

1 Jan Visser

Let the dialogue begin: An introduction

This brief introductory chapter highlights and describes the process that led to the creation of the present book. It argues that the process in question, which consisted of an elaborate form of evolving dialogue, was essential to the matter at hand, namely the deepening of understanding of human learning and of the essential features of being human that contribute to making learning meaningful. The chapter lists 32 questions that were formulated by 10 of the authors at the outset of the dialogue. These questions were the starting point for a process of group interactions that started online, then led to a face-to-face workshop and a panel discussion with a wider audience. Subsequently, the process proceeded again online as the chapters of this book evolved. The description of the above process will orient the reader to the context in which the author team worked. The chapter serves furthermore as an introduction to the organization of the book and its various components. It invites the reader into the dialogue and provides concrete suggestions for ways of entering the conversation from the outset.

2 Jan Visser

Constructive interaction with change: Implications for learners and the environment in which they learn

Reflections regarding changes in the learning landscape and their implications for the (lifelong) learner are placed against the backdrop of an ecological perspective on learning. Learning-individually and as a feature of social behavior-is defined in relation to constructive interaction of complex adaptive systems with their wider environment. Human existence involves more and more that people interact online. Consequently, such interactions have increasingly become a crucial dimension of learning. Adapting to life-and thus also to learning-on the Net poses a certain challenge to those whose major life experience predates the digital era. However, more important than the changes brought about by technological innovation as such are the challenges posed by increased complexity of the world in which we live, the nature and scale of the problems it faces, and the changed nature of our productive and transformative presence in the world. The latter challenges require a fundamental rethinking of the purposes for which we learn, given the complex thinking educated individuals must be capable of. They also call for a strategic reorientation of the processes and environment that afford such learning. Tentative answers will be offered and questions will be raised regarding the implications of the referred challenges for today's learners and the learning ecology in which they operate.

3 John Bransford, Mary Slowinski, Nancy Vye and Susan Mosborg

The Learning sciences, technology and designs for educational systems: Some thoughts about change

The idea that technology can be instrumental in connecting experts and novices who are separated by time or space inspired distance education pioneers over a century ago to take advantage of the innovations of their day—the printing press and postal system—to deliver the first correspondence courses. The technologies to facilitate learning at a distance have vastly evolved in the intervening years, becoming far more sophisticated and showing potential to break us free from old models of instruction. Yet instead of acting as transformative agents, the new technologies have often been assimilated to existing models, and it is not unusual to find ourselves strongly influenced by the methods found in the face-to-face classroom as we design instruction, monitor participant interaction, organize curricula, and conduct assessments in these new arenas. Still, the combination of a fast-changing, technologically-connected world and the expanding knowledge brought to our disciplines by advances in the learning sciences present an extraordinary opportunity for all of us to take part in the evolution and expansion of what we think of as 'teaching and learning.' Can technology help us reinvent how we prepare people for healthy and productive lives? This chapter asks that question and hopes to add at least a bit to the rich discussions in this book and sparked by it.

4 Jeroen J. G. van Merriënboer and Slavi Stoyanov

Learners in a changing learning landscape: Reflections from an instructional design perspective

Both learners and teachers find themselves in a learning landscape that is rapidly changing, along with fast societal and technological developments. This paper discusses the new learning landscape from an instructional design perspective. First, with regard to what is learned, people more than ever need flexible problem-solving and reasoning skills allowing them to deal with new, unfamiliar problem situations in their professional and everyday life. Second, with regard to the context in which learning takes place, learning in technology-rich, informal and professional 24/7 settings is becoming general practice. And third, with regard to the learners themselves, they can more often be characterized as lifelong learners who are mature, bring relevant prior knowledge, and have very heterogeneous expectations and perceptions of learning. High-quality instructional design research should focus on the question which instructional methods and media-method combinations are effective, efficient and appealing in this new learning landscape. Some innovative instructional methods that meet this requirement are discussed.

5 Christina Rogoza

The influence of epistemological beliefs on learners' perceptions of online learning: Perspectives on three levels

This chapter will discuss the influence of epistemological beliefs on learners' perceptions of alternate learning environments such as online learning. Epistemological assumptions will be examined on three levels addressing institutional, faculty, and individual learner perspectives. Questions to be explored include: What are the dominant beliefs about knowledge and knowing in our educational system today? What are our students' beliefs

about knowledge and knowing? How do we account for them and how do they align with a new paradigm of learning and a non-localized learning environment?

6 Mary Hall

Getting to know the feral learner

Feral learning offers a positive language and a conceptual framework that transcends the distinctions between formal and informal education, allowing educators and policy makers to deconstruct the implicit limitations of what we have become used to thinking of as teaching-and-learning. This in turn opens up a broader field of possibilities for effectively nurturing learners and cultures of learning. The theoretical basis of feral learning grows out of constructivist theory, with particular reference to the work of Rogers (1967) and Mezirow (1990, 1991). It returns to first principles by positioning learning as an instinctual and intrinsic part of growth and development. This chapter considers the nature of learning, explores the characteristics of feral learning and environments conducive to it and goes on to consider the roots of these ideas in the literature about constructivist theory, transformative learning theory, and flexible delivery. It concludes with a discussion of some of the issues facing formal education in our ability to nurture the feral learner.

7 Yusra Laila Visser

Postsecondary education in the changing learning and living landscapes

Today, more than ever before, a person's opportunities within the economic sector of most nations are determined by the extent to which he or she has formally participated in postsecondary education. As a result, postsecondary education is an integral part of the learning and development for many individuals. The overall purpose of this chapter, therefore, is to critically analyze the role of the postsecondary education system in the living and learning landscape, and to explore issues around some of the key ways in which the postsecondary education system is changing. The chapter explores the changing (and at times discordant) views of the purpose of postsecondary education, specifically focusing on three of the most commonly cited expectations of the postsecondary education system: professional training, remedial education, and cultivation of the knowledge worker. The chapter also considers shifting views on the value of a postsecondary education, looking specifically at how such perceptions are changing among both learners and employers. Looking at the effects of the commercialization of postsecondary education, the chapter discusses the adoption of the 'mass education' metaphor, the growing diversity in educational service providers, the prevalence of distance and distributed instructional modalities, and the reduction in funding for postsecondary education. To conclude, the chapter explores the implications of the changing role of the postsecondary education system in the learning landscape, focusing on those implications that most directly impact the learner.

8 Diana Stirling

Online learning environments in context

This chapter will explore the implications of courseware design and use in online learning environments for not only individual learner expectations but also expectations of the learning community as a whole. The concept of context density and its importance in formal online learning environments will be stressed. It will be argued that the lack of adumbrations in online communication necessitates explicit communication by participants in the process of co-creating meaning and context density. From this focus on the context embedded in online learning environments the discussion will zoom out to view the larger learning landscape through a wider lens, i.e. the context within which online learning is taking place for individual learners and the global society. While technology offers us the potential to create real change in our approaches to education, such change can only be realized if we proceed with reflective awareness. Before we can see such change, we must be willing to question our assumptions about what we have done so far and envision the truly different, the 'new model that makes the existing model obsolete' in Buckminster Fuller's words. A change in education is not inherent in our new technology; it must be a manifestation of the world in our collective imagination.

9 Ileana de la Teja and Tim Spannaus

New online learning technologies: New online learner competencies. Really?

Numerous organizations contend that online learning is different from learning in a classroom and that to be successful online it is essential to possess specific skills and characteristics. On the other hand, several studies comparing online and face-to-face learning argue that there is no significant difference in the effectiveness of both learning modes, thus suggesting that there may not be a significant difference either in the competencies required to get the same results whether learning online or face-to-face. The usual question is, are the online learner competencies different from those of the face-to-face learner? Our belief is that this is the wrong question. Rather, we argue, the specific set of competencies required in any setting for a particular learning event is driven by the strategy of the event, not whether it is online or face-to-face. Our analysis is based on the characteristics and skills of the online learner as described by the hints and tips some higher education organizations offer to their target public to become successful online learners. Given that most online learning now imitates classroom instruction, it is likely that the new competencies required specifically for online learning, if any, have not yet emerged. We suggest that three factors, the use of technology, the degree of collaboration, and the extent to which students or the instructor manage the use of time are far more important determinants of the competencies required than whether a class is online or face-to-face. We invite the reader to consider other factors to further explore the topic, believing that a clearer understanding of the online learner competencies will produce more informed choices and, consequently, more effective interventions in online learning.

10 Michael Beaudoin

Reflections on seeking the 'invisible' online learner

While much has been written regarding the learning behaviors of students participating in online courses, little research has been conducted to ascertain whether or not students are still engaged and actually learning even when not visibly involved in online discourse with other students and faculty. This work summarizes a preliminary study of inactive students enrolled in an online graduate course, augmented by further reflections of the author, based on experience and observation of online student behaviors over a five-year period following the initial study. These findings identify how much time is spent in course related activity, what the reasons are for 'invisibility,' and if preferred learning styles influence their online behavior. The data shows that these students do, in fact, spend a significant amount of time in learning related tasks, even when not visibly participating, and they feel they are still learning and benefiting from this low-profile approach to their online studies. Preliminary analyses of course grades indicate that the mean grade is better for high-visibility learners than for no-visibility learners. Subsequent reflections reinforce these findings, and suggest that further research on so-called invisible learners is a critical area of investigation to better understand the dynamics of asynchronous learning and teaching at a distance.

11 Deb LaPointe

Will games and emerging technologies influence the learning landscape?

Read newspapers and professional educational journals, attend a national or state conference, or review the offerings of a university catalog, and you soon encounter statistics like 92% of children ages 2-17 play video and computer games (Beck & Wade, 2004); 60% of Americans play interactive games on a regular basis (Kirriemuir, 2002); 78% of American families have video game equipment in their homes (Simpson, 2005). You will also read that 78% of 18-29 year olds use the Internet in their daily lives (Ramaley & Zia, 2005), yet only 38% of college students report using the Internet in their classes (Ramaley & Zia, 2005). Outside the classroom, students are creating a new shared culture, showing us new ways to learn and communicate and make sense of physical and virtual identities and worlds. They are showing us that what happens in virtual worlds is often just as meaningful as what happens offline (Taylor, 2006). They work autonomously or with others—playing with others online who may protect and advise them or playing next to others who play the same game. They know where to obtain helpful resources. However, these mainly young gamers do not just play games and consult resources; they create game guides, answers to FAQs, maps, overviews, strategies, fanfic (fanfiction—stories about the gaming characters or settings written by game fans rather than by game creators), and character-planning guides. All of this adds up to a different kind of play and developmental environment, which influences a different developmental process and way of seeing the world and thinking than experienced by generations before.

12 J. Michael Spector

What makes good online instruction good? New opportunities and old barriers.

This book is about changes in learning and instruction and implications for learners, teachers, designers and policy makers. Many of the relevant changes are related to new technologies and developing views of how, when, where and why people manage to learn different kinds of things more or less effectively. This chapter focuses on distance learning technologies and questions pertaining to the evaluation of a particular kind of distance learning-online instruction. Criteria that appear relevant to assessing effectiveness are presented and discussed. Arguments for and against online instruction being held to different quality standards are presented. The chapter concludes with remarks about the personalities of online learning groups and how these might affect learning outcomes.

13 M. David Merrill

Why basic principles of instruction must be present in the learning landscape, whatever form it takes, for learning to be effective, efficient and engaging

While today's opportunities and contexts for learning are far more varied than they were only a decade or two ago the underlying learning mechanisms of individual learners have not changed. It is important as we explore these different learning landscapes that we don't naively assume that because the landscape has changed dramatically the learners have also changed. There are fundamental instructional strategies, determined primarily by the type of content to be taught rather than by learning styles or by the form of instructional affordance, that are necessary for effective, efficient and engaging learning of specified knowledge and skill to occur. Those learning activities that best promoted learning in the past are those learning activities that will best promote learning in the future. Yet, we have all observed that many instructional environments fail. However, on close examination it is also evident that these learning environments also fail to implement these known instructional strategies resulting in ineffective and inefficient learning outcomes. As we explore the shifting learning landscape it is critical that we don't assume that because existing instructional environments often fail that the fundamental strategies of instruction have also failed. Most often these strategies have never been adequately implemented in the first place.

14 Muriel Visser-Valfrey

We question, we reflect, and we question again, therefore we are ... An analysis of the evolving dialogue around the central themes in this book

This chapter analyzes the evolution of a dialogue around the central theme of this book-learners in a changing learning landscape-from its inception prior to the Workshop and Presidential Session held at the 2005 annual conference of the Association for Educational Communications and Technology (AECT), through the lively discussions at the AECT meeting itself, and followed by the drafting, collaborative review and revision

of the chapters that form part of this book. A coding frame generated from the initial description of the purpose of the book is used to conduct a content analysis of the 32 questions which were formulated in preparation for the initial workshop in 2005. The same coding frame is then applied to the chapters in this book and used as a basis for a critical reflection on the nature and evolution of the dialogue. The resulting analysis highlights how the dialogue evolved, singles out some areas of agreement and discord and provides indications of where reflection, discussion and research around the critical themes identified could be strengthened.