

1. Word processing software, the most "lowtech" of the tools, "is perhaps the most accepted and universal use of computers in education today" (Hyland, 1993, p. 21). Typically, word processing software offers features such as spelling checkers, thesauri, dictionaries, style checkers, and grammar checkers (Levy, 1990). Some researchers asserted that word processing software tended to increase student enjoyment or appreciation of routine assignments by transforming traditional learning tasks into novel ones (Greenia, 1992; Scott & New, 1994). Greenia (1992) described an early use of a computer-based writing program whereby the class created, shared, and turned in electronic assignments on a floppy disk. The author asserted that this type of composition process facilitated the formation of communicative writing communities and transformed the conventional directive role of the instructor into the position of a facilitator for class discourse. Scott and New (1994) proposed that the development of their word processing program System D helped augment the curriculum by placing a focus on the writing process. Derwing et al. (2000) stated that the usefulness of speech recognition software for language students hinges on its ability to (1) recognize nonnative utterances and (2) identify problem areas of student production to provide corrective feedback. Thus far, research suggests that speech recognition technology is not sufficiently reliable to justify its implementation into second and foreign language classrooms (Coniam, 1998; Derwing et al.).

Importance of Applying Pedagogy and Design Principles

Apart from the reported enthusiasm for using computers, the realization that "technology is essentially impotent without creative and imaginative application" (Bailey, 1996, p. 73) was strong in the 1990s. Hoven (1999) proposed an instructional design model based on sociocultural theory for multimedia listening and viewing comprehension.

2.3 Word Processing Software

A number of articles discussed the need to create computer software based on sound pedagogy and language learning theories, while others stressed the importance of applying design principles in developing CALL applications (Allen & Periyasamy, 1997; Armstrong & Yetter-Vassot, 1994; Collentine, 1998; Masters-VXicks, Postlewate, & Lewental, 1996; Oller, 1996; Schwartz, 1995; Van Bussel, 1994). Padilla (1990), for example, reported that "HyperCard is very easy to use and can be directly applied to many aspects of instruction that occur every day in the classroom" (p. 224). Donaldson and Morgan added that HyperCard was the most cost-effective authoring tool for educators, considering its low price and ease-of-use. Moreover, researchers' comments seem to indicate that they appreciate the "tradition of sharing within the HyperCard community, a set of 'manners' which encourages free and open exchange of program code and thus benefit the novice user" (Donaldson & Morgan, p. 47). Through the use of the Internet, word processors, multimedia, hypermedia, drill and practice programs, students can engage in individualized instruction designed to meet their specific needs and participate in cooperative projects that foster communication with peers in their classrooms and throughout the global community.

Inter Change

is a 60 Babak Ghasemi et al. / Procedia – Social and Behavioral Sciences 28 (2011) 58 – 62 synchronous discussion tool that allows users to have real-time written conversations and was originally developed to teach English composition and literature to native speakers of English (Bump, 1990). Realizing the lack of design guidelines for language educators, Hemard (1997) presented some design principles for creating

Babak Ghasemi et al. / Procedia – Social and Behavioral Sciences 28 (2011) 58 – 62

hypermedia authoring applications. Much of the reviewed literature regarding software

tools consisted of a description of one or more pieces of software, a description of how this software was integrated into the learning environment, a description of the effects of the software on students, and possible implications for further study (Alderson, 2000; Chavez, 1997; Greenia, 1992; Hellebrandt, 1999; Legenhausen, & Wolff, 1990; Levin, Evans, & Gates, 1991; Nicholas & Toporski, 1993). This type of computer-mediated communication (CMC) has become an emphasis in recent language movements in part because it promotes students' equal participation in the classroom (Chun, 1994; Kern; Sullivan & Pratt, 1996). HyperCard (1987–1998), a Macintosh authoring program, was the most frequently cited tool among software researchers/developers (Borras, 1993; Donaldson & Morgan, 1994; Evans, 1993; Liu, 1994; Nagata, 1998).

1.2.1 Daedalus Many studies on CMC examined the use of Inter Change, a component of Daedalus (1988–2002), in second language-learning classrooms (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995). doi:10.1016/j.sbspro.2011.11.012 Babak Ghasemi et al. / Procedia – Social and Behavioral Sciences 28 (2011) 58 – 62 59 the perspective of a language educator and that of a language learner. In addition to specific author ware and commercial software, the literature also addressed broader software application categories that included word processing software, the Internet, and speech recognition software.

Introduction The role of technology as a resource for instruction of foreign language learners is increasing as educators recognize its ability to create both independent and collaborative learning environments in which students can acquire and practice a new language. Thus, learners have an opportunity to monitor their own language production and learn from others' language

1.2.2 Multimedia Authoring Software Though commercial software (e.g., Daedalus, 1988–2002) was the topic of a large number of discussions, many articles discussed the tools created by the researchers themselves using an authoring software program. Interest in using them as tools to support language learning is growing, both from

* Babak Ghasemi . Tel : +98-938-766-6174 , fax: +98-852-4225353 E-mail address : artman_2535@yahoo.com 1877-0428 (C) 2011 Published by Elsevier Ltd. In the eighties, the application of technology in language classrooms included the use of film, radio, television, language labs with audio/video tapes, computers, and interactive video (Cunningham, 1998). Such authoring packages, according to Motteram (1990), allow educators to create computerbased course materials with little or no computer programming experience. Although there were some innovative uses of software such as MacLang, the majority of CALL uses were limited, in form, to drill and practice exercises. As the technology advanced, we began to see more interactive uses of CALL as well as an increase in the integration of various media into the computer system (Pusack & Otto, 1990). These developments have brought text, graphics, sound, animation and video to be accessed on a single inexpensive computer.

1.2 Software Tools Realizing the potentials of computer technology, educators have become increasingly interested in its use as a tool to augment foreign language teaching. The literature seems to indicate that the greatest need for software development is in the areas of listening and speaking, because these two areas were found to be sparsely represented. One of the most important reasons that Inter Change has received a good deal of attention from second language teaching professionals is that it enables students to have meaningful and authentic conversations with others in the target language. In addition, all the language output produced in the Interchange session can be saved and sorted according by sender so that students can reflect on what they or others say. In

those discussions, the importance of technology-enhanced, student-centered activities was emphasized. Moreover, our growing understanding of its potentials has encouraged a shift in emphasis from computer technology itself to its applications. This research focuses on the potential of technology as a powerful tool for foreign language instruction and the challenge of training our lecturers in its instructional applications. The new computer-based instructional technologies were incorporated in order to accomplish the following: -line communication in the target language, speaking as well as second-culture competency. Students are encouraged to generate original utterances rather than just manipulate prefabricated language. Evaluative software articles also tended to discuss whether software was robust enough for school use. Watts (1997) suggested a learner-based design model focusing on learners' goals and needs, rather than on the technology itself. Various types of computer-assisted language learning (CALL) also began to become more commonplace (Landoli, 1990). This is indeed an important area and a current direction in foreign language teaching, which is under the discipline of applied linguistics (Stevens, 1992). A) Communicative CALL: Provides skill practice in a non-drill format through language games. Reading and writing were the most frequently addressed skill areas. Numerous software programs were created in foreign languages such as English, French, Spanish, Italian, German, Japanese, and Russian. That is, finding ways to use computers for enhancing teaching and learning has gained prominence in the research. Open access under CC BY-NC-ND license. It is of two types.