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A Model, Methods, and a Case Study

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Transforming an Established In-Ground Course for Use as an Online Course: A Model, Methods, and a Case Study

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Abstract: While the emergence of Massive Open Online Courses (MOOCs) continues to steal the headlines, the institutions of higher education are now giving serious consideration to the deployment of online courses through their curricula offerings. A multitude of motivations are driving this change, including the need for more flexible course offerings, the desire to make higher education more accessible to the diverse learning requirements of the public at large, and the need to explore reducing the costs of a college education. As a practical consideration, these same educational institutions must focus on the conversion of established in-ground courses to effective online equivalents. The purpose of this paper is to provide an analytical model and methods for such a transformation. We will employ a case study example to demonstrate the application of our rubric in the creation of viable online courses.

Keywords: Online Learning, Online Course Design, Online Course Delivery, Distance Learning, eLearning, Asynchronous Learning

Introduction: The Components of Online Course Design

This paper will provide necessary criteria for transforming an established higher education in-ground course into an online course. From the outset, we will establish a framework and diagnostic tool (a.k.a. rubric) for online course design, construction and delivery and we will then apply this approach to a case study to demonstrate its viability as a tool for use by instructional designers and course instructors. The participants in this exploration include Professor Richard Kesner of Northeastern University, who has extensive experience in the development and delivery of online curriculum with undergraduate, graduate and non-traditional student populations, and Professor Heidie Hutchinson of the Community College of Beaver County, Pennsylvania, who is a seasoned instructor with limited online teaching experience but who is in need of converting an established in-ground course to an online offering.

To begin, we will provide the necessary components of a course design (Kesner 2013B, Crawford-Ferre and Wiest 2012, Kidd and Chen 2011, Ambrose, et al. 2010, Lall and Lumb 2010, Fabry 2009, and Morrison, Kemp and Ross 1998) that must be considered in developing an effective online learning solution, namely:

- learning objectives and frameworks – the specific goals and objectives of the course’s learning process as well as the integrative framework that ties its content and operational components together
- lesson plans – the course’s structured, chronological approach to the learning experience, student engagement, and assessment
- course materials – the artifacts of learning, such as: textbook chapters, published articles and case studies, slide presentations, audio and video clips, exercises and assignments, and so forth
- a learning management system (LMS) – a Web-based platform for the delivery of online courses and course materials

- recorded lectures and presentations – the formal and perhaps recorded presentations of content, analysis, and opinion as presented by the course instructor
- instructor/student engagement and interaction – course activities where students may discuss course content, ask questions, problem solve, carry out experiments, submit and review work, and so forth with the involvement and direct participation of the instructor
- testing and assessment – the mechanisms (manual and automated) of the formative and summative measurement of student learning

We will then discuss how to use a rubric to assess the readiness of an in-ground course in becoming an online course. At the last part of this paper, through use of a case study, we will provide guidelines and recommendations on how to most effectively convert an in-ground course to an online course.

An In-ground Course Versus an Online Course

Although all the necessary components of a course design (see above) may be found in both in-ground and online courses, there are subtle and not-so-subtle differences as to how they are applied in these very different settings. For example, in a traditional classroom environment the instructor and his/her students meet regularly face-to-face. In this setting, the interaction may be taken for granted. Whereas, in an online environment, instructor/student engagement must be artfully scripted or it may not occur at all. Still other factors that are somewhat irrelevant when considering an in-ground course take on much greater significance in an online setting. For example, in Web-based course delivery the “look and feel” of the learning management system (LMS) as well as the ease of LMS navigation may exercise considerable bearing on the ultimate success of course delivery (Kidd and Chen 2011).

Indeed, the professional literature concerning online course design shares a considerable level of agreement among researchers and practitioners as to what is important (Crawford-Ferre and Wiest 2012; Lall and Lumb 2010; and Fabry 2009). For example, in our list below, derived in part from Falby, the emphasis is in getting the student’s attention and in keeping him/her involved, which is a particular challenge with asynchronous learning environments:

- begin with clearly stated learning objectives
- design and sequence a variety of learning events and resources that are aligned with these learning objectives and provide support instruction ~~and~~ for individual learning styles
- ensure that the content reflects different learning styles, i.e. universal design (Smith 2013 and Burgstahler and Cory 2010)
- specify expectations and provide timely and appropriate feedback
- design and sequence instructor-learner, learner-learner, and learner-content interactions
- design and align formative and summative evaluations
- use research-based motivational design theory to support a student-centered learning environment

The online learning experience places great responsibility on the student to be self-directed, self-managed, and self-disciplined. By tightly aligning learning expectations with particular assignments and exercises, the instructor provides the student with both the direction and motivation to focus on prioritized tasks in terms of their educational benefits (McPherson and Nunes 2008; Miller 2007; Hirumi 2005). This alignment effort also calls for the repackaging of

content, and the rethinking of recorded lectures, presentations and laboratory exercises to fit the medium of asynchronous Web access. Furthermore, the flexible use of briefers: more focused and recorded presentations that allow students to replay the content as many times as required is strongly recommended (Maor and Volet 2007; Morrison and Anglin 2006). In a similar vein, for an online setting, the literature speaks about the need for learning management platforms, such as Moodle and Blackboard that allow the instructor to decompose learning experiences and to relate course content, activities, and assessments in a highly flexible and dynamic manner (Kidd and Chen 2011; Means 2010).

In the absence of the face-to-face interactions of a traditional classroom environment, online courses must instead provide more formal, timely and extensive written feedback on student assignments, taking advantage of each opportunity to add value to the exchange through the sharing of supplemental knowledge and additional examples (Crawford-Ferre and Weist 2012; Grosso et al. 2012; Jones 2011; Venable 2011; Brew 2008). As with any web experience, a strong correlation exists between the levels and variety of instructor and student interactions and the incidence of student participation (Saade et al. 2012; Bates and Watson 2008; Wilson and Stacy 2004). In other words, experienced practitioners look for every opportunity to engage the online student in active learning, through proactive and reactive e-mails, discussion forums, tweeting, chat sessions, blogs, wikis, and so forth (Armstrong and Thornton 2012; Nandi 2012; Persico, et al. 2010; and Hemmi, et al. 2009).

Like all university courses, online courses must provide formative and summative assessment in keeping with the needs of students. Fortunately, online learning environments lend themselves to measurement based on student's activity. For example, they can monitor which students have opened what web pages, how long they have spent with a particular assignment, and the level of their participation in various exercises or interactive discussions. This activity data may then be employed to coach the student toward more successful learning outcomes. But activity is not a measure of learning. It is also necessary to assess the student's ability to apply what is learned in the course to appropriate contexts (Jones 2011; Means et al. 2010; and McPherson and Nunes 2008). To these ends, the flexibility of online learning environments and especially their adaptability in offering context-specific testing and exercises provides the instructor with relatively easy, unobtrusive ways to assess student work and comprehension (Benton 2011; Meyer and McNeal 2011; and Mishra and Koehler 2006).

Even with thoughtful design, well-conceived content integration and robust interactivity and assessment, online courses may flounder unless they are positioned to take advantage of the very information technologies familiar to students, such as mobile computing and social media. The good news here is that given the demand for online learning, institutions of higher education are aggressively investing in the tools to enable course delivery. The enabling learning management platforms now in place in most colleges and universities are already rather robust and are only likely to get better in the next few years (Committee on Research Libraries 2012; Kidd and Chen 2011; Ray 2009; Dede 2004). However, these tools are only as good as the practitioners who use them. Faculty must invest in the time to become familiar with these tools and then to aggressively apply them to course construction and delivery, as well as other best practices documented elsewhere in the literature (Kesner 2014, Kesner 2013B, Crawford-Ferre and Wiest 2012, Kidd and Chen 2011, Ambrose, et al. 2010, Lall and Lumb 2010, Fabry 2009, and Morrison, Kemp and Ross 1998).

The Path for Migration from In-ground to Online Course:

In approaching any assessment of course design, it is important to bear in mind the overall duration of the course, the number of sessions or time-blocks involved, the maturity and social characteristics of the student audience (e.g. traditional undergraduates versus graduate students versus adult learners), and the level of coursework expectations that the institution has conveyed

to its student population(s). Together these factors define the scope and level of content that the course might comprehend, what the instructor should expect of students, and what he or she may demand in terms of the level of student effort.

An in-ground course may be loosely structured and held together by the presence of the instructor, online courses benefit from the more formal integration of elements. For example, the information management faculty within the D'Amore-McKim School of Business at Northeastern University have collaborated on an integrated framework for examining and understanding the relationships between the goals and objectives of the organization, its information needs, and its information technology (IT) investments (Kesner, et al. 2012). This framework serves as an integrative mechanism within our information management courses. As the instructor moves from one topic to another, he/she will refer back to the framework to help participants better understand the connections within an organization's IT strategies.

As a next step in course design, we need to consider the role of the lesson plan. The actual format of this lesson plan may vary with the particulars of the course and its student participants. Even so, we would expect to find the following lesson plan elements:

- the grouping of the course sessions around particular organizational themes
- a listing of each course session and its description
- the learning objectives associated with each session
- for each session, the reading and writing assignments, along with specific due dates
- the grade contribution of each activity

In an online course the level of specificity provided by the lesson plan is essential. Once finalized the lesson plan serves as the definitive course roadmap to be shared with students at the outset of the course. This same document should be employed as the blueprint for the organization of the course's learning management instance.

The learning management system will facilitate the presentation of course content as dictated by the needs of the offering and as documented in the course's lesson plan. The administrative components of this library of materials will no doubt include such things as a syllabus, the course lesson plan, assessment tools, grading rubrics, and the like. But the bulk of LMS content will include actual course content, such as: assigned and optional readings, recorded lectures, supporting materials - presentation slide sets, video and audio clips, drawings, et al., assignments, links to discussion forums and chat sessions, and perhaps links to supporting LMS sites. The exact presentation and layout of these materials depends upon your LMS.

The fact is that in a traditional in-ground class these materials could be loosely connected and informal, whereas for an online class, these materials must be well labeled, their relevance to the course's learning objectives must be clear, and their accessibility and ease of use to the learner must be readily apparent. Indeed, course materials that might have circulated in class with simple oral instructions from the instructor in an in-ground setting now require a formal instruction sheet and perhaps an accompanying orientation video.

In terms of course reading assignments, the best results may come from highly customized content that ties more directly to the overall learning framework for the course and the lesson plan for each class session (Kesner and Russell 2008). This approach carries with it a considerable amount of overhead, especially if the faculty member must craft materials and therefore may not prove to be practical for your own courses. Where published texts, case studies, et al., are employed, we would recommend the attachment of digital versions within the appropriate session activity pages of the course's learning management site. This allows all the resources for the course to be housed in one place and accessible to students whenever and wherever they wish to do course work. If hardcopy is the only alternative, ensure that your course site provides clear, detailed instructions directing your students to these external resources.

We also recommend the inclusion of “diagnostic quizzes” to accompany required reading assignments. These quizzes test for reading comprehension. For example, at the undergraduate level, we at Northeastern employ test banks of multiple choice questions where each student receives his/her own randomized sub-set of questions. The grading of these quizzes within an LMS is entirely automated. If the student gets a question wrong the system tells the student where to turn in the assigned readings to review the content area related to that question. Because these diagnostic quiz scores are counted as part of the course grade, students are more apt to do the assigned readings with a view toward comprehension. At the graduate level, you may prefer more substantive essay questions that require instructor’s review, evaluation, and comment(s). These exchanges create an opportunity for the instructor’s comments to move beyond the assigned reading and deepen the learning experience for the student. In each of these examples, the LMS affords a quick and relatively painless process for creating these and other formative assessment opportunities.

Most courses will require some form of faculty presentation. In the world of MOOCs, these presentations take on the form of production-quality video lectures with costs averaging \$300,000 per course (Stokes 2013). For the more typical online offering, this level of investment is unrealistic and probably unnecessary. Instead, there are any number of practical approaches, enabled by such products as Storyline, Camtasia and Adobe’s Captivate, that will allow the instructor to produce effective and economical presentations for student consumption.

The practical advice coming out of studies of recorded lectures amount to: keep it short and focused, when dealing with a complex topic, break down the subject matter into 7-10 minute increments, no “talking heads,” and vary the visual images (Kesner 2014; Venable 2011; Bates and Watson 2008; and McPherson and Nunes 2008). This may all seem like common sense but you would be amazed by the number of recorded lectures which contain a class period of an instructor talking to an audience and scribbling eligibly on a blackboard. The evidence is conclusive that online students faced with the latter sort of experience will quickly tune out and turn elsewhere.

Similarly, the approach to class assignments should be to create and assess several smaller sequenced assignments within each course session rather than through larger mid- and end-of-term exercises. Feedback should be timely and detailed. With large classes this may be very difficult but there are ways to save time while adding value to the student’s learning experience. For example, you might prepare in advance a detailed response to homework question, placing it in the broader context of the course, relating its value to the student’s understanding of the subject, identifying common student misconceptions and errors, and suggesting ways that a response might be extended. These answer templates could then serve as the basis for your comments as you review student submissions. Many times these templates may need only minor customization before they are pasted into an LMS assessment. This approach provides extensive and timely but not labor-intensive feedback that the student will appreciate. Bear in mind that the online student does feel a bit isolated from the learning process. The more interactions that the instructor has with each student, and the more substantive each interaction, the better the learning experience is for the student and the instructor.

Electronic mail is another effective tool in integrating online courses and in building rapport with student participants. Messaging at the start of a semester to welcome and orient the student to the online course is highly recommended. Thereafter, several times per week, proactively reach out to the class to make general comments about graded work, to alert participants to any changes or updates posted to the LMS, and to recommend Web sites or current articles in the news of pertinence to the course.

Discussion forums are another mode for online course interaction (Armstrong and Thornton 2012; Grosso et al. 2012; Nandi 2012; Hammond 2005; Wilson and Stacey 2004). You might compose a few open-ended discussion topic threads for each forum session. These threads should move beyond immediate reading assignments and ask participants to draw upon their own work

and school experiences. Students would be encouraged to both respond to the instructor's discussion thread and to the comments of other students. In this manner, students engage with one another virtually while remaining focused on those topics of greatest relevance to course learning objectives. The instructor's role is to then monitor the quality and extent of participation and to provide individual student feedback by engaging in the forum him/herself.

To these asynchronous online course activities, we would add one synchronous activity - weekly chat sessions. Chat sessions offer an opportunity for direct dialog between the students in the course and their instructor. They may be employed to both review the work of the prior week and to help prepare students for the assignments to come. The tool sets available for this activity, such as Wimba Classroom and Blackboard Collaborate, include voice, Web-cam, slide presentation, and white board functionality. Chat sessions must be scheduled for a specific date and time. This may not prove convenient for all course participants, especially if the online class draws from a global student population. For this reason, chat sessions should be recorded for use by students who cannot make the call. In the final analysis, chat sessions are an excellent supplement to other online course experiences and also serve as a useful litmus test of what is working in the course because students will raise matters of concern to them as well as questions about course content.

A Rubric for Assessing the Readiness for Migration from In-ground to Online Course

In the previous section we discussed several online teaching best practices and how they related to an online course design. Our assessment rubric draws from these practices to identify seven essential elements of online course readiness, namely:

- learning objectives and frameworks
- lesson plans
- course materials
- a learning management system (LMS)
- recorded lectures and presentations
- instructor/student engagement and interaction
- testing and assessment

For each of the above elements, our rubric (see Exhibit 1) is used to rate an existing in-ground course in terms of its readiness for conversion to an online delivery format. Using the rubric each element is placed on a sliding scale from zero which means that the particular element is missing from the in-ground course design to 4 which means that the course possesses all the needed attributes to move successfully from in-ground to online. For example, if the in-ground course is tightly integrated through the use of a learning framework and session-by-session learning objectives, these same structural features may be imbedded in an online course for similar educational benefit. Similarly if the course's learning materials are already decomposed and organized by session on an LMS, this is a major step towards its readiness as an online course. Please examine the attached rubric closely and then proceed to an illustration of its application to a case study that is provided in the following section.

Assessing "Introduction to Programming" for its Readiness as an Online Learning Experience

Our case study features the course Introduction to Programming as taught by Professor Heidie Hutchinson at the Community College of Beaver County. This is an entry-level course for students majoring in information technology. Some of these students are adult learners seeking to

reenter the labor market with updated skills. As a whole, class is comprised of students of wide-ranging ages and work experiences. The goal of the course is to impart practical hands-on training in basic computer programming concepts and methods as well as to teach techniques employed in Web application development. Originally created by Professor Hutchinson, this course has been offered in-ground at the College since 2003.

Introduction to Programming employs a flipped classroom design. The course syllabus and lesson plan are loaded onto the College’s Blackboard LMS. There is no text book but there are detailed instruction sets/tutorials in the form of source code with narrative for a variety of web software applications, prepared by the Professor as discrete lectures. Though these lectures do not include sound or visuals other than text, they do provide the students with structured readings that progress from topic to topic to fulfill the course’s lesson plan. All of these lectures are available via Blackboard along with supplemental readings and “lab” assignments. The class meets twice a week for 85 minutes. The first part of each session is lecture/discussion where the Professor takes questions on the materials and lab assignments posted in Blackboard. The remainder of the class period is devoted to lab work where the Professor works one-on-one with students and also where the more advanced students may help their peers address homework issues.

Besides course content, Blackboard hosts a course lesson plan where each assignment is defined in terms of its learning objectives, reading and coding assignments, and point value towards a grade. In terms of course interaction, most of this occurs during the lab periods each week. Assessment includes the grading and feedback on twelve individual web application design and coding assignments (60% of the total grade), a mid-term project assignment (10%), a final capstone project (20%), and class participation (10%). For an in-ground class, it provides solid, hands-on, practical knowledge. But Professor Hutchinson wants to know if it can work as an online course, making it more accessible to students who work full-time jobs.

Our initial examination of Introduction to Programming would suggest that it has all the necessary components for conversion from an in-ground to an online course:

Readiness Criteria	Status
learning frameworks	in place
learning objectives for each session	in place
lesson plans	in place
course materials	in place
learning management system	in place
recorded lectures	in place
faculty/student engagement/interactions	in place
student/student engagement/interactions	in place
Assessments - formative and summative	in place

However, when we study this offering more closely from the standpoint of the readiness rubric (Exhibit 1), we can identify some significant gaps:

- If a learning framework is in use, this is not apparent – though perhaps also not necessary for this particular topic. Course integration is provided through the lesson plan.
- There are learning objectives for each session but these are not fully developed to allow the student to self-assess his/her readiness to move on to the next lesson.
- The lesson plans are fairly complete with the exception of the learning objectives.

- The course materials are robust and make good use of the LMS to afford easy access as well as to reinforce course organization and focus but they rely on verbal presentations by the instructor to render them coherent to the student.
- The LMS is in place but is not as fully exploited as it could be. Institutional support of the platform and related course-design and support services are weak.
- There are recorded lectures but they are really screen shots of instructions sets and coding rather than more comprehensive presentations.
- Faculty/student and also student/student interactions are frequent but will need to be substantially restructured to work within an online context.
- Both formative and summative assessments are in place and working well but these too will need to be adapted for an online version of the course and perhaps rethought to encourage more student team work and more student participation online.

In summary, using the rubric we would rate the readiness of Introduction to Programming as a 13 meaning that substantial work is required to move this course from in-ground to online. See the scoring guideline at the bottom of Exhibit 1.

Readiness Category	Status +/-
learning frameworks	0
learning objectives for each session	1
lesson plans	2
course materials	2
learning management system – support	1
learning management system – use	1
recorded lectures	0
faculty/student engagement/interactions	2
student/student engagement/interactions	2
assessments – formative and summative	2

These findings in no way suggest any failings in the educational experience of the in-ground course. Rather they point to what needs to be done to move forward the process of course conversion to online. What follows are the action items stemming from the application of our rubric to Introduction to Programming.

- By creating a more explicit set of learning objectives within an overall course framework, the instructor will provide greater structure to each learning event and provide students with a clear focus for their activities as well as an ultimate measure for learning outcomes.
- Once incorporated into lesson plans, these learning objectives and their associated sessions and course materials will be ready for deployment in the LMS, strengthening and reinforcing the flipped-classroom learning experience.
- The Professor should also solicit additional institutional support in the form of both hands-on training and technical assistance (e.g. an instructional designer) to more fully exploit the LMS (Blackboard) which has powerful tools that can be brought to bear to enhance an online course offering, such as:

- an “Ask the Professor” discussion forum
- group folders for team activities
- the use of Blackboard Collaborate (the LMS’s Web conferencing platform) for both class and team-based Web conferencing sessions
- grading rubrics and other just-in-time assessment tools
- the use of blogs to get students to share course process and content ideas
- The lectures all need to be rerecorded using a tool like Camtasia or Adobe Captivate so as to add sound, multimedia visuals and the like. With Storyline or Captivate, the instructor might also create simple yet impactful learning simulations to help develop student programming skills through interactive exercises.
- Engagement and interactions need to be rethought, using forums, Web conferencing chat sessions and the like. More can and should be done to empower group work, including the use of the mid-term and final projects as group rather than individual learning activities.
- Lastly, the assessment structure needs to be altered to encourage engagement. In an in-ground class, the instructor can engage the students in a captive setting (the classroom). This cannot occur in the same way online. As a rule of thumb, online courses should weight participation to something like 25% of the grade, where participation is defined as forum, chat session, blog, et al., involvement. With these changes, the assessment process will be more balanced and yield the desired results in terms of student participation and engagement.

As you can now see, what appeared at first to be an easy move from in-ground to online delivery of Introduction to Programming is in fact a substantial undertaking. The rubric helps to focus the instructor’s time on those learning experience components in greatest need of transformation and to identify where additional institutional resources may be required.

Conclusion: Applying the Rubric to the Case Study and Lessons Learned

This brief case study illustrates how our readiness rubric might be put to use in assessing the readiness of in-ground courses for the move to online. As already stated, the purpose of our tool is not to find fault but to indicate where effort must be focused. Few colleges and universities today are well positioned to provide faculty with the support that they need to achieve desired outcomes in this process, but they are becoming more aware of the gaps and are striving to close them. The authors recognize that the instructor’s time is limited as are his/her personal resources. Our rubric serves as a lens for identifying those courses most easily converted from in-ground to online delivery and as a tool for assessing the relative investment required to achieve these transformations. The rubric may also prove useful to program administrators in calculating the institutional impact of the move from in-ground to online courses and programs.

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APPENDIX

Level of Readiness =>	Online Ready	Approaching Online Readiness	Not Ready for Online
Learning Objectives and Frameworks	A learning framework is in place to integrate all course content; learning objectives are articulated at the session and at the course level.	Learning objectives in place for the course as a whole, but, it does not effectively integrate course content at the session level.	No learning objectives or frameworks are in place
Points Available	4 3	2 1	0
Evaluation			
Lesson Plans	Lesson plans tie to learning objectives and describe the focus for each class session, identifying assigned readings and tasks, and stating desired learning outcomes.	Lesson plans describe the focus for each class session and identify assigned readings and tasks.	Session level lesson plans are not in place.
Points Available	4 3	2 1	0
Evaluation			
Course Materials	Course content in diverse, rich media, flexible, aligned with sessions and fully embracing the values of universal design.	Course content largely digital and easily sorted among appropriate session frames on the LMS with some consideration of universal design.	Course content entirely text-based and not currently segmented to align with course learning events/modules. The content does not embrace universal design.
Points Available	4 3	2 1	0
Evaluation			
Learning Management System (LMS) – Part 1 Institutional Support	A Learning Management System (LMS) is in place with robust technical and instructional design support for faculty.	A LMS is in place but with only nominal technical and instructional design support for faculty users	No LMS is in place
Points Available	2 1.5	1.4 .5	0
Evaluation			

Exhibit 1: In-ground Course to Online Course Readiness Rubric

KESNER AND HUTCHINSON: TRANSFORMING AN ESTABLISHED IN-GROUND COURSE

Level of Readiness =>	Online Ready	Approaching Online Readiness	Not Ready for Online
Learning Management System (LMS) – Part 2 User Exploitation	The instructor makes full use of the LMS in the design and delivery of his/her course.	The instructor utilizes some capabilities of the LMS but not consistently and robustly as part of course delivery.	The instructor has no prior experience with the LMS.
Points Available	2 1.5	1.4 .5	0
Evaluation			
Recorded Lectures and Presentations	Numerous presentations scripted for just-in-time use <i>as part of</i> course materials, learning simulations, and integrative information sharing.	Presentations recorded in line with <i>best practices of lecture capture</i> , with at least one such offering per course session.	No recordings exist and there has been no provision made for recorded lectures, demonstrations, et al.
Points	4 3	2 1	0
Evaluation			
Instructor/Student Engagement and Interaction	Engagement with students individually and in small groups as well as with the class as a whole through activities that integrate with specific class assignments.	Regular instructor/student engagement through e-mail, electronic office hours, and discussion forums, most with instructor participation.	Instructor/student engagement is limited to e-mail exchanges and the receipt of written feedback on homework assignments.
Points	4 3	2 1	0
Evaluation			
Testing and Assessment	The active use of instructor formative and summative assessments, that measure both learning and skill development, communicated in a timely manner.	A grading structure that emphasizes and rewards student engagement and initiative. A high level of formative assessment and feedback as well as summative testing.	Limited formative testing with a clear emphasis on summative testing (e.g. mid-term and final exams).
Points	4 3	2 1	0
Evaluation			
Grand Total: Totals=>			

Scoring:

- 21-28 points – the in-ground course is well positioned for conversion to an online course.
- 14-20 points – the in-ground course can be brought to online course readiness with some effort.
- 13 points or less – considerable changes are required in course approach, processes, and content before it can move to online.
- any category scoring a zero must be addressed if the online course has any hope of providing a positive learning experience.

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Today, universities face significant challenges to their traditional position in society. Contemporary knowledge systems are becoming more distributed and learning ubiquitous. Where does this leave the university—as a historically specialized and privileged place for certain kinds of knowledge and learning, as an institutionally bounded space? What do these changes mean for the mission and structures of the renewed university? What are emerging as principal areas of the academic interest? These are some of the key questions addressed by the journal.

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