on how to do the exercises are stated clearly, as well as the instructional objectives for each of the activities. Second, users of the program have control over learning activities; they can choose the lesson they want to study and do whichever exercise they choose within that lesson. Thus, they are not tied to a predefined path which they must follow when using the program. Hannafin and Sullivan (1996) contend that learner-controlled learning is more effective than program-controlled learning. Third, users are not constrained by time limits while studying a unit and doing the activities, except for the TexLab exercise where they are given 3 minutes to read the whole text before doing the cloze exercise. Pica (1994) has indicated that potential users, especially less proficient learners, should be given sufficient time to interact with the computer and negotiate the meaning at their speed. Fourth, the software allows users to read audio transcripts while listening if this is their preferred learning strategy. Finally, activities are provided for the learner in a nonthreatening environment.

Overall, the program includes diverse practice opportunities with engaging ageappropriate content. It also consists of a variety of learning options suitable to different ages, levels, and learning styles. This wide range of choices offers learners different kinds of activities linking sound and image, explicit instructions, provision of text reinforcement, and glossary entries.

Despite the above merits of its instructional activities, Americana has some drawbacks for its pedagogical environment. First, it is imprecise in specifying its pedagogical goals. Though the program's purpose is to improve listening comprehension, reading comprehension, speaking, writing, and other related skills, it does not specify which skills are targeted within each exercise. More precisely, learners are not introduced to specific skills and then led to apply them in the subsequent activities step by step. Additionally, it is not clear what the theoretical bases for the inclusion of these activities are. The designer seems to assume that merely listening to a short segment, typing words, and other mechanical activities improve the learners' abilities in areas of the four major skills: listening, speaking, reading, and writing. To allow such goals to be reached, the program needs to provide learners with opportunities that assist them in developing a wide range of skills within these four major skill areas systematically. Furthermore, instructional activities should be guided through the available research concerning each skill. Along with this argument, and concerning listening in particular since it seems the main focus of the program, Joiner (1986) contends that merely exposing learners to oral input is not sufficient and that explicit teaching of comprehension strategies is needed. Not only should users be given opportunities to listen to a multiplicity of situations, but they should also be provided with the ability to develop listening skills, as described by Rost (1990) as strategic responses that constitute an effective listening performance. In a similar vein, Salaberry (2001) accentuates the importance of identifying pedagogical objectives and basing them on second language theories.

Another negative aspect of the program is that the presentations are not sequential. The content of the lessons within each unit and across all six units is ordered such that one lesson or unit does not prepare or advance users to the next lesson or unit. Full control over the pace of learning is granted. Since users bring with them their characteristics and learning strategies, more explicit guidance ought to be included to accommodate individual learner differences.

Throughout the program, the instructions and pedagogical tasks are held constant. This is despite ever-changing unit themes and text types and the expected improvement of the learner's language abilities. It seems more appropriate to treat each unit separately and thus highlight its unique objectives and main points. Moreover, each lesson, or more specifically, text sample, should be presented with a short introduction. This brief introduction should provide a conceptual foreground to further comprehension and help in activating the learner's background knowledge. Research suggests that a preview movie with a voice-over is effective in activating prior knowledge (e.g., Chun & Plass, 1996; Hanley et al., 1995).

There are still further issues that make the varied activity types that are employed less effective than they could be. Except for the recording feature, Americana fails to fully exploit the possibilities of computer technology. Specifically, its activities do not advance beyond the standard instructional activities found in most ESL textbooks. Current technological capability can offer more than fill-in-the-blanks and crossword puzzles. The emphasis of the activities is placed upon the micro levels, including spelling, typing, pronunciation, and dictation. There are no activities that are concerned with reading, writing, listening, and speaking at higher levels.

Theoretical Framework

It is difficult to pinpoint the theoretical assumptions that guided the design of the instructional material of Americana. The software incorporates a variety of instructional activities but does not seem to base them on elements of second language theories. The designer claims that the program is designed to accelerate learners' abilities in the four major language skills. Such a claim, which is posted in the advertisement for the program, makes one assume that it draws on an integrated as opposed to a segregated skills approach. This is simply because one may find it impossible to target all the skills in the areas of reading, writing, listening, and speaking in one program unless such an approach is adhered to. It would include the possibility of a carry-over benefit from one skill to the next, giving the skills a chance to reinforce each other. This is not the case in Americana. Users are introduced to the main text, which is the point of departure for the activities that follow, but those activities are designed neither to allow for potential reinforcement nor to engage users in meaningful tasks. In other words, it does not provide users with instructional activities beyond micro levels of typing, spelling, pronunciation, and dictation.

Conclusion

Americana is a single comprehensive CD that introduces potential users to some aspects of American history and culture and some American folk songs. It is a self-instruction program targeted at intermediate ESL learners who might be interested in learning about the history and culture of the United States. Good design, clear presentation, ease of use,

and incorporation of diverse instructional activities are obvious positive distinctive features of Americana. However, to reach its extended potential, the software needs further technological and pedagogical enhancement. Among the technical attributes that require improvement are sound control, some navigational aspects, and the recording feature. Moreover, depth and validation are needed in the program's immediate feedback, and the program should better capitalize on visual aids. This is true regarding the instructional activities employed and the specific language skills, which need to be spelled out. The activities should also be sequenced, less homogeneous, and more innovative to move beyond the conventional instructional activities usually encountered in ESL textbooks.

References

- Al-Seghayer, K. (2001). The Effect of multimedia annotation modes on L2 vocabulary acquisition: A comparative study. *Language learning and technology*, 5(1).
- Berry, L. (2000). Design guidelines for web-based courses. In Beverly Abbey (ed.). Instructional and Cognitive Impacts of web-based education (pp. 44-55). Hershey, PA: IDEA Group Publishing.
- Brett, P. (1995). Multimedia for listening comprehension: the design of a multimediabased resource for developing listening skills. *System*, 23(1), 77-85.
- Chun, D. (1998). Signal analysis software for teaching discourse intonation. *Language Learning and Technology*, 2(1), 61-77.
- Chun, D. M., & Plass, J. L. (1996). Facilitating reading comprehension with multimedia. *System*, 24(4), 503-519.
- Chun, D. and Plass, J. (1996). Effects of multimedia annotations on vocabulary acquisition. *The modern language journal*, 80(2), 183-198.
- Hanley, J, Herron, C, and Cole, S. (1995). Using video as an advance organizer to a written passage in the FLES classroom. *The modern language journal*, 79(10), 57-66.
- Hannafin, R. and Sullivan, H. (1996). Preferences and learner control over amount of Instruction. *Journal of educational psychology*, 88(1), 162-173.
- Joiner, G. (1986). Listening in the foreign language. In H.S. Lepke (ed.), *Listening, reading, writing: analysis and application*, (pp 43-70). Middlebury, VT: Northeast Conference on the teaching of foreign languages.
- Muter, P. (1996). Interface design and optimization of reading of continuous text. In Van Oostendrop, H., and de Mul, S. (eds.) *Cognitive aspects for electronic processing*. Norwood, N.J.: Ablex Publishing Crop.
- Murray, L. and Ann, Barnes. (1998). Beyond the "wow" factor--evaluating multimedia language learning software from a pedagogical viewpoint. *System*, 26(2), 249-259.
- O'Malley, M, Chamot, A, Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied linguistics*, 10(4), 419-437.
- Paivio, A. (1986). *Mental representation: A dual-coding approach*. New York: Oxford University Press.
- Pica, T. (1994). Research on negotiation: What foes it reveals about second language learning conditions, processes, and outcomes. *Language learning*, 44(3), 493-527.

- Plass, J. (1998). Design and evaluation of the user interface of foreign language multimedia software: a cognitive approach. *Language learning and technology*, 2(1), 35-45.
- Robinson, L. (1991). Effective feedback strategies in CALL. In P. Dunkel (ed.), *Computer-assisted language learning and testing*, New York: Newbury House, 155-167.
- Rost, M. (1990). Listening in language learning. New York: Longman.
- Schmidt, W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-158.
- Salaberry, M. (2001). The use of technology for second language learning and teaching: A retrospective. *The modern language journal*, 85(1), 39-56.
- Tripp, S. and Warren, R. (1990). Orientation and disorientation in a hypertext lexicon. *Journal of computer-based instruction*, 17(17), 120-124.