

# Chapter 1

## The User Driven Learning Environment

**Rakesh Biswas**

*People's College of Medical Sciences, India*

**Joachim Sturmberg**

*Monash University and The University of Newcastle, Australia*

**Carmel M. Martin**

*Trinity College Dublin, Ireland*

### ABSTRACT

*This chapter is an introduction to user driven learning that initially dwells on features that are unchanged such as the role of collaborative social interactions in human learning and certain aspects that are evolving and helping create a learning transformation through web based technologies. The chapter is interspersed with user driven learning narrative examples taken from the authors' own experience of sharing data over the web to accumulate learning points as well as the experience of a significant population of other web based learners in discussion forums, blogs and other networking sites. This is an attempt to create a background that may help illustrate the evolution of user driven health care, which is another form of user driven learning on the web with particular reference to individual user clinical problem solving, be it initiated by patients, health professionals or other actors in a care giving collaborative network across a web interface.*

### INTRODUCTION

*Do you think me a learned, well-read man?*

*'Certainly', replied Zi-gong, 'Aren't you?'*

*'Not at all', said Confucius.*

*I have simply grasped one thread which links up the rest.*

*(Recounted in Sima Qian (145-ca. 89 BC), "Confucius," in Hu Shi, The Development of Logical Methods in Ancient China, Shanghai: Oriental Book Company, 1922; quoted in Qian 1985:125, in Castells, M. (1996). The Rise of the Network Society, Oxford: Blackwell. (p1)*

What drives us to learn? Is it our jest for reward in the form of feel good food for thought? We learn anything for these food for thought rewards

DOI: 10.4018/978-1-4666-2770-3.ch001

and like animals in a circus seem to be constantly foraging for it. Learning is not confined to childhood or the classroom, but takes place throughout life and in a range of situations.

Mikael Wiberg in an extensive article on net learning has brought out interesting facets of learning in general. (Wiberg 2007) According to him, what it is to be knowledgeable can be defined either in terms of how much one person has read and learned in isolation, or how knowledgeable a particular person is about different threads to grasp in order to gain access to other peers in different social networks. The latter concept pinpoints the social dimension of learning processes, the social interaction setting, and goes back to a Socratic understanding of knowledge gaining through conversations and argumentations with others.

Traditional libraries that have been often considered temples of learning where silence is valued and protected but they are nothing but isolated learning environments where the single individual has no access to a second opinion from another person, no access to a complementary perspective, or external critique, neither does s/he have any chance to get complementary literature from anyone which might have a different reference library. Given this, there is not much social interaction in this kind of traditional learning environment. (Wiberg 2007)

In modern libraries it is perhaps easier to break past this 'silence' barrier where the library user predominantly browses an electronic information network rather than a paper based disconnected media.

Unfortunately, this advantage of the modern library is under utilized as even systems for online universities, or distance education may not have adequate support or encouragement for social interaction. Most of these systems assume a centralized communication model in which the learning peers (i.e. the students) mostly communicate with one central peer (i.e. a mentor or advisor). This leads in many cases to communication related to the structure rather than the content of an online

education and does not support spontaneous, creative social learning processes. (Wiberg 2007)

Learning schools are redirecting the focus from what has been labeled "traditional computer-based learning environments" towards user-driven learning networks supported by social internet based applications. The assumption that computer-mediated learning will occur in the classroom, managed by a teacher, is now being challenged, not by schools and educational software developers, but by the consumer growth of personal technologies – [give some examples]. (Sharples 2002)

User driven learning is a form of conversational experiential learning between networked users in web space.

The experiential learning model suggests that learning requires individuals to resolve abilities that are polar opposites, and that the learner must continually choose which set of learning abilities he or she will use in a specific learning situation. In grasping experience some of us perceive new information through experiencing the concrete, tangible, felt qualities of the world, relying on our senses and immersing ourselves in concrete reality. Others tend to perceive, grasp, or take hold of new information through symbolic representation or abstract conceptualization – thinking about, analyzing, or systematically planning, rather than using sensation as a guide. Similarly, in transforming or processing experience some of us tend to carefully watch others who are involved in the experience and reflect on what happens, while others choose to jump right in and start doing things. (Baker 2002)

This chapter is mostly about illustrating how this model is active on web space and what are the lessons that we can grasp to improve it further.

Most of the other chapters would concern human centric user driven learning in health care and at the outset it may be necessary to illustrate this introduction to what essentially constitutes a user driven learning environment in topics other than human centric health care.

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/user-driven-learning-environment/73827](http://www.igi-global.com/chapter/user-driven-learning-environment/73827)

## Related Content

---

### A Novel Blind Wavelet Base Watermarking of ECG Signals on Medical Images Using EZW Algorithm

Mohammad Saleh Nambakhsh and M. Shiva (2008). *Encyclopedia of Healthcare Information Systems* (pp. 1004-1015).

[www.irma-international.org/chapter/novel-blind-wavelet-base-watermarking/13039](http://www.irma-international.org/chapter/novel-blind-wavelet-base-watermarking/13039)

### Bayesian Ontologies in Spatial Integrating Medical Information Systems

Stelios Zimeras (2012). *Quality Assurance in Healthcare Service Delivery, Nursing and Personalized Medicine: Technologies and Processes* (pp. 220-232).

[www.irma-international.org/chapter/bayesian-ontologies-spatial-integrating-medical/58736](http://www.irma-international.org/chapter/bayesian-ontologies-spatial-integrating-medical/58736)

### DRGs and the Professional Independence of Physicians

Lorraine Frisina and Mirella Cacace (2009). *Handbook of Research on Information Technology Management and Clinical Data Administration in Healthcare* (pp. 173-191).

[www.irma-international.org/chapter/drgs-professional-independence-physicians/35777](http://www.irma-international.org/chapter/drgs-professional-independence-physicians/35777)

### Technical Perspective of Authentication Policy Extension for the Adaptive Social Services and e-Health Care Management

Masakazu Ohashi, Nat Sakimura, Mituo Fujimoto, Mayumi Hori and Noriko Kurata (2013). *Handbook of Research on ICTs for Human-Centered Healthcare and Social Care Services* (pp. 719-726).

[www.irma-international.org/chapter/technical-perspective-authentication-policy-extension/77170](http://www.irma-international.org/chapter/technical-perspective-authentication-policy-extension/77170)

### Moving Beyond Repair: Perfecting Health Care

Joseph Onyeocha (2011). *International Journal of Healthcare Delivery Reform Initiatives* (pp. 54-56).

[www.irma-international.org/article/moving-beyond-repair/72307](http://www.irma-international.org/article/moving-beyond-repair/72307)