

CHAOTIC LEARNING: THE LEARNING STYLE OF THE 'NET GENERATION?

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Summary

This article contends that the young of the world, who are regularly using the Internet at home, are adopting a distinct learning style, that stands in marked contrast to the traditional school based learning. Where school learning is still characterised by a paper based, formal, linear and teacher controlled approach the young in their homes would appear to be using a screen based, seemingly chaotic, constructivist and multi-faceted approach, where 'play' is central. The implications for schools and educators, if there are two approaches emerging, are clearly considerable. Do schools disregard these developments or do they seek to harness and shape the students' 'chaotic' learning? How does education, where control is central, work with chaos?

Introduction

The signs point very strongly to the emergence, across the world, of a new and distinct style of learning that is already seriously challenging that of the schoolhouse.

Emerging out of the introduction of the World Wide Web combined with inexpensive computers, and manifesting itself in the homes of the networked world, this new, seemingly chaotic, highly individualised and unstructured approach would appear to be going a long way to providing an education for a knowledge-based world.

The phenomenon has emerged only in the last five to six years, however within that short time there has been, a rapidly growing group of young people across the globe using the same learning 'methods', displaying a remarkably similar set of attributes.

All of the group has ready home access to the Internet. All are actively engaging with the Net, each 'doing their own thing', in their own part of the world and amidst seeming chaos, developing a distinct set of skills, beliefs and attitudes that many educators have been hoping to develop via the 'school' system for many years.

While 'school' teaching remains largely locked in an Industrial Age model, and follows a formal, highly structured, primarily paper-based path. The new 'Net based learning would appear to be taking advantage of the digital technology to provide many young people much of the learning required to thrive in a knowledge based society.

What we are seeing worldwide is the emergence of parallel learning styles, that of the school and the 'Net, with little signs of the schools being prepared to vary their approach.

It is quite uncanny the sameness of impact this seemingly chaotic system is having upon the young of the developed world.

Whether one notes the findings from research conducted by people like Tapscott (1998) or Shopen & Liddicoat (1999), or simply chooses to interview and observe those young people - wherever they be in the world - the learning style the young are using and the effect it is having is remarkably similar. Out of the chaos order would seem to be appearing.

Learning Styles

In contrast to the predominantly paper base of the school, 'Net' learning would appear to be characterised by a digital and networked base. Learning is made possible by the facility to readily integrate all the digital medium and to take advantage of the networked world. The networked computer is not 'simply a tool' but rather an entrée into a new world, the new frontier, where the young are able to explore and fantasise as never before.

Use of the freedom, security and learning culture of the home and an emphasis on play are key factors. In both my personal interaction and the literature (Shopen & Liddicoat, 1999) the term 'play' dominates

There is an immense sense of fun in what the young are doing and little thought given to the almost incidental learning. The young chart their own course. Each sets his/her own goals. No teacher determines what they learn.

The time clock has gone. A '00 Newsweek survey found only 23% of parents supervised their children's use of the 'Net. Closely allied the individuality of the learning is the preparedness to learn how to do things themselves. That propensity is however, almost paradoxically tempered by the willingness to work and learn in highly collegial, unstructured teams. (Tapscott, 1998) .

The young have embraced the networked world, happily venturing into the unknown, and learning as they 'do' and discover. (Tapscott 1998) Much of their learning would moreover appear to be prompted by the necessity of developing the higher order skills required to better achieve in the games and activities they are undertaking.

The 'Net' users appear at ease handling a variety of tasks at once, and moving from activity to another in a seemingly random manner, in contrast to the traditional structured, linear approach. The young don't divide learning into segments called subjects or 'Key Learning Areas', rather they see it as a totality drawing upon the relevant skills and understanding for the task at hand. There is a strong preference for using one's peers for support. Teachers are rarely involved.

The 'Net' generation not only make extensive use of the electronic networks, but network with like minded folk across the world in their learning. There are seemingly no qualms about taking calculated risks, and if they 'nuke the hard drive' the major challenge is to 'fix it before mum gets home'. Is this 'chaotic learning' only employed by the young? My suspicion is that all of us working within the networked world are moving increasingly towards this model.

Attributes

The combination of these approaches has, within a remarkably short time, seemingly developed, in varying degrees, the following kinds of attributes: Independent/self directed learning with learners who are willing to tackle any area of interest. The Net generation have the tools and expertise to access core information. They are becoming a generation who use critical thinking to question and challenge

Most students believe they know far more than their parents and teachers and consciously using graphics, text, sound, pictures and motion in their communication, and knowing when it is best to use each aspect

The desire is to develop a 'literacy' that embraces all of the elements that can be used on a screen, and a growing disinclination to use the print form. Shopen and Liddicoat 's research in the ACT (1999) points to both girls and boys marked preference for a screen based literacy.

Students undertake collegial/team learning, preferring to work and play in teams. Realising the power of team building to play a game or undertake a project, and probably unconsciously developing the skills needed to draw the most from a team. The successful traversing of the networked world generates immense belief in oneself and a capacity to continue achieving with enhanced social skills of the type that will be required for effective interaction within a networked world, such as the facility to use email, chat and work groups and personal portaling services.

The list is by no means exhaustive. It is moreover appreciated that there are many key sub elements within each of the above. Some researchers are witnessing not only the contrast between the 'chaotic learning of the home and the school, but also the age old facility of the young to play the games that will ensure success, thus abiding with the ways of the school while preferring the path adopted in the home.

It is appreciated that these are very early days, and concerted studies have yet to be done on the many facets of the chaotic learning, but one has only to observe the young in the homes of those who have Net access to recognise a dramatic change is taking place. The full impact of this phenomenon is apparent when you pose a common set of the questions to a cross section of young people, each of who sees him/herself as distinct, and they all identify the aforementioned kind of attributes. We should be conscious that:

- this set of attributes have emerged only amongst those young who are engaging with the Internet;
- the educative power of the information and communications technology, particularly the software is still in its infancy;
- there appears to be some gender variability (Shopen and Liddicoat '99), for while both the girls and boys enjoy using the technology the girls seem to focus more on the application of the technology, and the boys on the technology, and some of the applications;
- the 'free market' nature of the chaotic learning is assisting the 'advantaged' to become even more advantaged; and
- there are many core skills and attitudes not being developed in this chaotic learning, and learning that could be markedly improved with wise teaching.

In identifying this phenomenon and attempting to flesh out its features I'm not for a moment suggesting the 'Net learning will or should displace the institution called school, nor am I suggesting it can provide the kind of social interaction and development so vital to the young.

What, however, I am suggesting is that the implications of the 'Net learning for the education of a nation's young are profound, and will impact on schooling - whether or not the schools like it. Schools are now operating in a networked world. What are some of those implications? One can opt to allow the development of parallel but fundamentally different learning environments or seek to harmonise the best of both, however that harmonisation is not likely to be easy.

The two systems, and the cultures associated with each, are fundamentally different. One has as its basis control over, and carefully structured development while the other is free-wheeling, seemingly unstructured and chaotic.

Most teachers, parents, education bureaucrats and politicians will not sit easily with an education they don't control - and in many senses do not understand. They tend to dismiss 'play' and 'games' as a waste of time. They seek to judge the new technology by asking how it enhances the traditional learning, rather than asking what impact it is having upon the young. Moreover they continue to view Information and Communications Technologies from within a paradigm that sees the school as the source of 'real' learning.

How does one vary a system as unchanging and immutable as schooling that insists the young be educated in a particular way? The nature of teaching and learning in the online and networked worlds is not only sketchily understood but is also constantly changing at a rapid pace. The shift to a networked learning environment with all its concomitant use of personal portaling services provides educational possibilities largely unknown even a year ago.

What are the variables that educators should observe in online teaching? Already we know that many of the ways of the conventional, stand alone classroom do not hold in a networked environment. One senses that even the time honoured developmental learning research of people like Piaget might not be wholly applicable in a digital environment. Stories already abound of the very young performing formal level work on their computers.

Conclusions

In considering that way forward try and take your mind outside the world we have all known and think about how nations like ours can harness the enthusiasm of the young for the digital world. Negroponte (1995:231) commented, "As children appropriate a global information resource, and as they discover that only adults need learner's permits, we are bound to find new hope and dignity in places where very little existed before..." The control bits of that digital future are more than ever before in the hands of the young. Nothing could make me happier.

References

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