Evolution of Child Development in the Multimedia Environment

ASHVINI JOSHI and VINITA BHATNAGAR

Sri Satya Sai College of Engineering, Bhopal (India).

INTRODUCTION

Education is not preparation for life; education is life itself.

The time it takes to earn the degree in education today is based on an increasingly outdated model: so many hours in a classroom entitle a student to a receipt in the form of a grade, and so many receipts can be redeemed for a credential in the form of a degree... Education today is just beginning to think of shifting the basis of certification from time served to skills and knowledge obtained.

Multimedia holds great promise for improving the quality of education because multimedia provides the ability to illustrate ideas with visual, audio, text or any combination of media so learners can create new ways of communicating ideas.

The role that information technologies are playing and will continue to play in the area of education , explains the ways that these forms of mass media are being applied in education to make it a more accessible, more effective, and more efficient. It illustrates that these forms of media hold a great deal of potential, and will become more and more important to education, multimedia teaching strategies allow for people to become educated and trained, who in the past would not have been given such an opportunity.

Advantages of Mu

The impact of technology on Education has been tremendous. By adopting the various technological tools that are available today we have been able to enhance learning and teaching at the same time. As a teacher, facilitator reading or speaking out the information to the students is not sufficient. A class or a session is like a presentation, and the presenter (teacher) needs to plan and prepare his/her session. Along with rendering information, it is the learning outcome to be achieved that has to be kept in mind. Technology helps and aids teachers to enhance this learning outcome. It looks at the argument that multimedia can educate children by entertaining and keeping their interest while they learn. Multimedia is a tool that can be used to increase the learning outcome of a session. In fact, it is a combination of multiple techniques, Today's children and those of the future will grow up immersed in the multimedia environment. I anxiously wait to see how these children will integrate the various media into their environments, creating and expanding their cognitive, social, physical, and creative capacities. The "wall" of information and technology that divided adults and children in the past is now not so thick, as children are now able to access all types of information easily using these technologies. They are also able to engage themselves in many types of virtual experiences which will allow them to broaden their skills and imagination. However, the question of how these children should best utilize, to their fullest potential, multimedia technologies and how adults who guide these children should scaffold them still remains unclear.

Multimedia Encourages New Learning Styles

"Students must be the change they want to bring in world"

Modern computer and communication technology is becoming common place in a growing number of schools. Add to this the multimedia capabilities of the web and students literally have the world of information at their fingertips, with much of this information available to them in ways easy for them to grasp. As new media are used by students both as their source of raw information and as the tools through which they express their mastery, the role of educator changes. Instead of teachers providing "content" to students, they now are freed to help students find "context" and meaning in their studies.

Multimedia as the catalyst
"*Education's purpose is to replace an empty mind with an open one.*"
   Education has historically prepared most students to live productive lives in a family within a society. This technology can serve as a catalyst to help educators capitalize on the unique skills which each learner brings to the classroom. Multimedia technology can support an education environment in which

´ All children can learn-the computer can enhance the learning process, from enabling communication for a child who is severely disabled, to providing insight and new ways of dynamically visualizing concepts for children who have special talents.

´ Cultural heritages are valued and nurtured-technology can help teachers provide learning environments that are not only culturally sensitive to the heritage of each of their students, but culturally affirmative and rich in varied language experiences.

´ Learning is a lifelong process-the computer can engage both parent and child and encourage learning for both through intergenerational sharing of language and experience.

´ Families can become more self-sufficient-computer technology can provide individualized programs in basic skills, literacy, health and nutrition, and career development, not only in formal education environments, but in community centers, museums, libraries, and the home.

"One's destination is never a place but rather a new way of looking at things"

Our goal must be to harness technology to provide the most engaging and dynamic system ever used in education, so that school once again embraces culture and learning in our society. The process of education must deal with the needs of students to develop both macro and micro strategies for dealing with their world. One effect of the worldwide information processing capability is that work can now move to wherever skilled labor is available. Countries are now linked financially, economically, socially, culturally, and politically as never before, and this linkage is constantly growing. This can create new income and demand for more goods and services in countries which have educated their populations to deliver the skills in demand for the information age; it can rapidly drain countries whose citizens do not develop skills to keep pace with the emerging work opportunities

"The surest way to grow the global market for educational media is to grow the global audience of educated people."

Benefits of multimedia technology
   Multimedia technology is intended to improve education over what it would be without technology. Some of the claimed benefits are listed below:
Easy-to-access course materials
   Instructors can post the course material or important information on a course website, which means students can study at a time and location they prefer and can obtain the study material very quickly

Student motivation
   Computer-based instruction can give instant feedback to students and explain correct answers. Moreover, a computer is patient and non-judgmental, which can give the student motivation to continue learning. Students usually learn more in less time when receiving computer-based instruction and they like classes more and develop more positive attitudes toward computers in computer-based classes

Wide participation

Learning material can be used for long distance learning and are accessible to a wider audience

Improved student writing

It is convenient for students to edit their written work on word processors, which can, in turn, improve the quality of their writing. According to some studies, the students are better at critiquing and editing written work that is exchanged over a computer network with students they know

Subjects made easier to learn

Many different types of educational software are designed and developed to help children or teenagers to learn specific subjects. Examples include pre-school software, computer simulators, and graphics software

"An educational system isn't worth a great deal if it teaches young people how to make a living but doesn't teach them how to make a life."

Knowledge is innately free and rightly belongs in the public domain. We just want learning to be easy, personalized. Technology is an increasingly influential factor in education. Computers and mobile phones are used in developed countries both to complement established education practices and develop new ways of learning such as online education (a type of distance education). This gives students the opportunity to choose what they are interested in learning. Technology offers powerful learning tools that demand new skills and understandings of students, including Multimedia, and provides new ways to engage students, such as Virtual learning environments. Technology is being used more not only in administrative duties in education but also in the instruction of students. The use of technologies such as PowerPoint and interactive whiteboard is capturing the attention of students in the classroom. Technology is also being used in the assessment of students. One example is the Audience Response System (ARS), which allows immediate feedback tests and classroom discussions.

Information and communication technologies (ICTs) are a "diverse set of tools and resources used to communicate, create, disseminate, store, and manage information." These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephone. There is increasing interest in how computers and the Internet can improve education at all levels, in both formal and non-formal settings. Older ICT technologies, such as radio and television, have for over forty years been used for open and distance learning, although print remains the cheapest, most accessible and therefore most dominant delivery mechanism in both developed and developing countries.

Yesterday's impossible is today's normal.

What we want is to see the child in pursuit of knowledge, and not knowledge in pursuit of the child."

"Education is a weapon, whose effect depends on who holds it in his hands and at whom it is aimed."

It also exposes the other side of the argument— that children are merely being entertained, learning how to passively watch, while developing shorter attention spans and the need for quick stimuli , also study the difference between training and critical thinking with the use of multimedia.

This does not mean, however, that any program filled with rich media elements is automatically valuable. Our task in education is to engage, not entertain, the learner. Our new tools provide the potential to do this, but the art of software development still requires careful thought about both the pedagogy and curriculum.

REFERENCES

1. Apple, *Multimedia demystified.* New York: Random House (1994).

2. Anderson, J. R., *Cognitive psychology and its implications.* New York: W.H. Freeman

(1990).

3.   Barrett, E. & Redmond, M., *Contextual media.* Cambridge, MA: MIT Press (1995).

4.   Biocca, F. & Levy, M.R., *Communication in the age of virtual reality.* Hillsdale, NJ: Lawrence Erlbaum (1995).

5.   Blattner, M.M.., In our image: Interface design in the 1990s. *IEEE Multimedia,* 25-36 (1994).

6.   Clark. R.E., Reconsidering research on learning from media. *Review of Educational Research,* **53**: 445-459 (1983).

7.   Dannenberg, R. & Blattner, M., The trend toward multimedia interfaces. In Blattner, M. and Dannenberg, R. (Eds.) *Multimedia Interface Design.* New York: ACM Press (1992).

8.   Davenport, G., Seeking dynamic, adaptive story environments. *IEEE Multimedia,* **3**: 9-13 (1994).

9.   Davenport, G. Seeking dynamic, adaptive story environments. *IEEE Multimedia,* **3**: 9-13. (1994).

10. Davenport, G., Evans, R. & Halliday, M., Orchestratingdigital micromovies. *Leonardo,* **26:** 4 (1993).

11. Eberts, R.E. *User interface design.* Englewood cliffs, NJ: Prentice-Hall (1994).

12. Erickson, T.D., Working with interface metaphors. pp65-73 in Laurel, B. ed. *Art of human computer interface design.* Reading, Massachusetts: Addison Wesley (1990).

13. Falk, D., & Carlson, H., Learning to Teach with Multimedia. *T.H.E. Journal,* pp. 96-101 (1992).

14. Farah, M.J., Knowledge from text and pictures: A neuropsychological perspective. In Mandl, H. & Levin, J.R. (Eds.) Toffler, Alvin (1990) *Powershift* (1989).

15. Utz, Peter. *All You Need is LV* (1994).

16. Van Tassel, Joan., *Advanced Television Systemsl.* Newton, MA: Focal Press (1996).

17. Waern, Y., *Cognitive aspects of computer supported tasks.* Chicago, John Wiley (1989).

18. Waring, Becky., Video Scan Converters: Not as Simple as they Seem. *New Media Magazine,* pp. 37-42 (1994).

19. Wilson, S. *Multimedia design with hypercard* Prentice Hall.

20. Wimberly, D. & Samsel, J., *Interactive writer's handbook.* Los Angeles: Carronade Group (1995).