A. S. Chislova (Rostov-na-Donu) Pedagogy and change in education through culture and information technology (on basis of the author's multimedia program "TALK")

The benefits of technology in education will not be fully realized without a focus on cultures that may potentially embrace them. Cultures encompass values, norms, and beliefs that normally protect them from being significantly altered or destroyed. Pedagogists can create collaborative environments to foster learning, innovation and change. These empowering and supportive environments will foster modification of values, norms, and beliefs that will allow their cultural members to effectively integrate technology into their curriculum. In turn, transformed cultures will be able to develop the capacity for change which leads to beneficial improvements, including those which involve technology. This article deals with one attempt at creating such a collaborative environment, the author's multimedia program *Talk*.

A. S. Chislova (Rostov-na-Donu)

PEDAGOGY AND CHANGE IN EDUCATION THROUGH CULTURE AND INFORMATION TECHNOLOGY (ON THE BASIS OF THE AUTHOR'S MULTIMEDIA PROGRAM "TALK")

Introduction

Over the last thirty years there have been numerous attempts to bring about radical reforms or changes in educational institutions. Today we cannot continue to promote change for the sake of change and we cannot mandate change (Fullan 1992: 745-752). In a similar way, we cannot mandate the use of technology in schools and universities. Technology has significant benefits for teaching and learning, but we can't simply utilize technology for technology's sake in order to satisfy political agendas that do not benefit students. Once again, the culture of the school is an important key for the acceptance and appropriate use of selected technologies, namely multimedia technology. The technology which is selected needs to fit into the educational institutions culture, goals, curriculum and activities, not vice versa.

Theoretical considerations

Although computers have at times been hailed for their potential to revolutionize teaching practices, recent research suggests that change is a complex matter and may be related to such factors as the materiality of the tool itself as well as the way it is ultimately adopted or rejected by individuals in specific social settings (Haas 1996; Hawisher & Selfe 2000; Murray 2000: 43-57; Nicolopoulou & Cole 1993: 283-314).

Other studies (Murphy 2000; Reyes & Vallone 2008; Sandholz, Ringstaff, & Dywer 1997; Warschauer & Meskill 2000: 3-20) suggest that more innovative uses of computer technologies may, in fact, be more reflective of teachers who espouse constructivist/socio-constructivist approaches to pedagogy. Sharon Reyes and Trina Vallone (2008) conducted a study linking constructivist pedagogies to ELL (English Language Learners) instruction. They combine a constructivist method with culturally responsive instruction (that builds on students' experiences and strengths) to improve educational equity. This approach demonstrates how the teachers' gradual shift towards constructivist teaching strategies, characterized by the use of projects

Язык, коммуникация и социальная среда. Выпуск 7. Воронеж: ВГУ, 2009. С. 150-162.

and cross-curricular initiatives, evolved over time as they felt more at ease with the technology itself (Reyes & Vallone 2008).

Language and cultural reality

The word "culture" has different meanings for different nations according to Webster's dictionary. The definition of culture in Webster's Dictionary, that most appropriately fits this discussion, reads: "the concepts, habits, skills, arts, instruments, institutions, etc. of a given people in a given period" (http://www.webster-dictionary.net/ definition/culture). This definition indicates that cultures do change, but that they also reflect all the characteristics and attributes that make them distinctive. Individuals may significantly represent or display their own cultural heritage. In foreign language teaching/learning process the term 'cross-cultural' or 'intercultural' usually refers to the meeting of two cultures or two languages. This cultural approach seeks ways to understand the *Other* by learning his/her national language. Such meeting may involve two cultures, one being adopted (the adoptee) and one that is adopting the other (the adopter). However, it is necessary for both cultures to preserve their backgrounds as national legacy.

Language (both verbal and non-verbal) is the principal means whereby we conduct our social lives. When it is used in contexts of communication, it is bound up with culture in multiple and complex ways.

To begin with, the words people utter generally refer to common experience. They express facts, ideas or events that are communicable because they refer to a stock of knowledge about the world that other people in their cultural community share. Words also reflect their authors' attitudes and beliefs, their points of view that are also those of others. In both cases, *language expresses cultural reality*.

But members of a community or social group do not only express experience; they also create experience through language. They give meaning to it through the medium they choose to communicate with one another, for example, speaking on the telephone or face-to-face, writing a letter or sending an e-mail message, reading the newspaper or interpreting a chart. The way in which people use the spoken, written, or visual medium itself usually creates meanings that are understandable to the group they belong to, for example, through a speaker's tone of voice, accent, conversational style, gestures and facial ex-

pressions ("emoticons" and other symbols in e-mail). Through all its verbal and non-verbal aspects, *language embodies cultural reality*.

Finally, language is a system of signs that is seen as having itself a cultural value. Speakers identify themselves and others through their use of language; they view their language as a symbol of their social identity. The prohibition of its use is often perceived by its speakers as a rejection of their social group and their culture. Thus we can say that *language symbolizes cultural reality* (Kramsch 2000: 3-5).

In the modern world there are more than 2,700 languages spoken. But it is English that has grown into the language of international communication. Incredibly enough, 75 % of the world's mail and 60 % of the world's telephone calls are in English. It is also the language of business, international conferences, and symposia. If we look at history it seems inevitable that English will move into the past (English in a changing world 1999: 5-20], but currently it holds a unique position among world languages.

English is the language of Information Technology (in the sense that e-mail lists and information on the Internet are overwhelmingly in English). Because of the Internet, information can be available to anyone of any culture that wants to look at it. We have already entered the Information Age. Education is shifting more and more toward services and knowledge and the number of people who wish to learn English in the Russian Federation has grown dramatically.

Globalization of English does not mean rejection of native language and cultural traditions. It is something different. English can provide a variety of possibilities, particularly through the Internet. The development of global English is a natural process; it is not imposed by some governments, politicians etc. In an interview, Tom McArthur, Editor of *English Today,* says: "A 'global nervous system' i. e. an electronic network, whether it is the radio, TV, cinema, or the Internet and the World Wide Web, is highly unlikely to be in English alone, but English will probably dominate it. The situation may change but at the moment English is the high language and it tends to flow into everything else, downward, like water" (English in a changing world 1999: 6-7).

Researchers Tony Schirato and Susan Yell, wrote that communication can be understood as the practice of producing meanings and the ways in which systems of meaning are negotiated by participants in a culture (2000: 1-3). The globalization of English combined with the

rapid growth of Information Technology has resulted in a new language culture.

Educators, learning to integrate technology into their curriculum, will probably move through different stages and levels until they feel very comfortable and confident. Healthy cultural environments – those are maintained and updated by educators in their schools – will foster beneficial changes for students and teachers, including those changes that make beneficial use of technology.

Students must somehow be prepared to operate with English in unknown situations, which are characterized by variation in linguistic and cultural behaviour. Recognizing the fact that the objectives in English as an International Language are broader ***cross-cultural communication***, Baxter (1983) notes that students need practice in listening to English in the real world. The unpredictability of the English speakers, on the one hand, and their divergent range of cultural backgrounds on the other, creates a ***multicultural perspective*** for English in international conditions. What does this need for English communication in a multicultural milieu mean for the English language teacher?

Consider speech and writing. Speech and writing are two of the primary means or mediums people use to communicate. Traditionally they were considered to be two alternative ways people can communicate using language. With the advent of new technologies, what seemed to be fairy clear cut differences between the medium of speech and the medium of writing are becoming less distinct. Once a message is completed and sent, it travels almost instantaneously, and if the other user is using the network at the same time, that user can reply almost immediately. Communication via the Internet can thus take on the interactivity of a telephone conversation while allowing the option of keeping a permanent record of the message. More than that, the services of Skype and Video Conferences allow users to make their communication through the Internet instantly (they see each other and speak in real time without any delay).

Users of the Internet have even developed a common code to supply the paralanguage and bodily communication (the facial expressions, tones of voices, and gestures) called “emoticons” which supplement the verbal meanings in face-to-face interaction. These are typographic symbols combined to form miniature icons for various emo-

tions (Schirato & Yell 2000: 131-132). All these tools open up new possibilities for the language classroom.

The revolution in global communications has also created new expectations. The Internet is the fastest growing instrument of communication in the history of civilization, and it may be the most rapidly disseminating tool of any kind ever. It has already changed the way many people work and live. So the challenge is clear: if we are to capture the promises of globalization while managing its adverse effects, we must learn how to cooperate in learning to manage these new tools of communication.

Joint efforts make people closer together; they change their attitudes towards each other, and learn to negotiate meaning so their communication makes sense. In this way there appears a convergence of cultures.

Much attention is currently being devoted to understanding the role of computer and multimedia technologies in pedagogical practice, fostered to a large degree by the two key factors discussed above, changes in the world socio-economic order frequently referred to as globalization, and the ever-increasing presence of computer technologies in daily life (Hass 1996; Hawisher & Selfe 2000; Murray 2000; New London Group 1996; Warschauer & Kern 2000). This attention has resulted in a more active learning pedagogical approach.

Related to an active learning pedagogical approach is the notion that students learn well by doing for themselves. Multimedia technology offers the opportunity to simulate reality, which can facilitate innovative experiential learning. Through video and sound, a real-life ***scenario*** can be conveyed. Then the interactive and non-linear access capabilities of multimedia can enable the student to explore the situation as if it was real. These capabilities of multimedia technology mean that it can be used for the application of previously learned concepts, or for a more inductive approach to learning.

Best Practices in Multimedia Development

The material selected for multimedia development should lend itself well to an inductive approach to learning. The special characteristics of multimedia should be exploited, rather than simply presented as material in a way that models textbooks. Students should be able to interact with the program. It should be student-driven and aimed at recognizing different students' capabilities as appropriate and feasible

and accommodating them. Our research has shown that interactivity, in the form of "intelligent tutors", can reduce time of instruction and errors in learning.

Tasks particularly suited to multimedia presentation include role-playing, concept acquisition, and visualization-based skills. A large range of products could be called "multimedia"; but, regardless of its form, multimedia material should be interactive and student-centered.

To develop multimedia products successfully, a variety of expertise is required – although, of course, such a range may be found in one person. These skills include instructional design, programming, writing, graphic art, subject matter, funding development, and perhaps project management as well. Without sufficient grounding in such expertise, the use of multimedia products is very likely to be marginal.

There are limitations, which we try to overcome, as the complexity of a real life situation can never be replicated with total accuracy. Surely, one of the major problems to consider is the advance of hardware which sometimes causes incompatibility with software. (That is why our latest multimedia programs are based on *FLASH* technology). Care must also be taken to ensure the package is not unrealistic. Social implications must also be considered.

Despite these potential limitations, the ability of multimedia to contextualize knowledge and enable non-linear access means that it does have the scope to enhance learning for any subject which contains a practical dimension. It is argued that it is these features which distinguish multimedia from other forms of CALL (Computer Assisted Language Learning).

Flexibility and interactivity of learning technology

Anticipating the teaching/learning process of the 21st century as exceptionally different from that of the previous century, the world community is stepping into a new education environment. The author of this article (being a pioneer in creating computer programs for humanities) gives preference to new information technologies, the communicative approach, and multimedia software because they have the following characteristics:

- establish a friendly, open atmosphere that shows the participants it will help them learn;

- encourage students to communicate in English in a wide range of everyday situations;
- sustain motivation through providing students with the opportunity to use creatively the language they are learning;
- support students' participation in learning (to avoid their fear of being put down or ridiculed);
- treat all questions and comments with respect;
- give students the chance to test their ideas, to take risks, and to be creative;
- engage the students in a process of mutual inquire (not to "spoon-feed" the participants);
- develop students' receptive skills (listening and reading) beyond those of their productive skills (speaking and writing);
- take into account differences in style, time, types and pace of learning;
- contribute to students' personal, social, educational and cultural development.

The task-based approach to learning is drawn from the constructivist view that mere exposure to subject content is not enough. Rather, to achieve real understanding the learner must use information in the performance of some task involving thinking and problem solving. A special scenario may be written with a lot of innovative exercises specially developed and organized for the program.

We strongly believe that the more different neuro-systems are deployed in learning, the better something is learned and the more easily it is accessed again later. Computer technology is superbly adapted to this concept (i. e. English language teaching) as it can provide sound, colour, graphics, animation, and video – in addition to or layered onto textbooks' hard-texts. The author develops multimedia software – interactive programs which can be used not only in classrooms, but can be applied through the Internet for Distance learning, for self-studying. In these programs, students receive comprehensive, individualized instruction in all the skills simultaneously, listening, speaking, reading, and writing, along with computer record-keeping and adaptive testing.

For example, our multimedia PC program, *Talk,* is based on communicative games and activities. Experience has shown that if learning is pleasurable, there is greater involvement and recall on the part of the student. The main purpose of this program is to help students ac-

quire skills and habits in other cultural environment communication and to choose linguistic means according to the situation and individuals involved. Language is not a static phenomenon, it is alive and dynamic. And our task is not only to write an electronic textbook with grammatical rules and traditional sets of standard exercises, but to transmit knowledge to students about the process of development and function of the English language. This program is designed for the 2nd and 3rd-year students in institutions of higher education.

The whole program "Talk" is divided into 15 units. Each unit has its own interface, style and assignment, but all of them are linked by the main idea – language, the English language – from its history up to the present time. The program starts with an introduction into the history of the English language, and then students choose countries where English is spoken as a native language and where it is used as a second one on a map of the world.

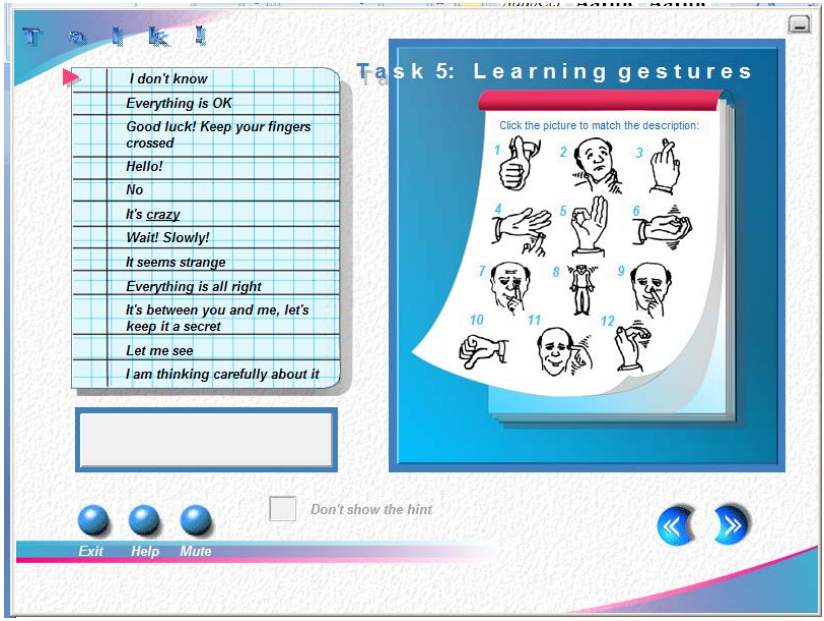

Figure 1. Non-verbal communication

There is an exercise on using gestures – nonverbal language (Fig. 1) – not only in English-speaking countries but in some other cultures, to show the peculiarities of native cultures and to orient students to forms of politeness in their manner of communication with foreigners. There are other exercises on adequate response in different spoken situations. To help students understand whether they are right or wrong, we also use some of the gestures from previous exercises. There is an exercise on the differentiation of various uses of language, various registers (formal or informal speech, English and American variants of the English language) and styles.

There are some exercises on composing dialogues using everyday English (Fig. 2).

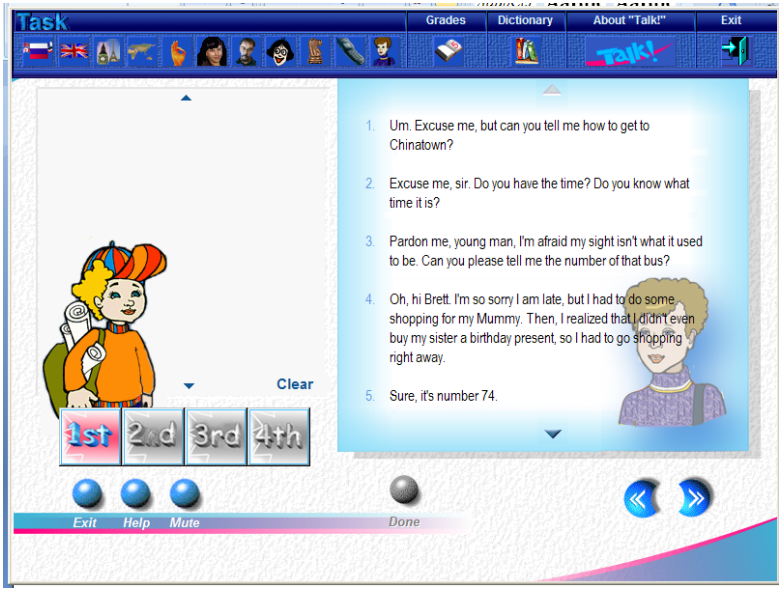

Figure 2. Spoken English, different styles of speech

The structure of electronic multimedia programs for language learning favours the development of multi-literacies and collaborative processes of text production (e. g. Fig. 3).

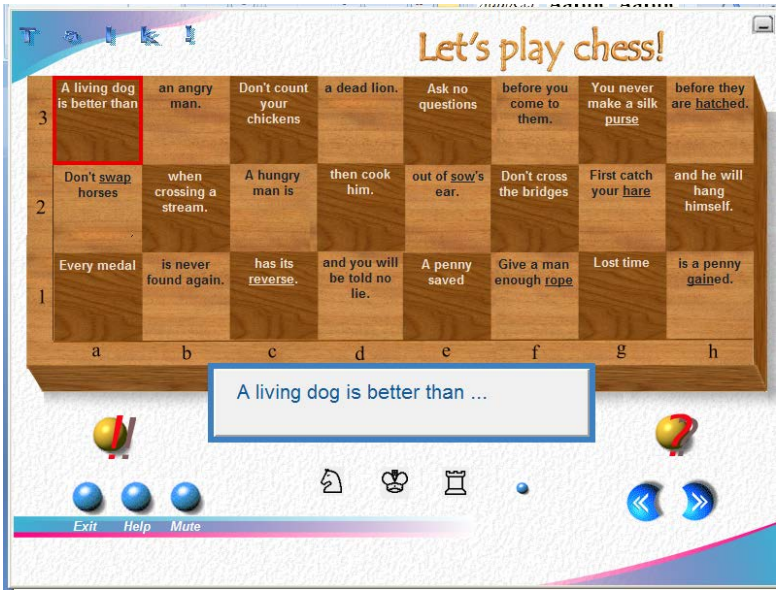

Figure 3. Finding the suitable ending for a proverb

We strongly believe that the use of multimedia software opens up the classroom to creative instruction and applications, integration of knowledge, and expanded student-teacher and even wider communication (as via the Internet). The instructor becomes coach and motivator, rather than only an authority, in a setting that can address real-world problems.

Summary

Computers and technology play starring roles in our personal and professional lives, and they have also begun playing dominant roles in the classroom. In recent years, publishing houses have disseminated new language learning technology, and teachers have also posted a wealth of materials on the Internet to enhance students' language learning experiences (Sharma & Barrett 2009: 33).

Some authors call such an approach *blended learning*, a concept that has become more and more prominent in second language classrooms (MacDonald 2008; Thorne 2003). Sharma and Barrett indicate that the crucial element in blended learning is an appro-

priate balance of face-to-face teaching and technology use. Neither the computer nor the World Wide Web is meant to replace instructors; both are supplements to instructor-developed lesson plans. Yet technology can provide a myriad of benefits, including the development of independent learners, a source of instant feedback, and motivation to learners. The authors also suggest that many second language learners have come to expect technology in the classroom because they see themselves as part of the "Net generation" (Tapscott 1999: 6-11); however, Sharma and Barrett stress that technology should fit appropriately into each lesson plan (both in and outside the classroom), to facilitate independent and motivational learning and should not be used just for the sake of using it. Technology should be used to enhance instructors' lesson plans and create interactive and motivating lessons for both teachers and students (Sharma & Barrett 2009: 34-38).

The program described here provides an illustration of how the potential of technology was harnessed in an effort to move toward a notion of community as a multi-voiced, dialogic space. It goes without saying that while such multimedia tools can fundamentally restructure the educational process, they cannot replace the functions of good teachers.

References

1. Baxter, J. "Interactive listening". In L Smith 'Readings in English as an international language'. Pergamon Press., 1983 http://iteslj.org/Articles/Talebinezhad-EIL.html

2. English in a changing world, edited by David Graddol and Ulrike H. Meinhof, AILA, 1999, pp.5-7

3. Fullan, M. & Miles, M. Getting Reform Right: What Works and What Doesn't: *Phi Delta Kappan*, June 1992, pp. 745-752

4. Haas, C. (1996). Writing technology: Studies on the materiality of literacy. Mahwah, NJ: Lawrence Erlbaum. http://www.kent.edu/english/Faculty/Haas.cfm

5. Hawisher, G. E., & Selfe, C. (Eds.). (2000). *Global literacies and the World-Wide Web.* London: Routledge. http://www.infibeam.com/Books/info/Gail-E-Hawisher/Global-Literacies-and-the-World-Wide-Web/0415189411.html

6. Kramsch, C. Language and Culture, Oxford University Press, 2000, pp. 3-5

7. MacDonald, J. (2008). *Blended learning and online tutoring: Planning learner support and activity design (Second Edition)*. Burlington, VT: Gower. http://www.elearningscotland.org/content.asp?ArticleCode=2858

8. Murphy, E. (2000). Strangers in a strange land: Teachers' beliefs about teaching French as a second or foreign language in online learning environments. Unpublished doctoral dissertation, Université Laval, Quebec City, Canada. http://www.hotelsmag.com/article/CA6484895.html#1

9. Murray, D. (2000). Changing technologies, changing literacy communities? *Language Learning & Technology, 4*(2), 43-57. Retrieved September 27, 2000, from http://llt.msu.edu/vol4num2/murray/default.html

10. Nicolopoulou, A., & Cole, M. (1993). Generation and transmission of shared knowledge in the culture of collaborative learning: The Fifth Dimension, its play-world, and its institutional contexts. In E. Forman, N. Minick, & C. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 283-314). Oxford, England: Oxford University Press.

11. Reyes S.& Vallone T., Corwin Press, 2008, Constructivist Strategies for Teaching English Language Learners (http://www. corwinpress.com/booksProdDesc.nav?prodId=Book228955).

12. Sandholz, J. H., Ringstaff, C., & Dwyer, D. C. (1997). *Teaching with technology: Creating student-centered classrooms.* New York: Teachers College Press. (http://www.fno.org/juno2/ teachingreview.html).

13. Schirato, T. & Yell, S. (2000). Communication and Culture, SAGE Publications, London, pp. 1-3; 131-132

14. Sharma P & Barrett B. *Blended Learning: Using technology in and beyond the language classroom // Language Learning & Technology* (http://llt.msu.edu/vol13num1/review3.pdf). February 2009, Volume 13, Number 1 pp. 33-39.

15. Tapscott, D. (1999). Educating the net generation. *Educational Leadership, 56*(5), 6-11.

16. Thorne, K. (2003). *Blended learning: How to integrate online and traditional learning.* London: Kogan Page Publishers. (http://wiki.media-culture.org.au/index.php/E-Learning_-_Blended_Learning).

17. Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3-20). Tokyo: Logos International

18. Warschauer, M. & Meskill, C. ESL/EFL Ideas & Issues – "The Accidental Linguist" (http://esl-eflideasissues.blogspot.com/2008/08/warschauer-meskill-2000.html).

19. Warschauer, M. & Kern, R. ESL/EFL Ideas & Issues - "The Accidental Linguist" (http://esl-eflideasissues.blogspot.com/2008/08/warschauer-Kern-2000.html)

20. ESL/EFL Ideas & Issues – "The Accidental Linguist". (http://esl- eflideasissues.blogspot.com/2008/08/warschauer-kern-2000.html)

21. Webster's Dictionary (http://www.webster-dictionary.net/definition/culture).

Получено 05.10.2009

Числова, Алла Сергеевна (Chislova A. S.) – кандидат философских наук, профессор, заместитель заведующего кафедрой английского языка гуманитарных факультетов по информатизации Южного Федерального Университета (Ростов-на-Дону); chislova@english.rsu.ru