

**E-learning and Multiple Intelligences:
*catering for different needs and learning styles.***

Claudio de Paiva Franco
 Cultura Inglesa-Caxias

Resumo: Este artigo tem como objetivo mostrar a relação entre educação a distância e as inteligências múltiplas.

E-learning, educação a distância, inteligências múltiplas.

Summary: This article aims to show the relationship between e-learning and multiple intelligences.

E-learning, distance learning, multiple intelligences.

You cannot teach a man anything, you can only help him
 find it within himself.

Galileo Galilei

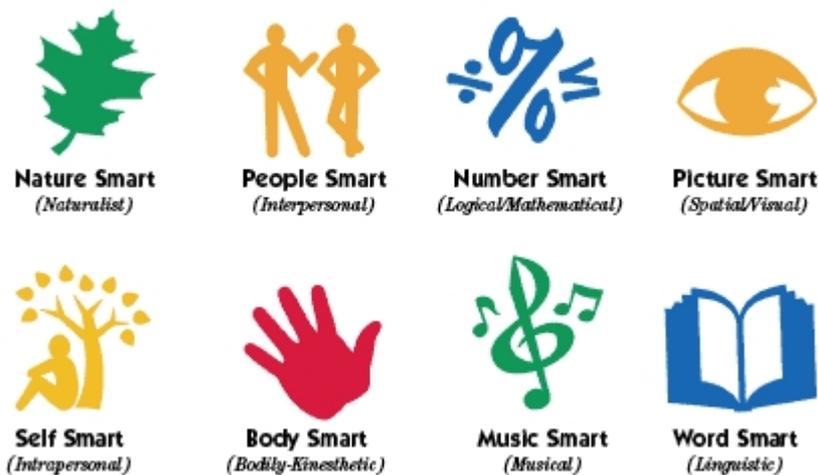
A – DIFFERENT INTELLIGENCES

Simply put, Gardner (1981) claims that all human beings possess not just one single intelligence (often called “g” for general intelligence), but a set of relatively autonomous intelligences. Consequently, individuals differ substantially for both genetic and experiential reasons in their respective profiles of intellectual strengths and weaknesses. According to him (1993), no two people – not even identical twins – possess

exactly the same profile of intelligences. Such intelligences can, however, be developed once the opportunity is given.

“At the time that MI theory was introduced, it was very important to make the case that human brains and human minds are highly differentiated entities. It is fundamentally misleading to think about a single mind, a single intelligence, a single problem-solving capacity. And so, along with many others, I tried to make the argument that the mind/brain consists of many modules/organs/intelligences, each of which operates according to its own rules in relative autonomy from the others.” (GARDNER, 2003, p.13)

Professor Howard Gardner proposes eight discrete intelligences: verbal-linguistic, logical-mathematical, visual-spatial, bodily-kinaesthetic, musical-rhythmic, interpersonal-social, intrapersonal-emotional and naturalistic (although there is a ninth intelligence being mentioned – existential).



(Fig. 1 – The eight intelligences)

- verbal-linguistic (being sensitive to the meaning and order of words);
- logical-mathematical (dealing with maths and other logical systems);
- musical-rhythmic (being able to understand and create music);
- visual-spatial (thinking in pictures - artists and photographers);
- bodily-kinaesthetic (being able to use your body - athletes and dancers);
- interpersonal-social (dealing with other people);
- intrapersonal-emotional (dealing with your own emotions);

- naturalistic (being very aware of plants, animals, rocks etc);
- existential (able to wonder, ask philosophical questions, and see the 'big picture')

(GARDNER, 1993)

B – PROBLEMS OF TRADITIONAL CLASSROOM IN ACCOMMODATING MIs

Many people, mainly educationalists, are well acquainted with the multiple intelligences. However, is society as well as our educational system prepared to accept such intelligences?

School has long privileged one or two forms of human intelligence – those involving language and logic – while ignoring the other powerful ways in which we can come to know the world. (GARDNER, 2000, p. 32)

How many times has a teacher frowned upon a student drawing on the desk? Probably the answer is most often. Historically speaking, a greater focus is given to linguistic and logical-mathematical intelligences. On the one hand, if a student succeeds in mathematics s/he is regarded as intelligent. On the other hand, individuals who have other intelligences more developed are to be excluded from the learning environment and labelled as less capable than others.

With a view to enabling students to actively take part in the learning process, teachers should motivate all learners by designing tasks, which cater for their learning styles/needs. Therefore, respecting their individual intelligence.

Teachers should fashion teaching and learning so that *all* students have the chance to learn and to demonstrate what they have learned – not just those students who happen to be gifted with words and numbers. (GARDNER, 2000, p. 32)

It goes without saying that in any class, students with different strengths and different ways of learning coexist, so when the principles of MI theory are applied to teaching, the advantages are easily noticeable. It can help us cater for different needs and learning styles by devising activities which will eventually reach all of our learners.

C – THE ADVENT OF E-LEARNING

Internet and the World Wide Web have never been in the spotlight as they are nowadays and they have brought with them e-learning:

Also called CBT, Computer Based Training, e-learning is a general term that relates to all training that is delivered with the assistance of a computer. Delivery of e-learning can be via CD, the Internet, or shared files on a network. Generally, CBT and e-learning are synonymous, but CBT is the older term, dating from the 1980s. The term E-learning evolved from CBT along with the maturation of the Internet, CDs, and DVDs. E-learning also includes Internet-based Learning, Web-based Learning, and Online Learning. (www.wikipedia.org)

As the Internet and the Web have become more widely available and individuals have become quite accustomed to using them as a means of communication, their use as educational tools has become increasingly widespread. At the same time, learners are more time-poor than they were as well as in desperate need for continual skills upgrading. Accordingly, these factors are bound to have led many people to resort to distance learning, especially e-learning. Many people have the common misconception that the former is part of a new trend, but it has, in reality, existed for more than a century. Correspondence courses in Europe were the earliest form of distance learning, a.k.a. open learning or flexible learning.

Considering the traditional face to face [F2F] classroom, a great many students cannot profit from the teaching offered as their learning style is not privileged. Some other students who fail become demotivated to take part in the proposed activities.

Nowadays more and more universities are rapidly adopting Blended Learning [BL], i.e. a mix of face to face and online approaches. According to Carrier:

“Blended Learning assumes an active role of ‘blending’, that is the teacher actively selecting, sequencing, integrating with the classroom learning experience in order to achieve a more optimum learning experience for the learners (and very specifically focused on the individual needs of individual learners).” (CARRIER, 2006, p. 11)

D – ADVANTAGES OF E-LEARNING IN ACCOMMODATING INTELLIGENCE

DIVERSITY

The relationship between e-learning and MI theory is far too strong to go completely unnoticed. In practical terms, this means that the WWW may support and encourage collaborative task work, and given the wide range of different types of activities online, it can help some way towards supporting learner's very individual learning styles.

One can truly claim that the Multiple Intelligences [MI] theory has helped many educators to take stock of their teaching practice and e-learning is definitely an invaluable source to help them/students cope with different learning styles. There is a vast array of tools one can make good use of if internet is taken into consideration.

In practical terms, e-learning allows learners to be the agent of their own learning. Sometimes a task available may serve different learners, which also enables them to experiment with new ways of dealing with new knowledge. Therefore, it proves to be a great opportunity to enhance other intelligences.

Undoubtedly one of the most crucial issues in e-learning is that it effectively grants the learner independence and autonomy. Fostering autonomous learning is of paramount importance when it comes to education.

Autonomy is perhaps best described as a capacity ... because various kinds of abilities can be involved in control over learning. Researchers generally agree that the most important abilities are those that allow learners to plan their own learning activities, monitor their progress and evaluate their outcomes. (BENSON, 2003 p. 290)

In order to achieve autonomy, learners should be able to learn in their own way and pace, having their talents/intelligences privileged and whenever possible, the others developed. Fortunately, this is possible with the advent of e-learning.

E – E-LEARNING OPPORTUNITIES

In the case of e-learning, students might well plan, create their own tasks by making them more meaningful, relevant to their needs and experience, more motivating.

The implementation of *blogs* and *wikis* to improve traditional F2F classroom, for instance, appeal to a great many students. On top of that, they can communicate and convey meaning through different ways. Learners with well-developed interpersonal-social

intelligence, say, will profit by exchanging ideas via instant-messaging programmes such as MSN, ICQ or SKYPE. They may prefer to communicate with others using audio, video or simply text depending on their talent.

The level of motivation and interest is easily increased and they get actively involved. Not to mention the fact that a wide range of intelligences is reached.

Learners may download *podcasts* recorded by their classmates or teacher. Podcasts are all over the WWW and they allow people to deliver and gain knowledge through audio, an invaluable source for musical-rhythmic learners. In contrast, a verbal-linguistic learner may benefit by reading e-books or making a great effort to hand in a thorough essay to her/his instructor.

F – CONCLUSION

Most e-learning now promotes interaction and is very largely based upon the constructivist model as it is completely learner-centred. The focus is firmly on the learners rather than the teacher. Students have the chance to interact with co-learners from various places and together actively build up new knowledge and understanding from authentic experience. Palloff & Pratt (1999) believe it is the relationships and interactions among people in the online classroom that primarily generates knowledge.

Contrary to the behaviourist classroom, where the primary role of the learner is as a relatively passive recipient of the knowledge transmitted by the teacher, e-learning allows students to negotiate meaning, solve problems, try out hypotheses and eventually, come up with a plausible answer or solution within their real-life context.

“Human learning is constructed not only by interacting with the content but also by working together with colleagues and instructors.” (ALONSO, 2005)

We should offer individuals the chief opportunity to learn in various ways in addition to enabling them to show their understanding by dint of representations that make sense to them. The appearance of e-learning has, by all means, contributed to helping learners acquire and convey knowledge through many forms.

New multimedia work may enable ordinary students to gain an understanding that may have been accessible only in the extraordinary classroom in years past. (GARDNER, 1996, p.72)

The belief that applications of the new technologies should provide ways for a variety of minds to gain access to knowledge has gathered considerable strength over time.

Last but not least, one should take into account the fact that learning is what matters and the World Wide Web has come to offer an array of tools so as to enable learners to become autonomous, not to mention to take part in the learning community.

Bibliographical References

ALONSO F. *An instrumental model for e-learning education*. British Journal of Education technology. Vol. 36, 2 pp 217-235, 2005.

BENSON, P. *Learner autonomy in the classroom*. New York: McGraw Hill, 2003.

CARRIER, M. *Technology in the future language classroom*. Modern English Teacher, Vol. 15, 4 pp 5-15, 2006.

GARDNER, H. *Frames of mind: The theory of multiple intelligences*. New York: Basic Books. New Editions: 1993, 2004.

GARDNER, H. *Multiple Intelligences: The Theory in Practice*. New York: Basic Books, 1993.

GARDNER, H. *Multimedia and Multiple Intelligences*. The American Prospect, n. 3 pp 69-75, 1996.

GARDNER, H. *Multiple Intelligences After Twenty Years*. Invited Address, American Educational Research Association, April, 2003.

NUNAN, D. *Second language teaching and learning*. Boston: Heinle & Heinle, 1999.

NUNAN, D. *A foot in the world of ideas: graduate study through the Internet*. Language Learning & Technology, 3 (1), July 1999, pp.52-74.

[Online] <http://lt.msu.edu/vol3num1/nunan/> Access on June 15, 2007.

PALLOFF, R. & PRATT, K. *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Jossey-Bass Publishers, 1999.

TAVARES, K.C.A. *O papel do professor – do contexto presencial para o ambiente online e vice-versa*. Revista Conect@, n. 3, 2000. [Online]

http://www.revistaconecta.com/conectados/katia_papel.htm. Access on June 15, 2007.