# Experiences and Opinions of E-learners: What Works, What Doesn't, and What Competencies Ensure Successful Learning

**Michael F. Beaudoin**
University of New England
MBeaudoin@une.edu

**Gila Kurtz**
The Center for Academic Studies
kurtzgila@gmail.com

**Sigal Eden**
Bar Ilan University,
The Open University of Israel
sigaled@openu.ac.il

## Abstract

This paper reports preliminary findings of online learner survey from Western (mostly US), Israeli, Mexican and Japanese cohorts. A questionnaire with 58 questions, including several open-ended questions, allowing the respondents to tell their "stories" as online learners was administered online. The total number of returned surveys was 318. The current study attempts to better understand how students engage in online learning, in terms of interacting with the medium, with the materials, with one another, with the instructor, and ultimately, with the environment in which they work and apply new knowledge and skills acquired through their engagement with learning process. Also, with four distinct cohorts, representing four different countries and cultures, there is some value in determining if there might also be some differences between these learner populations that are driven primarily by cultural orientation.

**Keywords**: online learners, e-learning, comparative study.

## Introduction and Aim of Study

In 2007, the International Board of Standards for Training, Performance and Instruction (ibstpi http://ibstpi.org/) undertook an ambitious new research project- to survey learners enrolled in diverse education and training offerings delivered in an online format. This data is intended to assist the research team in ultimately developing a set of universally applicable competencies which learners consider critical to success in this environment, and that could be widely disseminated for use, not only by online learners, but also by providers designing and delivering online education and training. Knowing what learners find to be the most effective and least useful features and practices for success in online settings can be instructive to those wishing to enhance the teaching-learning process.

This paper reports preliminary findings of online learner survey from Western (mostly US), Israeli, Mexican and Japanese cohorts. The current study is essentially attempts to better understand how students engage in online learning, in terms of interacting with the medium, with the materials, with one another, with the instructor, and ultimately, with the environment in which they work and apply new knowledge and skills acquired through their engagement with learning process. Also, with four distinct cohorts, representing four different countries and cultures, there is some value in determining if there might also be some differences between these learner populations that are driven primarily by cultural orientation.

## Review of the literature

Online education literature is often characterized by its focus on "how to" teach online, and how to optimally utilize the various features available in most instructional platforms, often based on authors' experiences teaching in this milieu. Less evident is if these recommended instructional techniques are based on data derived from systematic analysis of online student behaviors, attitudes, preferences, etc. Jones' study (2008) of distance education directors' main concerns revealed their preoccupation with the cost and support of technology, with less attention paid to quality or the level of satisfaction with instruction. Though technology is a critical medium by which online instruction is delivered and the milieu in which students process resources, we are alarmed by this continuing preoccupation with technology, seemingly at the expense of adequate attention paid to pedagogy.

Assessments that incorporate stakeholders' perceptions of their learning environments (LEs) are consistent with predictors of student outcomes (Fraser, 1998). Variables within learning environments can be changed to achieve different affective and cognitive outcomes (Anderson and Walberg, 1974). In many studies of environments and outcomes, dimensions of the former have been consistently identified as determinants of the latter (Fraser, 1998). Environments which students perceive as positive tend to lead to improved student achievement and attitudes (Chang & Fisher, 2001). Research involving LEs has a tradition of considering the association between perceptions of psycho-social characteristics of the environment and of students' cognitive and affective outcomes. LE research has demonstrated that across languages, nations, cultures, subject matter, and educational levels, there are consistent associations between environmental perception and student outcomes (Fraser, 1998).

There is need for new instruments to investigate the association between the nature of the online learning environment and students' enjoyment of studies. Social structure has a strong influence on students` learning and satisfaction, and on the method by which the course is presented (Swan, 2001). Students have need for social connection and a sense of presence in electronically mediated distance education. (Paloff and Pratt, 1999). In these settings, participants can become part of a social milieu with anyone with a computer. (Klopher, 1971) affective categories (e.g., students' attitudes toward subject matter, attitude toward inquiry, enjoyment of learning, interest in subject as a career), are among the variables to be identified and measured to determine if and how certain learning environment characteristics have a positive association with student satisfaction and academic achievement.

Student engagement is defined in important ways by the environments and cultures in which it occurs. The convergence of parallel forces-rapid advancement of instructional technology, the collapse of barriers that has kept much of humanity separated, and the educational opportunities which are now available to anyone-anytime-anyplace- is changing higher education. Expanding instructional delivery to a diverse population is the new reality, and that population is the new majority of learners. As Inoue (2007) notes, this makes it difficult for students enrolled in online courses to visualize, or relate to fellow classmates who now represent cultural differences in various geographical locations.

These advances in distributed learning technologies have made courses accessible to diverse learners worldwide, resulting not only in a diversity of cultures, but also in differences in learning styles. We must be alert to the fact that there are substantial differences in interaction and communication beyond the actual words being said, or in the case of online dialogue, the words being written or read (Januszweski, 2008). Does educational technology improve the performance of students, teachers, designers, and organizations? If so, what means are valid and reliable to verify that certain attributes of teachers and learners are those best suited to optimize

performance? Palloff and Pratt (2001), as have others, define the attributes of successful online learners, listing the characteristics that by now have become conventional wisdom in the field. Successful learners are seen as voluntarily seeking further education, having higher expectations, being more self-disciplined, older, enjoying learning for its own sake, demonstrating good thinking skills, able to work independently with limited structure, and recognizing the value of interacting with other online peers. Jonassen et al (1999) and others, have identified attributes of meaningful learning, such as: Intentionality, content centrality, authentic work, active inquiry, construction of mental models, and collaborative work. Anderson and Garrison (1998) indicate that the isolation which, fairly or unfairly, characterized an earlier era of distance education, has been largely replaced by collaborative learning, suggesting that this trend demands emerging interactive skills of online learners, along with several attendant skills: social, discursive, group and reflective skills. Similarly, the constructivist approach to learning, seemingly preferred by online teachers, also demands self-directed learning skills. Of course, the presence of these attributes in online learning environments presumes that those designing and delivering such courses possess the requisite competencies that lead to the implementation and application of those features in their courses.

In recent research, Coates (2006) maintains that, despite the emergence of online education, there appears to be a reliance on serendipity to produce patterns of use for teaching and learning. And despite the proliferation of studies into online education in the past decade, and widespread levels of adoption, most research has focused on financial, technical and administrative aspects of these learning systems. In particular, Coates notes, there are very few published works on student engagement, and most of these are utilitarian, not conceptual. Further, student engagement studies are, in large part, based on assumptions about campus learning environments that ignore the implications of online learning, and so present constraints in terms of advancing understanding of student engagement in these alternate settings. The current study is aimed to fill some of missing data by adding more dimensions of inquiry to this dynamic area of online education.

## Methodology

A questionnaire with 58 questions, including several open-ended questions, allowing the respondents to tell their "stories" as online learners. A pilot test of the instrument was completed in fall 2007 to identify items needing possible revision, based on initial respondent feedback. The questionnaire, essentially what can be described as an audience analysis, attempted to gain extensive data regarding student characteristics behaviors and experiences, specifically in online settings. After some minor modifications, the final survey tool was administered electronically (in English) online late 2007- early 2008. The questionnaire was also translated into Japanese and Spanish and administered in early 2008. Also, the survey was translated in Hebrew, a pilot test was done in March 2008, and after some minor modifications, was administered to online learners in Israel in April 2008. The Israeli respondents were mainly students from Bar-Ilan University or Askelon college. The total number of returned surveys from the four cohorts was 318.

## Findings
### Profile of Online Learners

Seventy one percent of Western respondents were female. The most dominant age group among these respondents was between 31-40 (39%). 58% of the Japanese respondents were male. The most dominant age group among those respondents was between 31-40 73% of the Israeli respondents were female. The most dominant age group among those respondents was between

21-30 (76%).The gender split among the Mexican respondents was nearly equal: 48% female, 52% male. The most dominant age group among those respondents was between 21-30 (46%) (See Table 1)

### Table 1: Demographic characteristics of cohort groups

| Characteristic | Western respondents | | Japanese respondents | | Israeli respondents | | Mexican respondents | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| **Gender** | | | | | | | | |
| **Female** | 73 | 71 | 16 | 42 | 12 | 73 | 72 | 48 |
| **Male** | 13 | 29 | 22 | 58 | 32 | 27 | 78 | 52 |
| **Total** | 86 | 100 | 38 | 100 | 44 | 100 | 150* | 100 |
| **Age** | | | | | | | | |
| Up to 20 | - | | - | | 2 | 5 | 7 | 5 |
| **21-30** | 14 | 16 | 6 | 16 | 32 | 76 | 68 | 46 |
| **31-40** | 34 | 39 | 14 | 37 | 7 | 17 | 52 | 35 |
| **41-50** | 24 | 28 | 11 | 29 | 1 | 2 | 16 | 11 |
| **51 +** | 15 | 17 | 7 | 18 | - | - | 5 | 3 |
| **Total** | 86 | 100 | 38 | 100 | 42 | 100 | 150 | 100 |

\*   Although a total of 150 Mexicans responded to the survey, and so are included in this demographic data summary, 45 were not aware that the survey involved more than one page, and so most of the results reported reflect respondent data on 105 students, not 150.

### Online Experiences Reported
Each respondent was asked to share three experiences of online learning. The four respondent groups produced a total of 428 online learning experiences: 40% represented Western and Japanese experiences, 35% Mexican; and 24% for the Israeli respondents (see table 2).

### Table 2: Number of online experiences of research groups

| Research group | online experiences | |
|---|---|---|
| | N | % |
| **Western & Japanese** | 172 | 40 |
| **Mexican** | 151 | 35 |
| **Israel** | 105 | 24 |
| **Total** | 428 | 100 |

### Level of Satisfaction with Online Experiences
Respondents were asked to identify up to three online learning experiences and to indicate their level of satisfaction with each of these. Among Western students, 39% rated one or more of those experiences as Very Good, and 27% as Good, while 39% of Japanese students rated their experiences as Good, and only 14% as Very Good, and 36% as Satisfactory. Eleven percent among each of these two cohort considered one or more of their experiences as Poor. Yet, no Japanese respondents identified any experiences as Very Poor, though 4% of Western respondents did so. It might be noted here that some Japanese may be somewhat reluctant to commit to extremes in making such choices; thus, a possible explanation for relatively small numbers at either end of the continuum.

Forty five percent of the Israeli responses rated one or more of those experiences as Good, 28% as Very Good, and 19% as Satisfactory. Eight percent considered one or more of their experiences as Poor.

It appears that the Mexican students reported a higher satisfaction rate than other cohorts. Almost 90% percent considered their online experiences as Very Good or Good, while Israelis followed with 73% in the two highest categories, then Western (66%), and lastly, Japanese (53%). It may be that because the Mexican respondents are all enrolled via consortium that provides various student services to its constituents, higher satisfaction was reported.

## Elements of Online Experiences that Influenced Satisfaction

A series of questions asked what were the elements of respondents' online experiences that most influenced their level of satisfaction, whether high or low. Among the Western respondents, there were a total of 222 elements listed most of them on the positive side. Aspects relating to the course, mainly content and organization, led the list with 23%. Next was the convenience and flexibility afforded by online learning (21%), followed by online interaction (18%), and the instructor's role, especially in providing feedback (16%). Other elements garnering some attention were desirable features of the technology (10%), and technical support (5%). On the negative side, inadequate instructor performance (8%), poor course content (4%), problems with technology (3%), negative experiences relating to interaction (3), and weak technical support (2%).

Among Japanese students, the clearly dominant element was the course itself, with respect to both content and design: 29% identified this item as a positive influence, while half as many said this had a negative impact on their satisfaction. Second for this cohort was online discussion, noted by 25% as a positive factor and by only by 2 Japanese students as a negative influence. For Japanese respondents, instructor-related elements were next (22%), followed by convenience (14%), and time management (13%), with only one negative associated with each of these elements.

Among the Israeli respondents, there were a total of 95 elements listed: 78 (82%) positive and 17 negative (18%). Aspects relating to the convenience and flexibility afforded by online learning, led the list with 38% of the positive responses) Next was the instructor's role, especially in providing feedback (18%) and online interaction (13%), and followed by was the course, mainly content and organization (12%)), technology (11%). On the negative side, the following three aspects garnered approximately the same number of comments: poor course content (35% of negative comments); problems with technology (35%) and negative experiences relating to interaction (30%).

For the Mexican respondents, online participation (32%) and professors (19%) were cited as the key elements contributing to their satisfaction with their experiences. These dominant elements were followed by flexibility (10%), assistance from the institution (9%) and readings (5%). Relatively few identified negative elements affecting their level of satisfaction.

The four cohorts produced a diverse list of positive/negative aspects, with no single element seeming to "take the lead" as the dominant element influencing satisfaction/dissatisfaction in their online learning. This finding suggests the complexity and the multi-dimensionality of the online learning environment.

## Dealing with Challenges in the Online Learning Environment

Literally hundreds of challenges were identified in response to this question. Only 5 among the entire respondent population expressed that they encountered no challenges in their online learning experiences!

Time management issues emerged as far and away the most dominant issue for these learners, except for the Israelis. Most dealt with this key issue by simply organizing their time in whatever ways necessary so as not to compromise their learning, but this often resulted in personal deprivation in terms of sleep, health, family, and work. Quite a few time-related challenges were exacerbated by the lack of institutional support, thus requiring students to dedicate more time on whatever was challenging them to arrive at some sort of resolution.

Interestingly, 13% of Japanese students indicated they simply persevered as their main mode of dealing with problems. Technology-related issues were noted, and these too seem to have largely been addressed through individual solutions rather than institutional support. Japanese students may delay taking action, as they tend to think that time, patience and optimism will solve the problem.

Most of the Israeli students interpreted this question as asking for their learning problems. Some of them cited the difficulty to learn on their own from a computer screen. Some felt the need to be active in discussion; posting comments to discussion just for the sake of being visible (and for grades).

## Next steps

Deriving a set of competencies useful to e-learning participants is the ultimate aim of this study. Weinert (2001) offers a useful definition of competencies: A specialized system of abilities, proficiencies, or dispositions to learn or do something successfully, or to reach a specific goal, prerequisites for meaningful activities and which are influenced through experience and learning. If, as some argue, the true purpose of e-learning is to support competence development rather than knowledge transfer, these "e-competencies" should be generally recognized and accepted as having reasonable reliability and benefits for use by a wide spectrum of both learners and teachers.

It is hoped, then, that this research provides some useful information on the experiences and opinions of representative online learners in a variety of cultural settings, through a better understanding of the teaching-learning phenomena that occur in online environments. This insight will culminate in a set of valid and reliable competencies. that should ultimately inform, influence and improve our practice. To this end, our other project team members (in Canada, Japan, Mexico, Israel and the US) are analyzing these results to provide their perspectives. Meanwhile, we invite our audience to also share their own reactions and ideas to augment this research.

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