Lowenthal, P. R., Wilson, B., & Parrish, P. (2009, October). Context matters: A description and typology of the online learning landscape. Paper presented at the 2009 AECT International Convention, Louisville, KY.

Context Matters: A Description and Typology of the Online Learning Landscape

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Descriptors: Online Learning, Typology, Context

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Introduction

The field of online learning faces a challenge: While we speak of online learning as a single entity, it tends to look very differently depending on the context of delivery. K12 and higher-ed learners, for example, might expect a fixed-pace, instructor-led course, whereas corporate learners see a greater mix of self-paced tutorials. Differences in setting, audience, techonlogy, pedagogy, and subject matter make generalizations and comparisons extremely challenging. Just as instructional designers often neglect the context of instruction (Tessmer, 1990; Tessmer & Richey, 1997; Tessmer & Wedman, 1995), practitioners and researchers of online learning rarely place enough emphasis on the context of their practices and models. And context changes everything.

This is a happy problem of course, part of the growing pains of a successful infusion into established institutions. As online learning enters mainstream practice (Allen & Seaman, 2006, 2008; Lokken, 2009; Picciano & Seaman, 2007), we need more nuanced descriptions and specifications in order to guide practice and understand appropriate uses. This paper responds to that growing need by reviewing, synthesizing, and expanding on past classifications of online learning in an effort to develop an initial framework that presents key variables of the online learning landscape as well as a typology that can be used to classify specific instances of online learning. Our intent is to develop a framework to provide a more precise language for research, and help practitioners targeting quality assurance and program improvement.

The Role of Context

A need for greater attention to context should come as no surprise. History has shown that context plays an important role in education. From the importance of conducting a front-end analysis when designing training and instruction (Rossett, 1987), to the development of situated theories of learning (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991; Wenger, 1998), to the rise of qualitative and mixed methods of research (Dellinger, 2007; Lincoln & Guba, 1985; Lowenthal & Leech, 2009), academics have been placing a greater emphasis on context over the last few decades. This is not generally true for online learning however. Rather than focus on or even acknowledge the situated and contextual nature of online learning, we tend to talk about online learning as a single entity. The language we use shapes the way we think, just as the way we think shapes the language we use (Lowenthal & Wilson, in press; White & Lowenthal, 2009). This lack of specificity when talking about online learning is problematic because it perpetuates a myth that there is a single type of "online learning."

An undifferentiated construct of online learning is problematic for a number of reasons, three of which are briefly outlined below.

- It *confounds research results* related to online learning (Philips, 2005, p. 541), which is regularly criticized for being low quality (Amiel & Reeves, 2008; Bernard et al., 2004; Reeves, 1995; Wray, Lowenthal, Bates, & Stevens, 2008). Researchers need to be as transparent and explicit as possible when researching anything – but especially when studying the ever-changing field of online learning. The ability to replicate findings is often seen as the hallmark of rigorous research and a basis for advancing knowledge (Moore &

Anderson, 2003). However, the lack of precision, explicitness, and agreement in the language we use to talk about, think about, and describe online learning makes this very difficult.

- It *confuses practitioners* by glossing over key differences in practice. While we continue to hear about how much online learning is growing each year, comparatively speaking, we tend to hear very little about online attrition and the difficulties encountered by students. Research suggests that attrition in online learning is higher than traditional face-to-face programs (Carr, 2000; Phipps & Merisotis, 1999; Willging & Johnson, 2004). Attrition, retention, and student persistence are complex issues that are difficult to study (Hagedorn, 2005) and overall research on attrition in online learning is relatively new (Shea & Bidjerano, 2008, p. 346). Therefore, there is a great deal we do not know about why some students drop out of online courses. Part of the reason may be the broad and often inaccurate assumptions of what online learning entails, when in fact students find themselves in a wide vary of online experiences when taking courses online.
- It likely influences *how faculty and instructional designers design online courses*. For instance, the overall popularity of asynchronous online learning environments coupled with past experience, leads faculty and instructional designers (especially in higher education spaces) to have a certain conception of "online learning." This conception is of a primarily (if not exclusively) asynchronous learning experience which then influences and possibly restricts the type of instructional activities they design.

Online learning manifests itself in many different ways and these differences need to be more consistently acknowledged, discussed, and valued. While dissertations might include thick descriptions of the context and type of online learning, journal articles (possibly due to restrictive word limits) often lack this type of rich and extremely important detail. We contend that when online learning is taken "out of context," we tend to have problems like those previously mentioned among researchers, practitioners, and students.

Background - Different Ways of Describing Online Learning

In the following section, we review and synthesize some common distinctions and characterizations made about online learning. These core concepts are later included in a list of key variables of online learning that researchers and practitioners alike should consider and serve as the basis of our initial proposed typology.

Synchronous vs. Asynchronous

Perhaps the earliest distinction made about online learning was between synchronous forms and asynchronous forms of online learning (Hrastinski, 2008). Simply put, synchronous learning requires the instructor and learner to be online at the same time to communicate and engage in instructional activities, whereas asynchronous learning allows instructors and learners to be online at different times, or proceed in an entirely self-paced mode with no instructor presence (Horton, 2006; Salmon, 2003). This distinction was especially useful with the rise of email, bulletin boards, and threaded discussion tools – contrasted with broadcast forms of delivery.

The reality though is that most online learning these days – especially in K-12 and Higher Education spaces – is mediated by Learning Management Systems (LMSs), which now come standard with both synchronous and asynchronous communication tools. While asynchronous activities still dominate online learning these days (Parry, 2009; WCET, 2009), increasingly online courses include a mix of synchronous and asynchronous activities (Salmon, 2003). Even when an instructor does not include any synchronous learning activities per se, he or she might use a chat tool to hold set office hours. Thus, it may be unproductive to characterize a course as simply being either synchronous or asynchronous, when in fact a mix of elements are used.

Instructor Led vs. Learner Led

Another commonly used way to characterize and differentiate online learning is to focus on the pacing of the course and the degree to which a learner can control the pacing of the course. This is often referred to as instructor led vs. learner led (e.g., DeRouin, Fritzsche, & Salas, 2004; Horton, 2006) or group-paced vs. self-paced (e.g., Brandon, 2007). Instructor led is used to describe a typical college course in which an instructor facilitates an online course (often self-designed and produced) with a group of students. Such a course would typically fall on a traditional semester schedule in a asynchronous environment. In instructor led courses, learners are expected to complete the course according to the instructor's predefined guidelines which typically include set deadlines. This structure often prevents a student from working ahead at his or her own pace (Horton, 2006). Learner led on the

other hand is used to describe online learning environments in which the learner can proceed at his or her own pace (Horton, 2006). This typically takes place in workplace education rather than K-12 and postsecondary settings; however all levels of formal education have examples of learner led offerings.

While this differentiation is useful, some issues remain. First, while some courses are truly instructor led, very few full courses are completely learner led or self-paced. The typical college self-paced course, for example, must be completed during a traditional semester timeframe. Further, many learner-led online learning environments might have an instructor or facilitator (even if only in a tutorial role) just as many instructor led online learning environments might allow a learner to proceed at his or her own pace.

Harasim's Typology

Harasim, first in 2000 and later in 2006 – while not specifically setting out to develop a typology – offered an early description of the diversity that exists across the online learning landscape. She first differentiates between three types of online learning:

- *Online collaborative learning* is a common method used by institutions of higher education; it involves using asynchronous, synchronous, or a combination of the two, forms of communication to bring a group of students and teacher together.
- *Online distance education*, on the other hand, is essentially a correspondence or independent study course that uses technology (e.g., email) for students to access course materials and turn in assignments. This type of online learning is used by K-12 and post-secondary institutions. It is essentially a one-to-one or one-to-many model.
- *Online computer-based training* "refers to the use of the web for access to online courseware or individualized learning modules. There is typically neither peer collaboration nor communication with an instructor or tutor" (Harasim, 2006, p. 63). This is often the preferred method of online learning in corporate and workplace spaces, adding the flexbility needed for on-the-job and just-in-time learning.

Different Types of Education

Citing the work of Coombs and Ahmed (1974, as cited in Harasim, 2006), Harasim places these online learning types within three different types of education:

- *Formal* education refers to traditional education completed typically in P-16 environments for credit and credentialing.
- *Non-formal* education refers to the type of education often described as professional development, completing as part of one's job duties.
- *Informal* education refers to the specific lifelong learning individuals take part in throughout their life. Informal learning lacks the "deliberate instructional and programmatic emphases in formal and non-formal education" (Harasim, 2006, p. 63).

Different Roles of Online Learning

Finally, whether a course is formal or non-formal, the particular role of online learning in a course can vary greatly. Harasim (2006) uses three categories:

- *Adjunct* mode is when online learning activities are used only to supplement a course.
- *Mixed (blended)* mode is when online activities are used as a significant part of a course.
- *Totally online* mode describes courses in which the majority (if not all) of the course activities are done online (p. 64).

It's no surprise that Harasim, an early pioneer in the field of online teaching and learning (see Harasim, 1986, 1987, 1990, 1993; Harasim & Johnson, 1986; Harasim et al., 1995), has developed a very helpful description of the online learning landscape. However, some continuing issues remain. For instance, even within online collaborative learning, very important differences may exist. Further, the rise in popularity and access of online conferencing applications has aided in the rise of the webinar, a form of learning activity in its own right.

iNACOL's Classification of Online Teaching and Learning

A recent classification of online learning has been developed by the International Association of K-12 Online Learning or iNACOL. iNACOL's brief (Cavanaugh et al., 2009) "examines some of the aspects of online teaching, specifically those related to communication and interaction" (p. 4). An entire section of the brief focuses on characteristics of online teaching. In order to understand the range of virtual school models, they decided to survey and then describe each virtual K-12 school's instructional pacing, course design, delivery technology, instructor role, and teacher requirements (Cavanaugh et al. 2009). The additional considerations below give body to an emerging framework for online learning.

- *Instructional pacing*. Does the virtual course follow the traditional school schedule? Other options would be: does not have a formal schedule, includes a required or suggested pacing chart, or does not follow any specific pace.
- *Course design* describes whether a virtual school uses vendor produced courses as is, with modification, or whether they locally develop their courses (individually or by a curriculum committee).
- *Delivery technology* refers to whether the course relies on synchronous video, synchronous classroom software, asynchronous software, or blended.
- *Instructor role* touches on whether the instructor provides instruction primarily synchronously, provides synchronous supplemental instruction, provides asynchronous primary instruction, leads discussion, evaluates non-graded activities, and/or evaluates graded activities.
- *Communication* focuses on the type of teacher-to-student and student-to-student communication required. Options include requiring email, discussion forum, instant messaging, synchronous, and in-person communication between teacher to student and/or student to student.
- *Teacher requirements* addresses teacher qualifications: whether or not the teacher is required to meet minimum certification, have minimum teaching experience, have minimum online teacher training and/or minimum online teaching experience.

These additional constructs provide further specificity for online learning, and are incorporated into the emerging list of key variables and typology presented in the next sections.

A Typology (Topology?) of the Online Learning Landscape

We recognize that a typology of online learning cannot realistically take into account every possible variable, nor should it do so. For a typology to be useful – and therefore more than an academic exercise – it needs to be as comprehensive as possible while at the same time being clear and easy to use. We present in this section the characteristics / variables of the online learning landscape we have chosen to include in our typology. Only those variables likely to impact pedagogy, learning, and performance were included in the framework.

Table 1 extends the characteristics identified by Harasim and iNACOL and summarizes the typology. Each variable is then discussed below. The categories constitute a typology – but we could also use the word *topology*, consistent with the metaphor of the online landscape!

Table 1
Key Characteristics of Online Learning

Themes	Characteristics
Context	Formality
	Setting
	Curriculum Fit
	Synchronous/Asynchronous
	Pacing
	% Online
	Class Size
	Development Model
	Targeted Learning
	Subject Area
Media	Multimedia
	3-D Virtual Worlds

Teachers and Learners	Instructor Role
	Cohort Group
	Student Collaboration
	Teacher Preparation
	Student Diversity
	Class Size

Contextual Variables

Formality. As pointed out earlier, Harasim (2006), working from the work of Coombs and Ahmed (1974), distinguished between three types of education: formal education, non-formal, and informal education (see also Rogers, 2004). One distinction needs to be added to Harasim's list. We see two different types of non-formal learning: required and optional. An example of required non-formal online learning is when employees are required to complete an online training workshop on sexual harassment prevention. An example of optional non-formal online learning however would be when people (typically adults) complete optional "training" (e.g., attending a synchronous webinar or completing an asynchronous learning module online). The optional or required nature of a course or module can affect learner motivation and engagement.

Setting. As mentioned earlier, online learning tends to manifest itself differently across K-12, higher education, and workplace education spaces. Harasim alludes to the importance of setting when she distinguishes between three types of online learning (i.e., online collaborative learning, online distance education, and computer-based training) but in the end she does not go far enough. While differences exist even within settings (as we address, e.g., under subject area), there are important differences across setting of use. For instance, in K-12 online learning, online faculty have to address standards, standardized testing, and even continuous communication with parents in ways that higher education and corporate/professional faculty do not. Similarly, corporate/professional spaces often benefit from the ability to "require" an employee to complete an online learning experience, which adds affordances and constraints (particularly costs).

Curriculum Fit. This variable is related to the formality of a course. Some online courses and modules fit neatly into a larger curriculum plan, while others do not. Some smaller-scale modules, often self-paced, fit within a more traditional course. This link to a larger curriculum or credentialing purpose affects how students and instructors think of learning and instruction within the course. Prerequisites become an issue, as do the specificity of learning outcomes, which may be used by another course as prerequisite knowledge.

Pacing. The pacing is another key variable that must be taken into account. There really are two parts of pacing that should be considered. First, does the course (or non-formal learning experience) follow some type of pre-defined schedule? Second, does the learner have the ability to complete the learning experience at his or her own pace? Regarding the first point, for years the accelerated learning movement has questioned the importance of "seat-time." That is, they have argued that people (especially adult learners) can learn the same amount of content in an accelerated term (e.g., 8 weeks) than in a traditional semester (e.g., 15 weeks) (Wlodkowski, 2003; Wlodkowski & Westover, 1999; Wlodkowski, Mauldin, & Gahn, 2001). While more research needs to be conducted on this (especially on accelerated online courses), most can agree that there is nothing sacrosanct about a 15-week semester. And while seat time does not equate to learning, the amount of time available in an online learning experience influences the sequence and scope as well as learners' ability to connect with each other. For instance, research on social presence has suggested that social presence is established early in a course, which builds the foundation for a Community of Inquiry to be established and subsequent learning (Garrison & Anderson, 2003; Shea, Li, & Pickett, 2006). Shortening the duration could likely impact how learners establish a Community of Inquiry (Lowenthal & Lowenthal, 2009). Similarly, but for different reasons, allowing learners to progress at their own pace is likely to influence the types of instructional activities included.

% Online. The increased use of course management systems (CMS) at campuses across the country and Web 2.0 applications is making it easier for faculty to incorporate online aspects into their face-to-face courses. From simply uploading their syllabus to the web to having simple discussions online, face-to-face instructors are using the Internet in their courses – thus blurring the line between face-to-face and online courses. Further, online courses and programs throughout the country commonly integrate face-to-face components – e.g., a meet and greet before the course begins or required face-to-face meetings – into their courses and programs. While face-to-face encounters like these are a positive addition, and blended learning experiences perhaps the best of both worlds (Shank, 2004)), they are unquestionably different than fully online courses, often leading to different learning activities and designs.

Class Size. Class size is also an important variable to consider when designing or researching online learning. While some have argued that enrollments in online courses should be between 15 – 25 students, many online courses have anywhere from 25-70 students enrolled in them at any given time. An online course with 50+ students is very different from one with 15.

Development Model. Early attempts at online teaching, at least in the higher education sector, were simply adaptations of classroom-based courses designed and developed by individual faculty interested in the new medium (Lowenthal & White, 2009). Many colleges and universities still rely on a faculty-driven design and development model, which Bates (1997) has characterized as the "Loan Ranger and Tonto" approach because of its heavy reliance on individual faculty. However, as the demand for entire academic programs offered online has increased coupled with continued technological innovation – many institutions are realizing that the development and delivery of online education is an increasingly complicated process, requiring both a specialized pedagogy and a technological expertise possessed by few faculty (Lynch, 2005; Oblinger & Hawkins, 2006; Wray et al., 2008).

As a result, across all sectors of the online learning landscape, there is an increased use of specialized individuals (e.g., instructional designers, web developers, flash developers, programmers, video experts, etc…) to design and develop (and sometimes even host) online course materials. These range from specific online learning departments within an institution, to consortiums that lease courses to other institutions, to consultants and publishers leasing and or selling their course materials (see Lowenthal & White). While research needs to be conducted on how using course materials produced by others influences faculty and student satisfaction and student learning (Lowenthal & Lowenthal, 2009), there is a long history of research suggesting that instructional design can improve the quality of course materials (for a recent example see Kidwaii, Howell, Defrain, van Middlesworth, & Spielvogel, 2009).

Targeted Learning. For this variable we are interested in the level of learning targeted – is the course knowledge-based, skill-based, or targeting complex, authentic performance that integrates knowledge and skill together? Determining the primary kind of learning goal can be surprisingly difficult when reading research reports. Knowing the kind of learning being targeted can provide a context for understanding research findings and how to generalize them to similar cases and needs.

Subject Area. Researchers of online learning have not adequately investigated the differences among specific academic disciplines (Arbaugh, 2005; Lowenthal & Lowenthal, 2009; Lowenthal, Lowenthal, & White, 2009; Smith, 2005; Smith, Heindel, Torres-Ayala, 2008; White & Liccardi, 2006). Anderson et al. (2001) suggest that subject differences might exist across disciplines because of differences between "discipline related conceptions of the education process" (p. 13). Similarly, Lowenthal and Lowenthal (2009) argue that differences likely exist because faculty and students belong to different communities of practice, which are constructed and maintained in part upon the language its members use (Street, 1984). Online faculty in certain fields of study and practice (e.g., education) communicate differently than those in other fields (e.g., business). Similarly, students' expectations regarding appropriate forms of communication, and ultimately things like presence or even work load, are likely to vary across academic disciplines. While we often like to think of good teaching as good teaching (Ragan, 1999), in practice, good teaching always happens in a specific context with specific forms of discourse (Lowenthal & Lowenthal, 2009; Lowenthal, Lowenthal, & White, 2009).

Media

This category presently contains only two sub-items. We have kept it separate conceptually because of its importance for online learning and its potential for continuing development.

Multimedia. Despite the increase in the availability of multimedia, most online courses tend to be primarily text-based (Parry, 2009; WCET, 2009). There has been a long history of debates about whether or not media can actually improve learning. This is not the place to continue this debate. But suffice it to say that people assume that online courses leverage multimedia when in fact, research suggests that most online courses (at least in the post-secondary sector) remain primarily text-based (Parry, 2009; WCET, 2009). It is important for researchers and practitioners alike to recognize this trend and strive to be as explicit as possible about the media usage in any online courses or programs they talk about.

Virtual Worlds. Increasingly educators are exploring the potential for using 3-D virtual worlds like Second Life for learning – especially in online learning environments (see Bronack, Cheney, Riedl, & Tashner 2008; Bronack, Sanders, Cheney, Riedl, Tashner, & Matzen, 2008). The use of these virtual worlds ranges from fully immersed online learning experiences to blended approaches. Over time we expect immersive environments to be commonplace learning resources.

Teachers and Learners

Instructor Role. The role of the instructor in online learning environments is often described as being more of a "guide-on- the-side" rather than a "sage-on-the-stage" (King, 1993). However, this cliché can be taken to extremes; there is a fine line between being a guide on the side and being absent at critical learning junctures (Lowenthal & Parscal, 2008). The role of the instructor may reasonably be different across online courses. For instance, self-paced courses typically do not include an instructor. In contrast, many survey courses at the undergraduate level are fairly instructor- and lecture oriented.

Cohort Group. Research about online learning suggests that students often feel isolated (Bischoff, 2000; Ludwig-Hardman & Dunlap, 2003) and alone in online learning environments (Grubb & Hines, 2000; Robinson, 2000). Attrition rates for online programs continue to be higher than ground-based programs (Carr, 2000; Moody, 2004; Phipps & Merisotis, 1999; Willging & Johnson, 2004). Whether an online course is part of a cohort – that is, a group of students completing the program together, typically in a set sequence – is likely to influence students' ability to establish a learning community online as well as whether they persist and complete the program. Everything from group-work to project based assignments is likely to be influenced by the degree to which students have had past experience taking online courses together.

Communication. From its early days, online learning has been characterized by its use of communication technology (e.g., asynchronous vs. synchronous). While asynchronous communication technology – primarily threaded discussions and email – still dominates online learning (when communication technology is used), a growing number of people are using synchronous communication technologies and an even increasing number are using a blend of the two (Chundur & Prakash, 2009). Research on asynchronous and synchronous communication technologies suggests that each of these technologies have their affordances and constraints (Horton, 2006). These affordances and constraints are likely to influence student satisfaction as well as student learning and therefore should be carefully thought about and described in detail when describing an online course or program of study.

Student Collaboration. The degree to which student collaborate with each other in an online course is an important variable to consider. Some instructor-led courses are very teacher-centric, with some discussion but very little collaboration on projects and assignments. Other courses utilize and rely on a great deal of collaborative group work. In our experience, for every highly collaborative course, there are many others with very low levels of collaboration. Rather than assume a course is collaborative because it is a group-paced course or that it is not collaborative because it is more self-paced, we posit that researchers of online learning need to explicitly describe the level of collaboration in the courses they study.

Teacher Preparation. People tend to assume that anyone can teach. For instance, in the higher education sector, a terminal degree is a license to teach; that is, "knowing a subject well is sufficient training to teach it" (Stevens, 1988, p.64). Similar assumptions and practices can be found in workplace learning environments. And while K-12 sectors have a history of requiring some type of teacher training – whether a traditional teaching certificate or alternative/emergency license – before being able to teach, only six of the ten programs surveyed in Cavanaugh et al. (2009) – iNACOL's brief cited earlier – have minimum online teacher training requirements and only one out of ten programs actually required teachers to have online teaching experience. As mentioned earlier, while good teaching is good teaching, researchers and practitioners alike have shown that teaching online is different than teaching in a face-to-face environment (Palloff & Pratt, 1999; Ragan, 1999; Salmon, 2003).

A number of institutions are now requiring some form of preparation for online instructors. Prior to teaching online for the first time, faculty in Regis University's College of Professional Studies must take part in a three-week assessment and training process online followed by an internship/mentoring process (Parscal & Florence, 2004). Regis is not alone. A growing number of programs are providing (and sometimes even requiring) training and development to teach online. For instance, faculty in the SUNY system have received exceptional training and development for nearly a decade (see Shea, Fredericksen, Pickett, & Pelz, 2003; Shea, Pickett, & Pelz, 2003). We suspect that just like in K-12 face-to-face settings (see Monk, Walberg, & Wong, 2001), the quality of the online teacher highly influences student learning.

Student Diversity. Online courses are more diverse than ever before – but so are the students completing them. With the increase of non-traditional students (at least in the higher education sector) coupled with an ever-increasing number of international learners (in both the higher education and corporate/professional sectors), more online courses consist of a very heterogeneous audience. The level of homogeneity in terms of prior knowledge, culture, and language can affect levels of course participation and learning (Parrish & VanBerschot, 2009).

A One-Page Rating Form

The list of variables in the previous section is not meant to be exhaustive. Rather, we outline key variables that need to be considered when talking about online learning. We recognize, and invite, other researchers to help us expand or refine the framework. Table 2 below casts the framework into a rating form for use by researchers and practitioners. The form is in draft mode; a polished formatted version needs to be prepared. The goal is to keep it on a single page for usability reasons. We believe a convenient form can have significant value. Researchers and consumers of research can benefit from this kind of specificity to make generalizations and interpretations easier and more accurate. In practice, instructors and students can benefit from this level of description through improved information to consumers, and for accountability and program-improvement purposes.

Table 2

Draft One-Page Form for Rating or Description

CONTEXT – Course setup, purpose, and fit					
Formality	Formal/Credit	Required Non-formal	Optional Non-formal	Informal	
Setting	K-12	Higher Ed.	Workplace Learning	Other [specify]	
Curriculum Fit	Course within Credential or Degree	Module Embedded within a Course or Credential	Stand-Alone Module		
Synchronous	[Specify % synchronous and asynchronous]				
Pacing	Fixed – Standard Term	Fixd – Accelerated Term	Self-Paced on	Completely Self-Paced	
% Online	[Specify % online and on-site]				
Develpment Model	Course was purchased by a vendor	Course was collaboratively designed and developed by a team or unit	Instructor is teaching a course designed and developed by another faculty	Instructor is teaching a course in which Web-based or other materials designed by others are incorporated into his/her own materials	Course is designed, developed, and taught by the instructor
Targeted Learning	Knowledge/memory/text processing	Skills and operations	Higher-order/authentic performing		
Subject Area	[Specify]				
MEDIA – Use and integration of multimedia and virtual worlds					
Multimedia	Primarily Audio and Video	Blended Media	Primarily Text-based		
3-D Virtual World	Fully Immersed	Blended	Supplemental	No 3-D World	
TEACHERS AND LEARNERS					
Instructor Role	Instructor – highly engaged/present	Instructor – less engaged/present	No Instructor		
Cohort Group	Continuing Cohort or Established Group	New Cohort	Non Cohort – most students don't know each other		
Communication	Regular communication with faculty and between students	Communication primarily with students	Communication primarily with faculty	Very little communication with faculty or students	
Student Collaboration	Ongoing student collaboration on projects and issues that arise	Occasional collaboration among students	Student collaboration is rare		
Teacher Preparation	Trained/Experienced Online Instructor	Trained but First Time Teaching Online	First Time Teaching Online	Not Applicable (No Instructor)	
Student Diversity	Heterogeneous [Describe in space provided]	Homogeneous [Describe]			
Class Size	[Specify class size or class size estimate]				

Conclusion/Implications

We are fully aware that trying to develop a stable and comprehensive typology of the online learning landscape is a challenging agenda. It may require more than an analytic exercise – students and professionals, for example, could report the most salient features that distinguish one product or experience from another. We thus see this as a work in progress. However, we also recognize that many of the current ways we talk about and think about online learning are inadequate in that they simply fail to take into account the complexities of online learning.

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