

Chapter 9

Authentic Tasks Online: Two Experiences

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ABSTRACT

This chapter presents an exploration of the design and methods of two instantiations of authentic learning tasks in online learning environments. The first case employs a service learning orientation involving a distance learning project taught to students in four sites in two countries, while the second case is of a multimedia-based learning environment employing a scenario to engage students in realistic, simulated learning activities. The two approaches are examined through reference to characteristics of authentic tasks. The chapter demonstrates a range of possibilities for the instructor interested in more informed design of technology-based learning environments in higher education, and in particular, the design and creation of authentic learning tasks.

INTRODUCTION

The rise of internet-based education programs has led to much concern over the quality of the courses offered online. Through learning management systems that model information-based modes of delivery, courses often revert to more transmissive modes (Beetham & Sharpe, 2007). Online learning has strongly perpetuated conventional

expository methods of teaching. Many of the pitfalls of online instruction can be attributed to the faulty and somewhat regressive assumption that online courses could be taught following the same principles of face-to-face instruction (cf. Reeves, Herrington, & Oliver, 2004). Simply transferring content and form from one mode of teaching to the other has typically generated online courses where students learn *from* media as opposed to learning *with* them (Reeves, 1998). While learning *from* is not inherently negative, this paradigm has

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had a tendency to produce courses that copy more traditional, expository methods of instruction and presentation to online media.

BACKGROUND

The emphasis on learning *from* media in online classrooms has largely lead to unidirectional content transfer with limited student engagement. Traditional teaching often typifies passive students and fictitious content, scenarios and examples. In many online courses where students read, watch, and listen to a variety of media, they are denied the opportunity to engage with authentic contexts. Learning concepts (especially abstract concepts) is greatly dependent on context and experience (Gagné, 1984; Mezirow, 2000). Inquiry-based models such as those of project-based learning (Han & Bhattacharya, 2001) emphasize context, and focus on student activity and interaction. Providing authentic contexts for engagement in online environments can be quite difficult for teachers, especially when dealing with ill-defined problems. Nevertheless, much work has been done to leverage the potential of online environments in order to create authentic environments paying particular attention to context and audience (Reeves et al., 2004). Among these possibilities is the use of real-world scenarios in order to provide context and setting to meaningful engagement in an online setting.

Some academics contend that for a task to be authentic, it needs to be real. For example, Savery and Duffy (1996) nominated two guiding forces in developing problem-based scenarios: firstly, that the problems must raise the concepts and principles relevant to the content domain, and secondly that the problems must be real. However, research has provided principles to guide the development of realistic and complex learning environments that are not *real* but *cognitively real*, that is, the tasks that are created for students are not real tasks performed in a real workplace setting, but they are

‘cognitively real’ (Smith, 1986; 1987). Authentic tasks require the creation of real products and artefacts, and are more worthy of the investment of time and effort by students than decontextualised exercises and tasks.

TWO EXPERIENCES

In this chapter, we discuss these two alternatives to enhance the authenticity of the online classroom. First, we review an experiential e-learning model based on service-learning focused on pre-service teachers and multicultural education. Next, we describe a scenario-based model focused on mathematics and pre-service teachers. We finalize the chapter with a comparison of the two approaches based on the characteristics of authentic tasks. Our aim is to demonstrate a range of possibilities for the instructor interested in promoting authenticity in an online environment.

Experiential Learning: E-Service

Within the domain of education, pre-service teachers are usually involved in some form of experiential activity before graduating. The practicum is usually a sustained internship where students assist a more experience teacher to learn about the practice of teaching in an authentic context. This is but one type of experiential learning. It is a long-term and intense experience that occurs parallel to the academic environment. Opportunities such as this exist in other areas of study such as engineering or design, in the form of volunteer work or internships.

Furco (1996) provides a useful set of criteria to define experiential learning models, depending on the emphasis on service and/or learning, and who benefits from the service experience, the student and/or the community. *Volunteer* activities are those where students work for no financial benefit, for example, where students provide some of their time to a community organization

such as a community library or a hospital. Here, the community benefits mostly from the time and efforts of the volunteer. An *internship* also places strong focus on service, but the benefit is mostly to the community or organization. For example, students interning at a newspaper agency would likely be assigned to simple, routine tasks in an effort to “get a feel” for the operation. Opportunities such as these occur parallel to academic courses, or after a degree is completed. In these cases, as with the practicum, academic learning is not connected to experiential activities.

An often-underutilized alternative to promoting authentic tasks and assessment is to expand the boundaries of the online classroom, by providing students with offline experiential learning. One possibility is to engage students in service-learning projects with authentic partners and tasks. The service-learning experience can be defined in cooperation with the student, provides tangible outcomes, and assessment can easily be negotiated with the service-learning partner (Densmore, 2000). Simply having an offline experiential activity does not guarantee the authenticity of the project. Defining the authenticity of the engagement is essential, in accordance with the student, course, and community goals.

Service-learning, has been a growing field of educational practice and inquiry. It began as an educational strategy focused on civic education and public service (Kenny & Gallagher, 2002). It is a particularly complex form of experiential learning. In its ideal state service-learning aims at mutuality between the community and students – learning and service are bi-directional. Howard (2003) identifies three essential features:

- service is provided in the community and is based on community needs,
- student academic skills are strengthened, and
- a commitment to civic participation, democratic citizenship, or social responsibility is evident.

Service-learning is a useful correlate to scenario-based environments in that it emphasizes the connection between academic learning *and* action. In the case of service-learning, engagement occurs as part of a structured learning environment. The benefit from engagement is mutual, and community experiences are valued as legitimate and valuable sources of knowledge, which are meant to provide a critical role in the learning process. At the same time, student service must be valuable to, and valued by, the local community. While the field is still young (Kenny & Gallagher, 2002), evidence is mounting towards the multiple positive outcomes of service-learning programs. Well designed programs have been shown to promote academic gains, as well as promoting affective, conative, and behavioral changes towards a more critical stance and commitment to social justice (Astin, Vogelgesang, Ikeda, & Yee, 2000; King, 2004; Kiely, 2005).

In higher education what constitutes a local community can vary. Many courses emphasize engagement for students acting in areas around campus; others act internationally connecting study abroad and service-learning programs. “International service-learning” (Kraft, 2002) opportunities displace the traditional service location to alternative contexts (see for example, Kiely, 2004). There are many benefits but also limitations to a wide adoption of this approach. One need only think of the costs associated with having both students and instructors travel abroad for a substantial amount of time.

An emerging field blending service-learning and distance education has been termed “e-service” (Strait & Sauer, 2004). The incorporation of service-learning programs into distance education can be done in multiple ways. It can be more easily organized in traditional online university courses where the instructor and students are co-located. More interestingly, service-learning can be incorporated to courses with a distributed student group, where learners/instructors are not closely situated. As universities and other insti-

tutions engage students from around the globe, service-learning can enrich student experiences by fostering local (from the perspective of the student) engagement, and can enhance coursework by incorporating example originating multiple contexts and cultures into discussions. In order to illustrate this model, we present a particularly complex program integrating service-learning and distance education across two countries and four different locations.

SERVICE AND DISTANCE: AN EXAMPLE

Four universities, two located in Brazil and two in the United States collaborated over a four-year period in an undergraduate exchange program¹. Each year, for a period of one semester or longer, exchange students traveled abroad and took courses in educational technology and engaged in a service-learning program.

Students worked as partners with a public school teacher in the host country, visiting the school at least twice weekly during their stay. The objective of the program was to prepare pre-service teachers for a multicultural classroom through an authentic experience in a foreign classroom. In order to explore these issues, the students had one, long-term task to accomplish: design and implement a lesson plan in a local public school in partnership with a local school teacher, which would connect public schools across both nations (for further detail on the program and projects, see Amiel, McClendon, & Orey, 2007).

A major exchange, which we report here, involved 26 students simultaneously distributed across two countries and four distant locations. Final projects ranged from creating a student-led, school-based newspaper across four public schools, to fostering a bi-national video-exchange program. These were not simple projects, and students needed a substantial amount of support and scaffolding in order to engage.

Scaffolding and Sharing: Coursework

The course entitled *Multicultural Perspectives on Technology* (MPT) was designed as a seminar, meeting synchronously once weekly. The course was designed to scaffold students in all four locations (Ceará/São Paulo in Brazil and Utah/Georgia in the USA) through issues relating to culture, education, and technology, an intersection of increasing concern and interest (Amiel, 2008). These included concepts that were likely to emerge in interaction with school in another nation: race, religion, gender, nationality, language, disability, and others. The investigation of these topics was meant to provide students with complex, interacting, and systemic view of education and technology, mediated by socio-cultural factors (Amiel & Orey, 2011).

The MPT course was taught in tandem with a course focused on lesson plan design, taught at each institution by local faculty. Students were given guidelines to analyze, and asked to design, develop, implement, and evaluate a lesson plan. Every week a new topic was discussed and students were given time to engage in-group discussion in regards to how the topic would affect the design and implementation of their lesson plan and project. The service-learning experience both fueled discussion and functioned as a “laboratory” to investigate these concepts in the real environment of school.

The weekly meeting of the online course brought together a weeklong field experience by students in all four locations. Students in Brazil (from the USA) could exchange and confront their experiences with the Brazilian partners abroad (in the USA), and vice-versa. It was designed to be more than a forum for discussion and sharing – a sustained moment of mediated reflection on both abstract concepts such as religion and democracy, but also concrete action in their projects and conduct while abroad.

In designing the MPT course, our goal was to maximize the connection between academic learning and successful projects. In order to do so the course was permeated with field/experiential activities, which were intimately connected to both academic objectives *and* the overall service-learning project. These weekly assignments became experiential/field components to the readings and discussions in the online course.

One of the first course activities was focused on critical and multicultural education. Students were asked to devise a questionnaire (examples given) and interview their partner-teacher. The questionnaire aimed at identifying teacher beliefs and practices. Students prepared a report on their activity, including their observations, reflections on the outcomes of the interview, and the implications for their projects. The reports indicated that students created greater bonds with their teachers, had a better sense of teacher beliefs, and prompted them to reflect on how the teacher's perspectives would affect their project.

In order to examine the influence of socioeconomic status (SES) on education and technology, undergraduate students visited a private and a public school in their host country, and took notes on human and physical resources. They briefly interviewed students, and questioned teachers and administrators. During the weekly meeting, students discussed these disparities and the potential impact of SES on lesson planning. They then discussed how their investigation would affect their semester-long projects in both countries.

When the course reached the subject of the relationship between religion and schooling, students were asked to visit a religious celebration (congregation, mass, meeting) that they had no familiarity with. In order to identify a celebration to attend, undergraduates were asked to talk to students in their service-learning classroom about their beliefs, and celebrations they attended. Our class was comprised of students of many faiths, including protestant, muslim, mormon, agnostic, and others. Though students were given the option

to "opt out" of this assignment, none did so. This activity required no coordination by the professor. Activities such as these were organized to provide students incremental knowledge about their students, their beliefs, and the community at large. They were integrated to the classroom discussion. Once again, the activity promoted the integration of undergraduate students into the school community and was part of a larger, significant task.

As seen in the examples above, authentic tasks can take the form of immediate local action. Though students might be at a distance from the instructor and other students, a large number of experiential opportunities, such as service-learning, can be designed and integrated into an online course.

SCENARIO-BASED IMPLEMENTATION

The second case described in this chapter is a multimedia-based learning environment that uses a scenario of a classroom mathematics teacher exploring alternative assessment (Herrington, Sparrow, Herrington & Oliver, 1997). The program, entitled *Investigating Assessment Strategies in Mathematics Classrooms*, is designed for pre-service mathematics teachers, and it allows them to explore the use and theoretical dimensions of a range of different assessment techniques as an alternative to pencil and paper tests.

McLellan (1996) points out that an authentic context can be represented in a number of ways: the actual work setting, a highly realistic or 'virtual' surrogate of the actual work environment, or an anchoring context such as a video or multimedia program. *Investigating Assessment Strategies* is an example of an anchoring context, and it uses a scenario to anchor the students' activities as they use the program. Carroll (2000) describes scenario-based learning as displaying characteristics elements comprising: a setting, agents or

actors, goals and objectives (held by agents), and a plot including actions and events. The scenario in the assessment program can be described as scenario-based learning only at the entry level of the task description, because it includes neither agents nor plot, except through the student's own identification with the teacher's task and the goals of the activity. It does, however, create a realistic place and context for the examination of assessment that is 'cognitively real' (Smith, 1986; 1987; Herrington, Reeves, & Oliver, 2007) rather than physically real.

The assessment program provides pre-service teachers with the experience of observing expert teachers using different types of assessment in classrooms. Students are also able to hear the teachers talk about why and under what conditions they used each particular strategy and to hear school children's comments on how they felt about them. They also have access to informed comment by experts and to the thoughts of other learners with varying degrees of skill. In effect, pre-service teachers using the program are able to investigate assessment strategies by observing experienced teachers in the field demonstrating a range of strategies and techniques, and then reflecting on the most appropriate strategy to use in a particular situation.

Movie files of classroom scenes and interviews are used to provide such opportunities to the students who use the program. Bransford, Vye, Kinzer and Risko (1990) advocated the use of visual elements such as movie clips because they provide a much richer source of information. Gestures and affective elements accompanying the dialogue means that there is much more to notice, and it is possible to find relevant issues which are embedded within the real-life context which might otherwise go unnoticed. Incorporating movie files into the program enables students to experience the classroom almost as if it were first hand, but without any of the inherent problems and dangers. Klein and Hoffman (1993) in a discussion on the development of expertise

contended that exposing students to 'manufactured experiences' is one of the best ways to increase the development of perceptual-cognitive skills. They argued that computer technology is able to provide 'low-cost and high-fidelity' experiences that can speed the acquisition of expertise. The two important advantages of using computer-based material are firstly, that the technology allows the learners to sharpen their ability to discriminate by providing them with a number of situations that are similar but subtly different. Secondly, the student is able to practice on a wide variety of situations and configurations, which allows a better development of assessment skills, and to 'quickly size up a situation' (p. 217).

The context of the learning environment needed to be situated in a simulated classroom, and to provide multiple perspectives on assessment, and in so doing, focus strongly on the classroom experience. On this basis, the elements included in the design of the program were 23 different types of assessment appropriate to mathematics, each comprising:

- *Movie clips of teachers using various assessment techniques* within their classrooms with original sound, in order to show an authentic example of particular assessment strategies being used in a real classroom;
- *Movie clips of teachers' comments on the strategies*, to present the teachers' own reflections on the strengths and weaknesses of each approach;
- *Movie clips of children's comments on the strategies* to present their own feelings and thoughts, and whether they liked and disliked each approach;
- *Interviews* with experts in the field to provide theoretical perspectives;
- *Reflections by third year pre-service teachers* to provide practical advice from the perspective of students whose experience is only slightly more advanced than the students who would use the resource;

- *Text descriptions* of each assessment category to provide a simple description of each strategy together with practical advice on its implementation;
- *Teacher and children work samples* to enable students to scrutinize work presented in the scenarios;
- *Problems and investigations* to enable the students to examine the resource within authentic tasks.

The interface of the program simulates the front part of a classroom with the resources located in full view: the movies are accessible on a television, and documents through a clearly labeled filing cabinet; tasks are on the desk. The students access each resource by clicking on the appropriate part of the picture.

Five authentic and complex investigations are provided for students to replicate the kind of task a mathematics teacher might be faced with in real life. The tasks are presented to the student realistically, such as in a memo or letter, rather than simply a list of possible activities, and they include realistic constraints such as deadlines and available resources. For example, one task asks teachers to create a new plan for assessment of mathematics in a school after a parent complains that the sole use of pencil and paper tests is making home life difficult because of the nervousness of the child before each test. Activities assume that students will be working in pairs or small groups, and require them to examine the resource from a variety of perspectives. The investigations can be assigned to students by the teacher to ensure an appropriate representation of topics, or students can choose their own topics. The resource also provides the opportunity for students to design their own investigations. The Cognition and Technology Group at Vanderbilt (1990) contends that such student generation of tasks is beneficial for transfer to other activities.

A teacher's manual provides background on the theoretical framework on which the program

was based and also to assist teachers to use the resource in a way most likely to optimize student learning, such as:

- *Length of Time:* Best used over a sustained period of 3-4 weeks rather than for a single session
- *Number of Students:* Students working in pairs or small groups around each computer, rather than individually
- *Teacher Support:* Teacher present during use to provide 'scaffolding' and support, rather than as an independent study activity
- *Setting the Task:* Teacher demonstrates the resource by thinking-aloud as an investigation is modeled. Students then choose an investigation from those provided, or their own choice.

The learning promoted by the assessment program is not the kind that could be packaged and used as a self-contained finished product; it needed to be 'reinvented from location to location' depending on the needs and interests of the learners (Brown & Campione, 1994). Similarly, a diverse array of products result rather than a single correct response to the problem.

A four phase study researching the program and its use with pre-service teachers (Herrington & Oliver, 2000; Herrington, Herrington, & Sparrow, 2000) suggests that the authentic learning model was a successful alternative to the system models frequently used for the development of multimedia programs, and one that enabled students to freely navigate a complex resource. When implemented as recommended, it appeared to provide an effective environment for the acquisition of advanced knowledge. Students used a substantial amount of higher-order thinking, relatively little social and lower order talk, and a moderate amount of procedural talk as they worked with the assessment program. While on their professional practice in schools after using the program, the pre-service teachers used a variety of assessment techniques

to assess children's learning, and they were able to speak knowledgeably and confidently about the issue of assessment, supporting the view that they had incorporated their learning deeply into their cognitive structures. According to the beliefs of the students themselves, the learning environment appeared to influence the types of strategies they employed and their thinking about assessment as they taught mathematics and other classes during their professional practice.

This case describes the potential of scenario-based complex problems to engage students in a meaningful and realistic way, not by providing experience in real situations and work-place settings, but by giving the opportunity to think and respond as a professional would when faced with realistic problems.

COMPARING TWO ALTERNATIVES

The examples above demonstrate two among many methods that allow for the integration of distance education with local action. We compare and contrast the scenario-based and service-learning models described above using the ten characteristics of authentic tasks developed by Herrington, Oliver and Reeves (2003). Our objective is to expand on the benefits—and also the drawbacks—of these models in order to provide a guide for those interested in enhancing distance education with authentic tasks:

1. *Authentic tasks have real world relevance.* Well-constructed service-learning (SL) programs are oriented towards immediate action within the community. The relationship between what is learned and what is practiced is contextualized in local action, not an envisioned reality. It promotes individualized “relevance” since students apply it to local context. The use of scenarios can provide tasks that would be difficult to spontaneously replicate in the real world – critical incidents, extraneous situations, which might not arise in day-to-day but constitute important skills to acquire.
2. *Authentic tasks are ill-defined, requiring students to define tasks and sub-tasks needed to complete the activity.* By design, SL implies a negotiation between student and community on what task is to be accomplished. The framework imposed by the learning objectives of the course must be clear but also flexible. The complexity of real-world tasks can be overwhelming and unpredictable, for both the teacher and students. Setting where service takes place must be selected carefully to allow the learner to become a real contributor as opposed to a mere spectator (i.e., internship models). Scenarios define the task based on real-world settings and provide multiple, rich resources and the means to find and select additional resources to investigate the task. Because they provide a representation of reality, they may provide a better scaffold to the complexity of the real-world application.
3. *Authentic tasks comprise complex tasks to be investigated by students over a sustained period of time.* SL programs must be designed to be long term as opposed to simple trials or visits to school. In both SL and scenarios, task planning, support, and scaffolding are necessary to sustain the completion of the task.
4. *Authentic tasks provide the opportunity for students to examine the task from different perspectives, using a variety of resources.* Multiple perspectives are implicit in SL programs through interactions with stakeholders (student, peer, instructor, and community perspectives tend to vary widely). Many events and experiences that will inform task outcome are uncontrollable by the instructor. SL provides the context and perspectives of both scripted and unscripted engagement and the opportunities to reflect on these ex-

- periences. Complex scenario-based courses provide resources that are multiple and varied. The scenario might limit the realism of spontaneous associations and interactions. If students are in varied physical locations, the scenarios might not reflect culturally appropriate or meaningful experiences, and producing resources and scenarios for each context may be costly and time-consuming.
5. *Authentic tasks provide the opportunity to collaborate.* Collaboration is implicit in service through student-community relationships – the task simply cannot be accomplished without collaboration. Because action is mostly located in the real world, rather than the virtual environment, group work between students located in different locations is complex and demands great facilitation skills by the instructor. In both SL and scenario design, collaboration occurs in project planning, problem-solving, and sharing concerns and ideas from the field in the virtual environment. With planning, the online environment provides a series of possibilities for synchronous and asynchronous collaborative opportunities across time and place.
 6. *Authentic tasks provide the opportunity to reflect.* Though students tend to reflect on their experiences, in SL there is generally a call for meaningful reflection to be fostered by the instructor through activities and discussions related to the task and objectives of the program. Using scenarios, reflection is fostered through a complex authentic task that requires decisions to be made and collaboration, so that students can reflect as a social process, without specific prompts.
 7. *Authentic tasks can be integrated and applied across different subject areas and lead beyond domain specific outcomes.* In SL students have to negotiate their activity and participation both in the beginning and at every step during their participation. Scenario designs with complex tasks demand planning for an integrated approach including diverse resources.
 8. *Authentic tasks are seamlessly integrated with assessment.* SL has an element of accountability beyond the classroom environment. The student must make a commitment to the instructor and the community (local teacher, for example) based on clear objectives set collaboratively. Expectations must be clear since outcomes can vary significantly and constraints might emerge. Scenario-based assessment provides higher levels of authenticity, as there is always a product that is assessed. This can promote creative (though not unreal) outcomes, which are not constrained by the unpredictable constraints of the real world.
 9. *Authentic tasks create polished products valuable in their own right rather than as preparation for something else.* Both learning designs demand a polished final product that is valuable in its own right and demonstrates learning. SL demands a finished product/process to be implemented, however, a product from a scenario may or may not be implemented in a real-world context.
 10. *Authentic tasks allow competing solutions and diversity of outcome.* In SL distance students will act in different settings, producing distinct outcomes. This is especially the case when students in the course are from different locations and the contexts of application vary. Because the settings and context vary substantially, there is no accounting for the *exact* outcomes of each student project and success must be measured accordingly. In both, the task must permit flexible outcomes to be judged as equally valid, and the assessment must be designed to account for this.

FUTURE RESEARCH DIRECTIONS

As traditional (and non-traditional) students and institutions incorporate online learning into their educational programs, exploring methods for authentic engagement becomes critical.

The integration of service-learning can provide an opportunity to engage in authentic tasks, enriching the online course itself through the contextual experiences of local engagement. More interestingly, with the rise of open courses (P2PU², among others), service-learning can provide an opportunity towards the personalization of learning experiences. This is an opportunity for students and a viable challenge for instructors. The multiplicity and indeterminacy of partnerships and projects can provide an interesting feedback loop to course designers and instructors, who can evaluate their courses based on how well they respond to varied contexts and situations. Instructors can provide students with reasonable autonomy to find service partners of interest. Service and partner-finding guidelines can be provided to students, who in turn are asked to identify and make a commitment to a local partner and project. Similar opportunities and challenges exist for scenario-based models. One can highlight the challenges of designing scenarios for a diverse and distant student base (see Amiel, Squires, & Orey, 2009), but also the opportunities that such diversity provides in terms of solutions and perspectives to the challenges presented by the scenario, many times not envisioned by the instructor (an interesting feedback loop).

This remains a developing field, for both experiential and scenario-based implementations. There is potential to grow as existing/formal and new/informal educational institutions spread their course offerings to an increasingly diverse student population. The multiplicity of variables and contexts will demand research to identify effective and informed “designs” (Amiel & Reeves, 2008) using varied tools, pedagogical methods, and configurations which designers and instructors can use in developing their own tasks.

CONCLUSION

The two models described here are presented as a means to demonstrate the range of possibilities available to those interested in promoting more authentic online learning environments. Whether through a virtual scenario based on real-world cases, or through immediate application through service-learning, students can engage in complex activities in collaboration with their peers. This is by no means a use of the online environment solely to promote more efficient or cost-effective learning. The use of internet-based tools is used in both cases as a tool in the design of a learning environment, providing unique and exciting possibilities. These include the use of multiple realistic scenarios and cases to be investigated by the students, and varied avenues for discussion and reflection for students at transnational distance. The two learning designs described here are by no means the only design alternatives for authentic tasks in online environments, nor are they mutually exclusive. Scenarios could be incorporated into experiential courses, whether they follow a service-learning model, or other methods such as on the job training, or volunteer activities.

The online platform provides exciting new avenues for the development of complex and authentic learning environments. Many educators still attempt to design online courses that closely match the face-to-face experience, ignoring the characteristics and innovative facilities of the new environment. What is needed is a critical analysis of available tools to promote a learning environment, which engages students in complex tasks and meaningful learning activities.

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KEY TERMS AND DEFINITIONS

Authentic Task: A realistic, but not necessary real, learning activity that requires thinking and acting in ways required in real-world tasks.

Authentic Learning Environment: A learning setting that provides students with tasks, resources and supports to enable the creation of realistic, collaborative and polished products.

e-Service: A blend of service-learning and distance-learning programs, allowing non co-located learners to participate in local (to the learner) service-learning opportunities.

International Service-Learning: Service-learning opportunities which extend beyond the national borders (for the learner).

Service-Learning: Experiential approaches to education with a balance between service activities and learning opportunities where both the learner and the community benefit from the proposed task or project.

Scenario: A contextualized description of a problem in a realistic setting that requires exploration of a solution.

Scaffolding: In an educational sense, the metacognitive support provided by the teacher, students, professionals and others, together with relevant resources, to assist the learning process.

ENDNOTES

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² P2PU is an example in the open education movement, describing itself as “an online community of open study groups for short university-level courses.” See <http://www.p2pu.org>