

Enacting Collective Design Intentions in an Online Graduate Level Introductory Instructional Technology Course

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This design case will introduce how collective design intentions shared by a group of three program faculty for an online Instructional Technology (IT) Master's program at the University of Tennessee (UT) were collaboratively identified and further acted upon within the context of the first course in the program. The course that is the focus of this case is "IT521 Proseminar 1: Instructional Technology as a Profession" in which we explored collective design intentions. The article begins with an introduction of the collective design intentions that program faculty shared. Then the article introduces how the first author enacted those design intentions in IT521 while working closely with the second author. The purpose for sharing this case is to document critical decisions that were made by one faculty member about a course within the context of shared design intentions for the program. The article ends with a discussion of lessons learned about communicating collective and personal design intentions to future designers who may be involved in similar situations.

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DESIGN CONTEXT

In this design case we will introduce design decisions that Lisa made related to IT521 Proseminar 1: Instructional Technology as a Profession within the context of an online Instructional Technology (IT) Master's Program. At the time that IT521 was being designed and developed the entire IT Master's program was in the midst of a complete curricular redesign at the University of Tennessee (UT) in Knoxville Tennessee, USA. IT521 was one of the key courses in the curricular redesign process because it was the first course in the program to help students become familiar with: (a) instructional technology as a field, (b) our IT program specifically, and (c) how to be successful participants in an online program.

Even though there were three faculty members in the program, Lisa and Trena worked collaboratively to share the leadership role in the curricular redesign as program co-coordinators from 2011-2012. In 2011 Lisa joined the program as a newly hired associate professor, and Trena was fairly new to the program and serving as interim program coordinator upon request by the department head. Trena had other significant duties in the department, so Lisa was hired with the understanding that she would take over the program coordinator role after her first year. The third faculty member in the program had taken a leadership role in the past, but by 2011 was the sole faculty member left in the original program.

During the first year of co-coordinating, Lisa and Trena worked collaboratively in leading the program and including the third faculty member in the redesign process. In this collaborative effort, we identified collective design intentions for the IT Program, which we will address first in this article. Then we will discuss how Lisa as the course designer, developer, and instructor of IT521 enacted the collective intentions in her design activities. These discussions will include information related to the course structure, assignments, and asynchronous and synchronous

participant activities. Finally we will discuss our lessons learned about communicating collective and personal design intentions to future designers who may be involved in similar situations.

Why Share this Design Case

We have three goals for sharing this design case. The first goal is to share this case with the general instructional design community so that other designers are able to use this story as a tool to evaluate their own situations and reflect on how to go about tackling similar problems related to curricular redesign. Our second goal is to share a case about agreeing on and implementing collective design intentions among a group of faculty members, then enacting them in individual course design activities. This case will show how “lived in” (Lawson, 2004) collective design experiences were accounted for while a single faculty member designed a new course in a curricular redesign context. Our third and final goal is to document this case for instructors who may, in the future be designing and teaching courses similar to IT521.

Case Background

When Trena took on the interim IT Program Coordinator role and when Lisa joined UT as a faculty member in August 2011, it was after several college, department, and program restructurings. Long before Trena was involved, the IT program was once a department of its own with eight tenure-track faculty lines offering both Master’s and doctoral degree programs. However, by 2011 it had been merged into the Educational Psychology and Counseling Department as a program. This was due to the loss of several tenure-track lines that were not filled during financially difficult times in the State of Tennessee.

In 2011 the program only had three tenure-track faculty lines and there was an understanding that this number would not grow. The doctoral program was permanently shut down, and continuing the 33-credit hour Master’s program depended on whether the curricular redesign resulted in higher enrollment and graduation rates. The Master’s program had been offered primarily as a residential program for students with a wide range of backgrounds, with a short-lived online program launched in 2008 exclusively for a K-12 teacher cohort. The third faculty member who did not take a leadership role in the current curricular redesign process was the coordinator of the initial online cohort program. This program was experiencing high attrition rates and of the 25 students who were admitted to the initial two-year cohort, 21 started the program and eleven students completed the program in 2010 (Waugh, DeMaria, & Trovinger, 2011; Waugh & Su, 2015). Due to the low student completion rate the online program went on a one-

year hiatus from admitting new students to make time for faculty to engage in a major curricular revision.

Situational Factors

To start the program redesign, the three program faculty members met every one to two weeks from August 2011 to January 2012 to review situational factors such as resources, past program performance, potential program audience, local teacher education context, competitor program offerings, and faculty strengths. Table 1 summarizes the findings that played a critical role in our collective design intentions. These meetings were also devoted to listening to the third faculty member’s descriptions of his extensive experience with IT as a department of its own. We also met regularly with the Department Head to discuss his vision for the IT Master’s program.

In terms of resources we found that the Provost’s Office at UT provided financial incentives to develop online programs, meaning that online courses would generate revenue for departments. Prior to 2011, the department received approximately 76% of the campus base tuition rate; however, this rate of return was gradually declining (Waugh, DeMaria, & Trovinger, 2011). As of 2011, the rate of return had decreased to 50% of the campus base tuition rate. This rate has not changed from 2011 to 2015. In 2008, when the initial online cohort program launched, the revenue was used to hire three doctoral students as graduate teaching assistants, supervised by faculty members, to teach courses in the program (Waugh & Su, 2015). Without the original revenue rates the program was not sustainable because the three-program faculty at the time already had full teaching loads in the residential program. In terms of tuition, we found that out-of-state tuition applies to online programs, with non-residents paying over three times the in-state rate. This made our program less appealing for out of state students.

When examining past program performance, we found that there were simply fewer students choosing to apply to the residential program. We suspected at the time that the pool of students was decreasing rapidly with so many online programs available to them. Students in the initial online cohort program had shared with our third faculty member that there were too many barriers to their learning experiences. Some students lost their financial aid or had family crises that required them to stop pursuing their degree. Additionally, the rigid two-year structure of the cohort program did not make room for students to take a semester’s leave and then continue the program (Waugh & Su, 2015). If students were to take a leave, they had to come to the Knoxville campus to take the courses they missed. This became very challenging for working professionals who did not live near campus. Students had also commented that they did

not develop a strong sense of belonging in the online program, which was facilitated through emails, listservs online discussion forums, and a website dedicated for the program with limited synchronous or face-to-face interaction (Vaugh, DeMaria, & Trovinger, 2011). Additionally, some students expressed a desire for more direct access to faculty members during the courses that were taught by the graduate teaching assistants.

By examining student data for both the residential and the initial online program along with market research data, we found that we were serving different audiences who required different types of program experiences. Our residential program students were individuals with general interests in instructional design and technology and its applications in K-12, corporate, or higher education settings. Many of them came to our program because, while they already had instructional design jobs, they did not hold academic credentials in the field. There were also students in our program who were employed in other fields, but were interested in transitioning to a new career in instructional design. The residential students also were a mix of professionals seeking to pursue an advanced degree part-time and others wanting to enroll as full time students. In contrast, students who enrolled in the initial online program were K-12 teachers with interests in integrating technology into the curriculum and advancing their career in K-12 systems with a Master's Degree. From the market research we found that despite the high attrition rate, prospective students preferred to be in an online Master's program than a residential one. This observation was also supported by the fact that several prospective students who contacted us were all interested in the online program. Course evaluations, too, showed that residential students would have preferred courses to be offered online because it better fit their schedules.

Because the initial online program was exclusively for K-12 teachers, we decided to review situational

factors specifically related to teacher education at UT. We found that K-12 teachers often came to obtain a Master's degree to earn salary increases from their school districts. However, we also learned that the State of Tennessee was in the process of eliminating the financial incentives for completing a Master's degree. For a raise, teachers would now need an Education Specialist degree. However, the teacher education department in our college already offered an Education Specialist degree in educational technology. We also found that the teacher education department in the recent past had revised their curriculum for a four-year bachelor's degree to a five-year bachelor plus Master's degree. Therefore, we were finding that teachers who graduated from UT did not come to our program to pursue a second Master's degree. Finally, we found that in the state of Tennessee there was no initial or advanced teacher license or endorsement for technology education. This limited the number of teachers who would be interested in pursuing an advanced degree in the field.

When we examined competitor information about Master's degree programs at other universities we found that many programs were exclusively online. We also found that many programs had five or more faculty and offered several Master's tracks as well as a doctoral program. Finally, we found that many online IT Master's programs were part of teacher licensing requirements.

As we spent more time in program planning we identified a common strength among our faculty. We found that all three of us had both research and practical interests in online course and program development. We also found that none of us had particular interests or skills in advanced media development. We started to gain a shared sense that we should build a new program that took advantage of our collective strengths.

Situational Factors	Findings
Resources	<p>Provost's Office had provided financial incentives to start online programs; however, these were beginning to decline.</p> <p>The initial online program was designed based on the availability of the Provost's Office financial incentive and without it the program was not sustainable.</p> <p>Three faculty members were not enough to run both a residential and online program.</p> <p>UT out-of-state tuition applies to online programs, which makes out-of-state students pay three times more in tuition than in-state students.</p>
Past Program Performance	<p>Both residential and online programs were declining in enrollment.</p> <p>When students in the initial online program were not able to take courses in sequence, they had to come to campus to complete their degree requirements.</p> <p>Students who were in the initial online program wanted a stronger sense of connection with</p>

the instructor and other participants than the asynchronous format was providing them. Students in the initial online program wanted more direct interaction with program faculty rather than the graduate teaching assistants.

Potential Program Audience Residential students were individuals with general interests in instructional design and technology and its applications in K-12, corporate, or higher education settings.

Some of our residential students already had instructional design jobs, but did not have the academic credentials.

Some of our residential students were employed in other fields, but were interested in starting a new career in instructional design.

Residential students were a mix of working professional/part-time students and full-time students.

Student in the initial online program were full time K-12 teachers.

Based on market research, we found that prospective students preferred online programs to residential programs.

Local Teacher Education Program Competition The State of Tennessee cut financial incentives for teachers earning a Master's degree. The UT teacher education program already offers an Educational Technology Education Specialist degree.

UT teacher education program had recently redesigned their curriculum to a five-year program where preservice teachers graduated with a Master's degree, which resulted in a decline in UT alumni coming back for a Master's degree.

The State of Tennessee does not offer initial or advanced teacher licensure or an endorsement for technology education.

Competitor Program Analysis Many Instructional Technology Master's programs are delivered online.

Many Instructional Technology programs have at least five faculty in the program.

Instructional Technology Master's programs with high K-12 teacher enrollment have licensing options.

Faculty Strength All three program faculty share a common interest in online learning as an emphasis within the Instructional Technology field.

Table 1. Curricular redesign situational factors.

COLLECTIVE PROGRAM DESIGN INTENTIONS

Once we felt that we had gathered as much information as we could, we scheduled a full day retreat involving all three faculty members in January 2012. The intent of this retreat was to closely examine our curriculum. At the time there were several courses associated with our program that were no longer being offered because the faculty members who were interested and qualified to teach them were no longer at the university. We took this opportunity to engage in a full program review to evaluate content currency, sequencing, alignment to professional standards, and preparation for future employment. Additionally, the program was now part of a larger department with many licensed and accredited programs that were designed according to professional standards and requirements. Faculty members in these programs, as well as the department head, advocated that we align our program with professional standards. We felt that if we helped our Department Head and Dean to better understand the field in the context of external

standards it would make the future of the program more viable.

During this retreat, each faculty member shared past syllabi to collectively review how previous courses would or would not fit into a newly designed program aligned with professional standards. We relied on the AECT 2012 draft standards and ISTE NETS*S Coach standards to guide our review. We began our retreat by closely examining our situational factors and lessons learned to make concrete decisions about our program. We had been engaging in discussion about the same data in our meetings thus far, but not necessarily with the intent to commit to decisions. Therefore, while all three of us had a good idea how each of us felt about the data, we discussed it again to make sure we were all on the same page as we made decisions. We decided that many changes had to be made to our program. These decisions will be discussed below with examples. This discussion will be organized based on our collective program design intentions including:

1. Identify a course delivery method that will increase student retention and graduation,
2. Provide curricular cohesion that will help students develop a sense of belonging,
3. Provide team-based course experiences that will prepare students for Instructional Technology careers, and
4. Provide program experiences that result in graduates being employable.

Identify a Course Delivery Method that will Increase Student Retention and Graduation

During the retreat we discussed whether it was possible to offer both residential and online programs without relying on the Provost's Office incentive. We wanted to offer a program that was financially sustainable regardless of the revenue generated. Based on student feedback, we also wanted to make sure that most, if not all, of the courses in our program would be taught by program faculty rather than graduate teaching assistants. Based on these two decisions, we were quickly in agreement that we could not offer two programs. Then we discussed whether to offer a residential or online program. We reached a quick consensus on this matter based on our potential audience and competitor program analysis. Even though we had experienced high attrition in the initial online program, we believed it would be in our best interest for the longevity of the program to offer it online. Therefore, we agreed to offer the IT Master's Program as a fully online program without a residential option.

After this decision, we had to plan what we could do to retain students for successful degree completion. Because many of our past online students found it difficult to feel a connection with faculty through asynchronous communication, we first decided to build a program blending both synchronous and asynchronous technologies. This meant that our courses would be designed to include asynchronous discussions and weekly synchronous meetings. From our own research related to online learning, we knew that there was not a great deal of research that supported synchronous meetings in distance education. Instead most research narratives about online learning are dominated by references to asynchronous tools and interactions. However, in our department many of our colleagues in other programs taught online exclusively with synchronous meeting tools, and we became interested in seeing whether we could blend the two. We also wanted to tap into the fact that many adult learners already rely on online videos as a source of everyday information (Percell, 2013). We wanted to challenge the existing

predominant narrative in the online learning literature that refers to synchronous online learning as ineffective due to its chaotic nature (see Hrastinski, 2010; Johnson, 2006; Petty & Farinde, 2013). We wanted to use synchronous online learning tools to help students (a) find an immediate and reliable means of communication, (b) stay on task, (c) feel a greater sense of participation, and (d) experience better task/course completion rates (Chen & You, 2007; Hrastinski, 2010).

The existing curriculum did not have a clear sequencing plan for courses. Instead courses were offered whenever the faculty member was able to teach them in any given semester. This meant that it was not only extremely difficult for students to know when pre-requisite courses needed to be or could be taken in order to be prepared for advanced courses, but also to know whether they were making adequate progress toward graduation. To address this problem, we decided to create a clearly identified sequence of courses to degree completion.

We had difficulties in agreeing whether we should plan for a cohort program that offered two courses a semester for two years, or offer courses consistently during the fall and spring semesters, letting students choose to complete their degree in two or four years. Following an online cohort model could help students develop a sense of connection with other students (Boling, Hough, Krinsky, Saleem, & Stevens, 2012; Jones, 2014); and encourage timely completion of the program. Following a cohort model could, however, discourage potential applicants who only wanted to take one course a semester. After extensive discussion on this matter, we decided that the priority was to be able to begin the program the following August with enough students to fill the courses, so it was best to not eliminate potential applicants. We thus created a sequence of courses with a two-year and four-year course completion plans.

Once we decided against the cohort model, we needed to ensure that our curriculum helped students build a sense of belonging and community (Palloff and Pratt, 2007). We needed to identify methods that would reduce the transactional distance (Moore, 1993, 2013) between students and between students and instructors. To address this, we began with an introductory course that prepared students to be successful online students fluent in both asynchronous and synchronous communication tools and to become highly competent instructional technology professionals. We also decided to include a capstone course that guided students through preparing for the Master's Portfolio Examination, identifying career options, and honing media development skills. Finally, we decided to require students to attend an on campus one-day orientation

once a year every August for the duration of the time that they were enrolled in the program. We decided that a face-to-face campus orientation would be viable because as long as UT continued to charge out-of-state tuition for online students, then our program would no doubt primarily attract Tennessee residents. We were sure to fully disclose the high tuition rate to prospective out-of-state and international students. We planned for the orientation to be a productive meeting for the students to meet faculty members, plan how to complete their degree, and build a network with current students and alumni. Over the years, the content of what we introduce to students during orientation has changed, but the most recent agenda is attached as Appendix A.

Provide Curricular Cohesion that will Help Students Develop a Sense of Belonging

When we reviewed the old residential and online curriculum in relation to both AECT and ISTE standards, we found that our curriculum was extensively focused on media development and it lacked the breadth of experiences that were included in the professional standards (e.g. content and pedagogical knowledge on how people learn, research, assessment, and evaluation, digital citizenship, and professional ethics). Because our current faculty did not have advanced media development skills, we would have to rely on adjuncts to teach a lot of our courses if we continued that focus. We decided that if we were to stick with our previous decision to be able to offer courses in our Master's program among the three of us we had to change the curriculum to match our strengths, as well as the standards. We decided to create a curriculum with a focus on online learning. While this was a very narrow focus for our IT program, we decided that it was the right scope for us to serve our students well.

Once we decided on our curricular focus, we were able to identify that upon completion of our program we wanted students from various work settings (e.g. K-12, corporate, military, and higher education) to be able to design and develop online learning environments. We envisioned that our graduates would find jobs in a setting of their choosing as a curricular or training specialist for online instructional delivery.

Based on our strengths and vision for our future graduates, we decided to include a three-course sequence that solely addressed online learning. We decided that the first course would be a general course about online learning environments, followed by a course on assessing online learning, followed by a practicum where students work with a client to design and assess an online course or program. We intended for these courses to be taken in sequential order.

We also decided that we did not want to lose core instructional technology elements. Therefore, we included an introductory instructional design course and an introductory media development course to be taken early in the program. We also included an advanced instructional design course later in the program. In the advanced instructional design course we envisioned that the entire class, with instructor assistance and facilitation, would work with a single client to develop instructional materials. These courses ensured that our program would be aligned to standards set up by professional organizations.

Provide Team-based Course Experiences that will Prepare Students for Instructional Technology Careers

While we were aware that participants might find it difficult to engage in team-based course activities in an online program (Paulus, Bichelmeyer, Malopinsky, Pereira, & Rastogi, 2005) we believed that instructional technology students needed the real-world instructional design experience of working in teams. We also believed that program participants would develop a stronger sense of connection with one another through team-based activities. Therefore, whenever appropriate we decided to include team-based activities and assignments in our courses. Part of the curriculum planning process would be taking an inventory of which courses included independent work and which included team-based experiences.

Provide Program Experiences that Result in Graduates being Employable

We were committed to providing students with both theoretical and practical experiences that would help them find employment after they graduated. As discussed in the curricular cohesion section, we tried to maintain this theory and practice balance by including courses that were designed for students to gain practical experience working with clients alongside courses that pushed them to further their academic discourse related to the field. We also decided to include other courses from departments related to human learning and research methods.

RETREAT OUTCOMES

As a result of our retreat we began identifying a curricular sequence for a two-year and a four-year program as shown in Appendix B. We also mapped course sequencing for the next three years as shown in Appendix C, and we mapped how each of our courses would be designed to address both the AECT and ISTE Standards as shown in Appendix D.

Collective Course Design Intentions for IT521

During our retreat we identified the collective design intentions for IT521 as a new course. We knew that we had several courses to design, but we focused on IT521 during the retreat because it was the first course in the program and we already identified it as a key course to help students gain a sense of belonging in the program. At the time the course did not have a designated course number so was referred to as Course 001. In general we wanted this new course to address the following collective course design intentions:

1. Prepare students to become successful online learners,
2. Help students gain an understanding of instructional technology as a profession, and
3. Help students understand the IT Master's degree requirements.

Figure 1 is the draft of our collective design intentions agreed upon during our one-day retreat. We modified the draft design intentions as we kept meeting (from January to August 2012) about our new curriculum and started to discuss our collective design intentions for other courses. For example, "introduction to design processes" became an intention for our introductory instructional design course. In the following section we will discuss the collective course design intentions we designated for IT521.

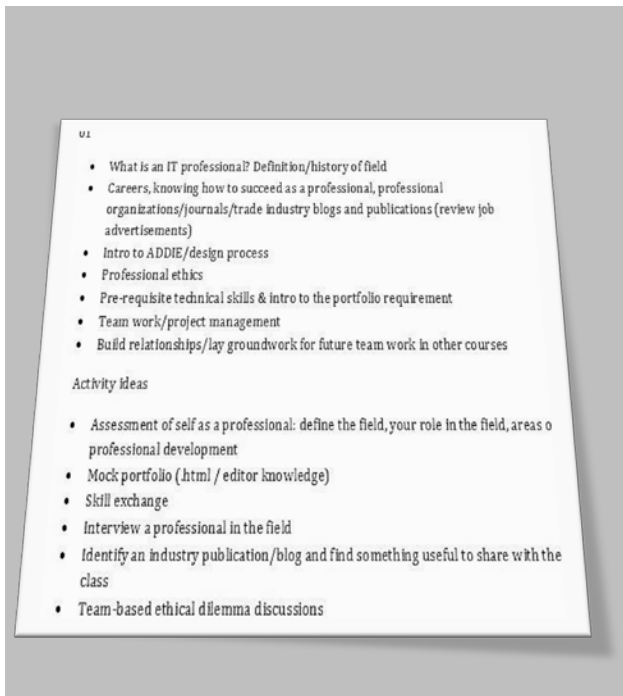


Figure 1. Collective course design intentions for IT521
Proseminar 1: Instructional Technology as a Profession.

Prepare Students become Successful Online Learners

As seen in the initial draft, we wanted IT521 students to build relationships by engaging in teamwork. We wanted students to have a strong bond as a group who could support one another through their graduate school experiences. We also wanted students to gain familiarity in both individual and team project management as part of learning how to be a successful online learner.

Help Students Gain an Understanding of Instructional Technology as a Profession

From our past experiences working with IT students, we were aware that many students enter programs without a full understanding of the field. This was often apparent when prospective students would ask us what instructional technology is about. We wanted IT521 to be a course where students become familiar with the field and understand that the program would provide them with experiences that would advance them in their career. Additionally we wanted students to be able to choose to leave the program at the end of IT521 if they realized that our program was not a good fit for them and/or Instructional Technology did not match their career goals.

Help Students Understand the IT Master's Degree Requirements

Finally, we wanted IT521 to provide upfront program advising. We wanted students to become familiar with program requirements, expected responsibilities as a student, and the culminating final portfolio requirement. Through the IT521 course experiences we wanted students to gain a sense of direction as well as a sense of accomplishment as they completed courses.

PERSONAL COURSE DESIGN INTENTIONS

After the collective program and course design intentions were articulated during the retreat, Lisa began identifying her personal design intentions for IT521. These personal design activities took place outside of the collective meeting context and Lisa worked fairly independently from this point forward. At this point, IT521 was treated as a course assigned to Lisa, and it was her sole responsibility to design and develop it.

Lisa's personal design intentions for IT521 came from her past experiences as a member of a faculty leadership team designing, managing, and implementing a fully online Instructional Technology program for working adults at Northern Illinois University (see Yamagata-Lynch, Cowan,

Luetkuhans, 2015). These personal design intentions were:

1. Model expected program outcomes,
2. Connect course experiences with professional goals to encourage participatory learning, and
3. Align course activities with assignments to encourage deeper reflections.

In this section we will discuss how the collective design intentions for our newly designed online program and IT521 were integrated with Lisa's personal design intentions as the faculty member responsible for preparing and teaching this course. In this discussion we will provide examples of how the collective and personal design intentions were aligned.

Model Expected Program Outcomes

Lisa decided that the teaching and learning experiences she facilitates in IT521 should serve as a model for both course design and basic media development skills students in the program would be expected to master based on the AECT and ISTE NETS.C professional standards. Specific design and media development activities that Lisa wanted to address included activities such as: (a) demonstrating appropriate use of media, (b) developing a shared vision for implementing technology into teaching and learning situations, and (c) engaging in ethical use of technology in teaching and learning situations. Lisa decided that it would not be a good class if students were to learn that IT521 was designed poorly as they learned more about online learning environments and instructional design throughout their Master's degree experience.

Connect Course Experiences with Professional Goals to Encourage Participatory Learning

Ensuring that course experiences are connected with professional goals was a collective design intention that Lisa and colleagues from her previous institution shared while designing and developing an online program for the technology specialist advanced teaching certification in Illinois. Working adults are very busy, and while they come to graduate school for their education they also are there to grow as professionals. From her past experiences Lisa knew that working adults find most value in programs that are academically rigorous and have practical applications to their work. Lisa believed that when course experiences are connected to professional goals then it is more likely for adult learners to take a participatory learning approach (Palloff & Pratt, 2007). Lisa also found that a participatory online learning

environment often helped learners develop a sense of community and presence through collaborative discussions with one another and the instructor (Conrad & Donaldson, 2011; Garrison & Cleveland-Innes, 2005). Lisa also thought that by connecting academic experiences with students' professional goals it was more likely that IT521 would help students immerse into instructional technology as a profession.

Aligning Course Activities with Assignments to Encourage Deeper Reflections

Aligning course activities with assignments was a design feature that Lisa has valued since she began her career as a university faculty member in 2001. It has allowed her to take the time to communicate the value of course experiences to students. Subsequently, students spend more time reflecting on course content, experiences, and applications to their career, rather than engaging in activities that are disconnected from one another. Over the years, Lisa found that aligning course activities with assignments can save instructional time, and help students reflect deeply on course content while they engage in a shared activity from multiple perspectives. In these situations Lisa found that students engage in reflection-in-action about their moment-to-moment course activities, and reflection-on-action about how the previous moment-to-moment activities influenced the actions they took for completing an assignment at a later time (Schön, 1987). Lisa also found that when students engage in deeper reflections on course content they are more likely to engage in rich discussion. These rich discussions help students take an active role in making new meaning related to course content (Lehman & Conceição, 2010).

COURSE DESIGN ACTIVITIES

As Lisa was designing IT521, she found out about the 2012 UT Summer Teaching Institute (STI), which was designed for both tenure-track faculty and lecturers to create new or modify existing courses for online delivery. The STI was a one-month experience with various workshops in course design, assessment, and media development. In her 2012 STI application Lisa proposed the following expected outcomes:

- Complete syllabus for IT521 Proseminar 1: Instructional Technology as a Profession with identified weekly topics, readings, course assignments and matching assessments;
- Design and develop instructional materials and activities for the first three-weeks of the class;

- Prepare course Blackboard site and populate content for the first three weeks of the class; and
- Identify appropriate course topics and prepare interactive presentation materials and videos.

Lisa's proposal was accepted by the STI and she participated in the program in June 2012 to prepare the course to be offered in August 2012.

Identifying Course Objectives that are Aligned to Collective and Personal Design Intentions

STI required participants to start with course objectives, which, as an instructional designer, were a comfortable starting point for Lisa. While writing the objectives Lisa made sure that each objective was aligned to the collective program intentions, collective course design intentions, and her personal course design intentions. By aligning the objectives to the collective intentions, Lisa was confident that every time she referred back to the objectives while designing the course her design would address the collective intentions. The course objectives she identified were as follows:

Course participants will be able to:

1. Develop an online community of professionals,
2. Explore instructional technology as a field,
3. Explore and identify career paths within instructional technology and examine personal roles in the field,
4. Evaluate electronic media for instructional purposes, and
5. Design an electronic professional portfolio.

These objectives became the pillar for Lisa's design activities for weekly student participation expectations and assignments. A brief description of student participation expectations, assignments, alignment to course objectives, and alignment to design intentions are included in Table 2.

Designing Course Participation Expectations including both Asynchronous and Synchronous Activities

Lisa decided to design IT521 relying on both asynchronous and synchronous team communications to address our collective program design intention related to student retention and team-based activities. This decision was also made to help students gain a strong sense of belonging and community to address the collective course intention

helping students become successful online learners. Lisa decided to make both weekly asynchronous discussions and synchronous meetings mandatory for all course participants. Lisa discussed this decision with other program faculty during ongoing design meetings. For course delivery purposes, faculty decided that it would be best to facilitate all of our courses with both asynchronous and synchronous technologies in a blended format. We knew that this arrangement might be atypical for a distance education program so we decided to clearly communicate this requirement in the student recruitment materials, in the student course registration system, and the syllabus for all of our courses. In terms of IT521, Lisa decided to take advantage of the asynchronous and synchronous blending by assigning students to weekly peer groups. Lisa wanted to help students get to know each other through weekly course interactions. With this arrangement, all participants would be able to read and respond to discussion posts for any student in the class, but be required to read and respond to their assigned peers. During synchronous meetings, they met with peers they were assigned to and engaged in further group activities. Lisa decided that she would arrange these groups so that each student will have a chance to work with every member of the class for at least one week.

In terms of the asynchronous activities, students were expected to participate in discussions related to readings every week by responding to instructor discussion questions or by completing a mini project they then had to present during the weekly synchronous meetings. Lisa also decided to include prerecorded lectures (shorter than 5 minutes) related to course topics when appropriate to help students engage with their reading materials and the asynchronous discussions. Lisa wanted these lectures to help students experience instructor presence that can be maintained even when students engage primarily in asynchronous activities (Garrison & Cleveland-Innes, 2005).

Synchronous sessions were scheduled for a three-hour block similar to residential graduate courses at UT. Lisa made a decision that requiring students to engage in asynchronous activities during the week followed by a three-hour synchronous meeting would be more than what is expected of a graduate course. Therefore, she decided that she would devote some of the three-hour session to advising sessions and time for students to work on individual and group projects. She discussed this decision with other program faculty who decided to implement this format for other courses too.

To ensure that the synchronous sessions promoted participatory learning Lisa decided these sessions

could not become three-hour lectures. Lisa decided that the meetings needed to include a variety of activities to engage students with the course content. She decided to start synchronous meetings with a logistical check in, where she made announcements related to future course activities and program information. This time was designed for students to ask questions about the course or the program that were relevant to all participants. After the logistical check in, Lisa provided just-in-time lectures, when appropriate, which were no more than 20-minutes in length. During these lectures she summarized that week's asynchronous discussions, asked students for their thoughts on the discussions, and addressed any concepts that students had difficulties understanding. Students then engaged in breakout activities for 20 to 30 minutes in smaller groups and then presented their conclusions to the class. After the breakout activities, students had between 60-90 minutes during which they could work on future assignments, in their groups, and/or with the instructor for individual advising.

Through these asynchronous and synchronous activities Lisa addressed her personal design intention to model expected program outcomes. Therefore, her goal was to demonstrate full integration of asynchronous and synchronous activities to model design and development skills that students in the program would be expected to master by the time they graduated.

Designing Assignments

Lisa decided to include the following assignments in IT521:

- Definition Concept Map of the Field and Professional Statement,
- Interview a Professional in the Field,
- Usability Testing of a Web Authoring Tool, and
- Portfolio Prototype and Showcase.

The first assignment for IT521, the Definition Concept Map of the Field and Professional Statement was designed for students to gain a better understanding of what our field is about and also reflect on what type of career paths they could pursue. This assignment required students to think about future employment, become aware of the curricular cohesion in IT Online, become aware of their role as a professional in the field, and assess what professional development

activities they needed to engage in during the program. It addressed the collective intentions for students to explore their future employment opportunities and identify skills necessary for them to be successful. By requiring participants to address how they could leverage their program experiences with other professional development activities, this assignment encouraged students to make connections between course experiences and their professional goals. This was in alignment with Lisa's personal design intention for the course.

The second assignment was an interview assignment, which was first discussed during the retreat. In the Interview a Professional in the Field assignment, students prepare their own interview questions to find out more about the field and future employment opportunities. The interview helps students understand: (a) the professional's experiences, (b) the field in general, and (c) jobs in the field. This assignment was designed to address the collective design intentions related to program graduate employability and instructional technology as a profession. It also addressed Lisa's personal intention for connecting course experiences to real world experiences.

The third assignment was Usability Testing of a Web Authoring Tool. While usability testing was not an assignment that was collectively suggested for IT521, both the AECT and ISTE standards included an evaluation competency. During ongoing program related discussions both Lisa and Trena were in agreement that we had to find more ways to provide students with evaluation experiences because the new curriculum did not yet address it adequately. Therefore, we decided that it was a good idea to include an assignment related to usability testing in IT521. Students worked in a small group to test a web-authoring tool that would help them decide which tool to use for the web-based portfolio project. Lisa decided to require students to test a web-authoring tool because she wanted to tie this assignment closely with the final portfolio prototype assignment. Lisa made this decision to address her personal course design intention about aligning course activities with assignments. The usability testing assignment addressed the collective program design intention about team-based course experiences and becoming a successful online learner by gaining a sense of belonging in their teams.

Assignment/Objective Alignment	Collective Design Intentions	Personal Course Design Intentions
<p>Course Participation Expectations</p> <p>Participants prepare for each class session by being a productive participant in course discussions on class readings in both asynchronous and synchronous course activities.</p> <p>Course Objectives 1, 2, and 3</p>	<p>Program—Retention and Delivery: Participants engage in asynchronous and synchronous communication to develop a strong sense of community</p> <p>Program—Team-Based Course Experiences: Participants work in teams for asynchronous and synchronous activities</p> <p>Course— Successful Online Learner: Participants build relationships to lay groundwork for future team work</p>	<p>Model Expected Program Outcomes: Participants engage in course related activities that they themselves can design and develop by the end of the program</p>
<p>Definition Concept Map of the Field and Professional Statement</p> <p>Participants explore what the field of instructional technology is about. Participants are assigned to (a) demonstrate an understanding of the definition of the field in a concept map format, (b) identify competencies that they aspire to master, and (c) identify how they will continue their professional development in specific competency areas.</p> <p>Course Objectives 1, 2, and 3</p>	<p>Program —Curricular Cohesion: Participants become familiar with program sequencing</p> <p>Program —Program Graduate Employability: Participants explore future professional growth areas in the field</p> <p>Course—Instructional Technology as a Profession: Participants explore Instructional Technology as a field</p> <p>Course—Skills for Successful Professionals: Participants engage in self-assessment as a professional</p>	<p>Connect Course Experiences to Professional Goals: Participants assess how their work in the course and program can be tailored to help them grow as an instructional technology professional</p>
<p>Interview a Professional in the Field</p> <p>Participants are responsible for conducting an interview with a professional in the field. During the interview participants ask questions that will help them understand the respondent's experiences, gain a further understanding about the field in general, and find out about job opportunities.</p> <p>Course Objectives 1, 2, and 3</p>	<p>Program —Program Graduate Employability: Participants explore future professional growth areas in the field</p> <p>Course—Skills for Successful Professionals: Participants engage in self-assessment as a professional</p> <p>Course—Instructional Technology as a Profession: Participants explore future employment possibilities</p>	<p>Connect Course Experiences to Professional Goals: Participants engage in an interview with a professional to gain a realistic perspective on future employment</p>
<p>Usability Testing of a Web Authoring Tool</p> <p>Participants work in a team of 3 or 4 members to usability test a web-authoring tool that will help them decide which tool to use for his/her web-based portfolio project.</p> <p>Course Objectives 4 and 5</p>	<p>Program—Team-Based Course Experiences: Participants work in teams and conduct a usability test</p> <p>Course—Successful Online Learner: Participants engage in team work and project management</p>	<p>Aligning Course Activities with Assignments: Participants usability test the tools that they are likely to use for the Portfolio Prototype and Showcase Assignment</p>
<p>Portfolio Prototype and Showcase</p> <p>Participants start their professional web-based portfolio and become familiar with the IT Master's Degree Portfolio Exam requirements.</p> <p>Course Objectives 4 and 5</p>	<p>Course—Successful Online Learner: Participants explore web-authoring tools and identify necessary skills to succeed in the program</p> <p>Collective—Curricular Cohesion: Participants become familiar with program sequencing and portfolio expectations</p> <p>Course—IT Online Requirements: Participants become familiar with the IT Online Master's Portfolio requirements</p>	<p>Aligning Course Activities with Assignments: Participants start a prototype for their Master's Portfolio that they can continue to develop throughout their program experience</p>

Table 2. IT521 Assignments and alignment to collective program and course design intentions.

The final assignment was the Portfolio Prototype and Showcase. This assignment was designed for students in the program to start exploring a web-authoring tool for designing and developing a portfolio as well as becoming familiar with the Portfolio Exam requirements. Students were required to study the Portfolio Exam requirements and create a web-based prototype that included their resume, program of study, professional statement, and one completed competency area. The portfolio competency areas were identified by program faculty during ongoing meetings and included:

- Theoretical Knowledge in the Field,
- Learning Environments Design,
- Collaborative Leadership in the Field,
- Ethical Practice, and
- Assessment and Evaluation.

During the last synchronous session for IT521, students showcased their portfolio for the class. Lisa designed this assignment to first address the collective program design intention about becoming a successful online learner. She thought that this assignment would give students a good opportunity to explore their strengths and weaknesses related to media development skills and help them identify what areas to focus on in future courses. During the showcase, Lisa intended to have students share new skills that they learned and challenges they encountered during the prototype development process. Lisa also intended for this assignment to address the collective program design intention about curricular cohesion by requiring students to complete a program of study that would make them pay attention to course sequencing. This assignment was also designed to address the collective program intention about helping students become familiar with the Master's degree requirements. Finally, creating a Master's portfolio prototype was intended to address Lisa's personal design intention for aligning course activities with assignments. In this case, this assignment was intended to help students get started with their future portfolio.

Sample Weekly Activities

We will introduce activities from the second week of IT521 to illustrate how weekly activities were implemented with a blend of asynchronous and synchronous activities and course assignments while addressing collective and personal design intentions. The topic for Week 2 was Instructional Technology as a Profession and Professional Associations. The required readings were related to the definition of the field and introductions to various professional

association resources. The goal for the week was for students to engage in both individual reflection and team-based discussion to gain a better understanding of the definition of instructional technology as a field. These activities were designed to help students get a start on their Definition Concept Map and Professional Statement Assignment.

Asynchronous activities for this week included: (a) watching one pre-recorded instructor lecture about concept maps, (b) participate in one instructor facilitated asynchronous discussion about instructional technology as a field, and (c) draft a concept map that demonstrated student understanding of instructional technology. The five and a half minute instructor pre-recorded video lecture contained information on what a concept map is, how to create a concept map, examples, concept mapping tools and their features such as grid-based canvasses, shapes, links and groupings (<http://www.screencast.com/t/0aYeD7ssus>). The complete storyboard for this video is included as Appendix E. After viewing the video, students were required to explore concept-mapping tools such as Gliffy, bubbl.us, and Visual Understanding Environment and start creating a draft concept map to outline their current understanding of the field. This activity was designed to get students started working on their Definition of the Field Concept Map and Professional Statement assignment as well as gain skills with concept-mapping tools. The asynchronous instructor facilitated discussion required students to reflect on readings and share their understanding about instructional technology. The activities from Week 2 were in alignment with the collective program intention for helping students understand instructional technology as a profession. The activities were also in alignment with Lisa's personal course design intention to align course activities with assignments and modeling expected program outcomes.

When the class met synchronously that week, Lisa started by introducing the agenda for the session, having a check-in to make sure all students were able to: (a) navigate Blackboard during the first weeks of class, (b) participate in the asynchronous discussion activities, and (c) ask questions regarding the Blackboard Collaborate synchronous platform. Then Lisa provided her observations of the highlights from the asynchronous discussions and solicited questions regarding the readings and the discussions. At this early stage in the semester, the instructor summary of asynchronous discussion highlights was intended to make clear what constituted a high quality contribution to the discussions without penalizing the students who had not done so.

After the large group discussion, students worked in teams of three to four members for 40-minutes to

share the draft concept maps they had prepared as part of their asynchronous activity. Appendix F shows the breakout activity instructions. In the breakout, each participant shared what they learned about creating concept maps, what they learned about instructional technology as a field, their plans for continuing the concept map assignment, and tips for others. After each member presented his/her work, each team had to identify similarities and differences in their understanding about the field and new insights about concept mapping tools or the field. The class took a short break, and then it was time for individual advising with the instructor and/or time to work on assignments individually or in teams. These synchronous meeting activities were in alignment with the collective program design intention to provide team-based course experiences. These activities were also in alignment with the collective course design intention to provide participants with an understanding of instructional technology as a profession. Finally, these activities were aligned with Lisa's personal course design intention to align course activities with assignments.

Trends in Weekly Activities in IT521

The course included a total of 13 weeks of activities. There were a couple of weeks devoted to 100% asynchronous activities so that students could experience the trade-offs between the convenience of asynchronous interactions and the sense of connectedness gained through synchronous interactions. The other weeks, however, were delivered through a blend of asynchronous and synchronous activities. Because IT521 online activities were mandatory, in most cases all students participated in asynchronous and synchronous activities every week unless there were personal or professional difficulties that made it impossible for them to participate.

Similar to Week 2 activities, most weeks began with students reading course content and engaging in asynchronous discussions. Then the weekly activities ended with a synchronous session where there were instructor lectures when appropriate, but the primary activity was for students to work in small groups and present the results of those activities to the class. All synchronous sessions ended with open advising and work time for students to meet with the instructor or with their teams on group assignments.

LESSONS LEARNED FROM INTEGRATING COLLECTIVE AND PERSONAL DESIGN INTENTIONS

We have offered IT521 at UT every fall since 2012 when the new online program launched. We have had

close to 40 students enroll in the course from 2012 to 2015. In terms of the program we have admitted 36 students from 2012 to 2015 and 11 students have graduated. Thus far we have had 3 students who chose not to complete the program after completing IT521 due to personal situations that made it difficult for them to pursue a Master's degree. A handful of students chose not to continue the program within the first couple of weeks of IT521 or right after taking IT521. These students often shared in emails to Lisa that they found that the program was not a good fit with their professional goals. Students who chose to stay in the program have been making steady progress towards graduation.

The IT521 end of semester anonymous student course evaluations indicated that students appreciated several of the collective and personal design intentions. Student comments often referred to gaining a sense of connection with the instructor and other participants through asynchronous and synchronous interactions, a better understanding of the field, a better sense of program requirements, and exposure to a new model of online instruction. These components together gave students ideas for how to design their own online program/courses. Students also appreciated how readings, course activities, and assignments were aligned with one another. Sample student comments include:

- This was a great class and offered a lot of really useful, real-world experience. The text and readings were relevant to my plan for utilizing my degree in the future. (Fall 2012)
- Every assignment, reading, project, etc, was focused on providing us real world experience for our chosen profession. (Fall 2012)
- The organization and structure of the class contributed most to my learning. As many of us will be future teachers and trainers, this instructor sets a great example on how to organize course content to the benefit of her students. It was obvious that each lesson was carefully thought out and every activity had a purpose. (Fall 2013).

We also received some constructive criticism related to the course. Students found it difficult coordinating group activities, especially when all members did not share the same level of commitment to the work. Some students also found that in an online course it is frustrating when the technology fails. Finally some students found sharing a live video feed of themselves during synchronous sessions was uncomfortable. Sample constructive criticisms include:

- I found the group activity to be frustrating. I spent more time sending emails that didn't

produce any results and would have preferred to spend my time on the project or learning something else. (Fall 2012).

- Some issues with Blackboard not working properly but not a major problem. (Fall 2013).
- I would like to see the video requirement become optional. You may find much more willingness to participate by all class members instead of a select few. (Fall 2014).

Upon reflection, we decided that we needed to ensure that there are ways that students are held accountable for unsatisfactory participation in team-based projects. After the first time that IT521 was implemented, Lisa added readings and activities related to virtual teaming early in the semester. We believe that frustration with technology is part of any online course experience and that by experiencing it themselves they can think of ways to minimize them in their own course designs. The comment regarding the video feed is the most interesting to us. We have found that when students take courses after IT521 they find it difficult to stay focused and participate in synchronous sessions if those courses do not include instructor and participants' live video feed. This contributes to an overall difficulty staying engaged with the course. Some students have come back after a semester or two and shared with Lisa that while they did not like seeing themselves in the video feed in IT521, the benefit it brought to their experience as a learner was quite significant.

As coordinators of this new online graduate program we have learned that articulating the collective design intentions with faculty, integrating them with personal course design intentions, and communicating them through our course design helps students have a consistent learning experience. It is clear to students that the deliberate use of asynchronous and synchronous technologies helps them stay engaged in their coursework. Some students became very passionate about exploring how to effectively blend asynchronous and synchronous online learning and co-authored a peer-reviewed article on this topic with Lisa (see Yamagata-Lynch, Do, Skutnik, Thompson, Stephens, & Tays, 2015). Students also commented in the anonymous course evaluations for IT521 that the way that advising is built into coursework through curricular cohesion provides them a sense of being on track with the program, and the various opportunities they have through their coursework to interact with professionals in the field helps their own professional growth.

However, when students take courses from adjunct instructors who were not involved in the collective program and course design process the experience

does not seem to fit with the overall program intentions. For example, students have shared with us that they are uncomfortable when a course relies solely on either asynchronous or synchronous communications. They feel disconnected from the instructor and other participants when they have only asynchronous interactions. They are also uneasy when they cannot find obvious applications to their development as professionals. Informally, some students have reported that they need to reflect more deeply and organize course experiences to fit their professional goals. In these situations, we have focused our advising efforts to help students see that there is no single definition of what online instruction looks like, and, as future designers, they need to experience various modes of online instruction. In the future, we will have to work more closely with adjunct faculty and help them enact the program design intentions into their courses. While our adjuncts typically enjoy the autonomy to design and develop their own courses, we need to further explore how to collaborate with them without demanding too much of their time.

IMPLICATIONS FOR OUR FUTURE DESIGN PRACTICES

Graduate education is a collectively designed experience for students. Every program takes a different approach to addressing collective and personal design intentions for shared programs and individual courses. Through our own design experiences we believe that individual faculty who align his or her *personal* course design intentions with the *collective* program and course design intentions will provide students with a consistent program experience. We believe that openly communicating the collective intentions to individual faculty can help facilitate this process.

Our next program challenge is how to communicate the integration of collective and personal design intentions to a new group of faculty and instructors who contribute to our program. Course syllabi as a designed artifact represent the essence of such intentions, but without deliberate efforts to bring collective and personal design intentions to the fore the original attributes of the program design that held it together can gradually erode and affect student experiences.

Design cases can be one method for documenting and deliberately communicating such intentions. For example, Table 1 and 2 introduced in this design case can be artifacts for communicating both collective and personal design intentions to new and/or adjunct instructors. Interestingly, as a design team we did not think to create such design artifacts until we began

reflecting on our design experiences and writing this design case.

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APPENDICES

Appendix A: IT Online Master's Degree Orientation Agenda

5:30pm to 5:50pm

Informal Greetings and Faculty Introductions

Find as many people as you can who 1) you were in class with in previous semesters and 2) you will be in class with this semester

5:50pm to 6:30pm

Alumni Panel

Meet the graduates and learn how they successfully completed the program

Break

6:30pm to 7:00pm

Whole Group Advising

Navigating the program website
Program requirements
Program Advising Form
Graduate School Deadlines
Application for Graduation in the student record system
Admission to Candidacy Form
Completion of Certificate Program
Portfolio Exam Requirements

7:00pm to 7:30pm

Individual Advising

Meet your adviser and professors for fall and spring classes

Appendix B: Curricular Sequence

Two-Year Plan

Fall Year 1	IT521 Proseminar I: Instructional Technology as a Profession IT570 Instructional Systems Design
Spring Year 1	IT573 Introduction to Multimedia Instruction IT532 Online Learning Environments
Summer Year 1	Choice of Foundation or Elective (such as educational psychology, program evaluation, assessment, or media development courses) or a break IT525 Professional Ethics in Instructional Technology
Fall Year 2	EDPY506 Introduction to Educational Research (or an alternate research course) IT566 Understanding Online Interaction *IT532 is a prerequisite for this class
Spring Year 2	IT578 Instructional Media Development *IT570 is a prerequisite for this class IT594 Proseminar II: Trends and Careers in Instructional Technology
Summer Year 2	IT577 Practicum in Online Learning Environments *IT566 is a prerequisite for this class Choice of Foundation or Elective (such as educational psychology, program evaluation, assessment, or media development courses) or a break

Four-Year Plan

Fall Year 1	IT521 Proseminar I: Instructional Technology as a Profession
Spring Year 1	IT573 Introduction to Multimedia Instruction
Summer Year 1	Choice of Foundation or Elective (such as educational psychology, program evaluation, assessment, or media development courses) or a break IT525 Professional Ethics in Instructional Technology
Fall Year 2	IT570 Instructional Systems Design
Spring Year 2	IT532 Online Learning Environments
Summer Year 2	Choice of Foundation or Elective (such as educational psychology, program evaluation, assessment, or media development courses) or a break IT525 Professional Ethics in Instructional Technology
Fall Year 3	IT566 Understanding Online Interaction *IT532 is a prerequisite for this class
Spring Year 3	IT578 Instructional Media Development *IT570 is a prerequisite for this class
Summer Year 3	IT577 Practicum in Online Learning Environments *IT566 is a prerequisite for this class
Fall Year 4	Choice of Foundation or Elective (such as educational psychology, program evaluation, assessment, or media development courses)
Spring Year 4	IT594 Proseminar II: Trends and Careers in Instructional Technology

Appendix C: Mapped Course Sequencing

IT Master's Course Offerings 2012-2015

Recorded by Lisa

33 credit hour program with 30 hours of required courses and 3 credit hours of elective

Year	Summer 12	Fall 12	Spring 13
2012-2013	1-day orientation to university and program	IT521 Proseminar I: Instructional Technology as a Profession	IT573 Introduction to Multimedia Instruction
		IT570 Instructional Systems Design	IT532 Online Learning Environments
2013-2014	Summer 13	Fall 13	Spring 14
	IT525 Professional Ethics in Instructional Technology	IT521 Proseminar I: Instructional Technology as a Profession	IT573 Introduction to Multimedia Instruction
	Foundation or other Elective (e.g. EDPY533 Program Evaluation I, EDPY581 Classroom Measurement, etc.)	IT570 Instructional Systems Design EP506 Modes of Inquiry IT566 Understanding Online Interaction	IT532 Online Learning Environments IT577 Practicum in Online Learning Environments IT578 Instructional Media Development
2014-2015	Summer 14	Fall 14	Spring 15
	IT594 Proseminar II: Trends and Careers in Instructional Technology	IT521 Proseminar I: Instructional Technology as a Profession	IT573 Introduction to Multimedia Instruction
	Foundation or other Elective (e.g. EDPY533 Program Evaluation I, EDPY581 Classroom Measurement, etc.)	IT570 Instructional Systems Design EP506 Modes of Inquiry IT566 Understanding Online Interaction	IT532 Online Learning Environments IT577 Practicum in Online Learning Environments IT 578 Instructional Media Development

Appendix D: Course Alignment with Standards

IT Online AECT Standards Alignment

By Lisa

Standards	Milestone 1	Milestone 2
AECT Standard 1: Content Knowledge Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practitioner applications of educational technology.	EDPY572 Theories of Learning in Applied Educational Psychology Or any other learning related course	IT532 Online Learning Environments
Artifacts	Paper related to learning theory (Individual Work)	Online instructional/program/ course design reflections (Individual Work)
Portfolio Areas	Professional statement Knowledge in the Field	
Assessment for Program Review Data	IT532	

Standards	Milestone 1	Milestone 2
AECT Standard 2: Content Pedagogy Candidates will be encouraged to grow as practitioners within a supportive community of practice that enables them to demonstrate effective implementation of educational technologies based on content pedagogy.	IT570 Instructional Systems Design	IT577 Practicum in Online Learning Environments
Artifacts	Instructional design and project management document (Team Report)	Online instructional/program/ course implementation management and evaluation report (Individual Work)
Portfolio Area	Knowledge in the Field	
Assessment for Program Review Data	IT577	

Standards	Milestone 2	Milestone 3
AECT Standard 3: Learning Environments Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.	IT532 Online Learning Environments	IT525 Professional Ethics in Instructional Technology
Artifacts	Online instructional/program/ course design prototype (Team Work)	Accessible media development and reflection (Individual Work)
Portfolio Area	Learning Environments Design and Development	
Assessment for Program Review Data	IT532	

Standards	Milestone 1	Milestone 2
AECT Standard 4: Professional Knowledge and Skills Candidates will demonstrate the essential professional knowledge and skills needed to be a successful educational/instructional technology professional through their work collaborating with colleagues and leading their peers on the design, development, and implementation of technology rich learning environments.	IT570 Instructional Systems Design	IT532 Online Learning Environments
Artifacts	Instructional design and project reflections on collaborative team processes (Individual Work)	Online instructional/program/ course design online collaborator statement (Individual Work)
Portfolio Area	Collaborative Leader in the Field	
Assessment for Program Review Data	IT570	

Standards	Milestone 1	Milestone 2
AECT Standards 5: Research Candidates explore, evaluate, synthesize and apply systemic methods of inquiry to enhance learning and improve performance.	IT521 Proseminar I: Instructional Technology as a Profession	IT566 Understanding Online Interaction
Artifacts	Usability testing of a web authoring tool (Team Work)	Online/instructional/program course assessment and evaluation plan (Team Work)
Portfolio Area	Assessment and Evaluation	
Assessment for Program Review Data	IT566	

IT Online ISTE.NETS_C Standards Alignment

Standards	Milestone 1	Milestone 2
ISTE.NETS C 1 Visionary Leadership Technology coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.	IT521 Proseminar I: Instructional Technology as a Profession	IT594 Proseminar II: Trends, Issues, and Careers in Instructional Technology
Artifacts	Definition concept map and professional statement (Individual Work)	Professional leadership/collaborator statement (Individual Work)
Portfolio Area	Professional Statement Collaborative Leader in the Field	
Assessment for Program Review Data	IT594	

Standards	Milestone 1	Milestone 2
ISTE.NETS C 2 Teaching, Learning, & Assessment Technology coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.	IT525 Professional Ethics in Instructional Technology	IT566 Understanding Online Interaction
Artifacts	Accessible media development and reflection (Individual Work)	Online/instructional/program course assessment and evaluation plan (Team Work)
Portfolio Area	Assessment and Evaluation	
Assessment for Program Review Data	IT566	

Standards	Milestone 1	Milestone 3
ISTE.NETS C 3 Digital Age Learning Environments Technology coaches create and support effective digital-age learning environments to maximize the learning of all students.	IT573 Introduction to Multimedia in Instruction	IT525 Professional Ethics in Instructional Technology
Artifacts	Any of the media development projects (Individual Work)	Accessible media development and reflection (Individual Work)
Portfolio Area	Learning Environments Design and Development	
Assessment for Program Review Data	IT525	

Standards	Milestone 1	Milestone 2
ISTE.NETS C 4 Professional Development & Program Evaluation Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice to student learning.	IT521 Proseminar I: Instructional Technology	IT566 Understanding Online Interaction
Artifacts	Usability testing of a web authoring tool (Team Work)	Online/instructional/program course assessment and evaluation plan (Team Work)
Portfolio Area	Assessment and Evaluation	
Assessment for Program Review Data	IT566	

Standards	Milestone 1	Milestone 2
ISTE.NETS C 5 Digital Citizenship Technology coaches model and promote digital citizenship.	IT521 Proseminar I: Instructional Technology as a Profession	IT525 Professional Ethics in Instructional Technology
Artifacts	Definition concept map and professional statement (Individual Work)	Ethical leader statement (Individual Work)
Portfolio Area	Professional Statement Ethical Practice	
Assessment for Program Review Data	IT525	

Standards	Milestone 1	Milestone 2
ISTE.NETS C 6 Content Knowledge and Professional Growth Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.	EDPY572 Theories of Learning in Applied Educational Psychology	IT532 Online Learning Environments
Artifacts	Paper related to learning theory (Individual Work)	Online instructional/program/ course design reflections (Team Work)
Portfolio Areas	Professional Statement Knowledge in the Field	
Assessment for Program Review Data	IT532	

Appendix E: Concept Map Lecture Storyboard (Last Updated June 26, 2012)

Production Memo: Initial slides created in Apple Keynote, exported as images, then imported to Camtasia 2 for Mac. Screen shots from gliffy.com taken with Snagit. Opening and closing music downloaded from www.jamendo.com, music by Löhstana David Creative Commons Attribution License (creativecommons.org/licenses/).

	Keynote Slide	Audio and Closed Captions
1	Title screen with music credits	Opening music by Löhstana David from www.jamendo.com/en
2	Title screen without music credits closed captioning starts	Hello this is Lisa. In this presentation I will provide a brief overview on concept maps as a tool for expressing your thoughts visually. I will also include discussions on common features you can expect when creating concept maps with free Web 2.0 tools, free software, and commercial software. This presentation was created in Apple Keynote, then imported to Camtasia 2 for the Mac for further editing.
3	What are concept maps slide	What are concept maps? They are often referred to as a brainstorming tool. They express your ideas visually. But you also need to remember that they are a visual format of an outline of your ideas, and each idea you include in your concept map maintains a hierarchical relationship.
4	What are the parts of a concept map slide	What are the parts of a concept map? Concept maps are made of nodes and links. Nodes are also referred to as shapes. Nodes are your ideas. Links are the lines that you use for connecting your ideas. Your links can be a straight line or in some software can be arced. Links show the relationship between nodes. They can connect nodes or ideas that are hierarchically at the same level or different levels. Some software will refer to this relationship as a “parent” and a “child” relationship, where the top-level idea (that has one or more ideas branching out of it) is the parent and subordinate ideas are the child. Links can have arrowheads to show the direction of the relationship between parent and child ideas.
5	An example slide	Here is an example. You will see that the first node or idea has the title “Concept Maps.” This node is the main idea or the parent of all ideas in this concept map. The ideas that are subordinate to “Concept Maps” include “What are they?” to the left and “How does it work?” to the right. Under “What are they?” you will see “outlines your ideas” and “brainstorming tool,” which are the child of “what are they?” Additionally, when you look closely to the lines or links that connect “What are they?” and the two subordinate or child ideas, you will see the label “is” to both ideas. Now look at “How does it work?” You will see that it is the parent of three more ideas.
6	Concept mapping free tools slide	You will find both free and commercial tools that will help organize your ideas in concept map format. Some free tools include bubble, gliffy, and Visual Understanding Environment or VUE. Both bubble and gliffy are Web 2.0 tools that you can use as long as you have a computer with high-speed internet connection. It will not matter whether you are working on an Apple, Windows, or Linux operating system. Your work will be saved on the cloud and not on your computer unless you export it as a JPEG or any other image format. However, in the image format you will not be able to edit your work at a later time. VUE is a free software that you download to your desktop, and your work is saved on your computer. VUE runs on Apple, Windows, and Linux operating systems.
7	Concept mapping commercial tools slide	Commercial tools include Inspiration and Microsoft Visio. Inspiration runs on both Apple and Windows operating systems, but Visio only runs on Windows machines. Both of these software tools include far more features

		than you need for just creating concept maps such as creating a network diagram, creating a computer lab facility management plan, and creating flow charts, but they both include basic concept mapping templates as well. Both of these tools will allow you to download a free 30-day trial version to work with before you make your purchasing decision. I am sure that there are other tools as well, but for now these are the two I have experience with myself and recommend.
8	Common features slide	Common features IS SOMETHING MISSING HERE?
9	Grid based canvas slide	When you open a concept map tool, you will find a grid-based canvas for your workspace.
10	Palette of nodes or shapes slide	Most tools will provide you with a palette of nodes or shapes to start your work.
11	Grouping and ungrouping slide	You will be able to group your shapes, nodes, and links. This is handy when you are happy with the way that a section of your concept map is laid out, but you want to move it around.
12	Draw shapes that are not nodes slide	You should also be able to draw shapes that are not nodes.
13	Send back and front slide	You should also be able to send shapes and nodes to the front or back of your canvas or workspace so that you can layer them in the order you want to regardless of the order you created them in.
14	Saving and exporting slide	When you are done with your work you will want to export it as an image into a word processing or presentation file.
15	Try it slide	Now you are ready to give it a try! Watch the tutorials that I recommend in the weekly activities and try some of the software tools. They may look a little different, but they are all about manipulating nodes and links for visualizing ideas. Decide which tool you want to use and create your concept maps. Have fun!
16	If you have any questions slide closed captioning ends	If you have any questions, email me at [Author A email] or make an appointment with me during one of the synchronous sessions.
17	Closing slide with background music and credit	Closing music by Löhstana David from http://www.jamendo.com/en

Appendix F: Breakout Activity Instructions

IT 521 Proseminar 1: Instructional Technology as a Profession Week 2 Synchronous Breakout Room Activity

With your assigned peers in Rotation A, share your definition of the field concept map draft. This will require each of you to take the time to find each other's posted draft in the Week 2 asynchronous Blackboard forum. Each participant needs to take the time to explain the following:

- Your thoughts on how you tried to draw the field in a concept map;
- How you intend to keep working on it;
- What type of professional you aim to become in the field; and
- Any technology tips about the concept-mapping tool you used.

This may seem redundant with the asynchronous activity, but the more you hear your own voice and hear others respond to your ideas you will gain new understandings about your own thoughts, and this will help you complete the Definition Concept Map and Professional Statement assignment for this class. As a group it may not be a bad idea to review the assignment guide and rubric to share ideas on how to best facilitate the breakout session in the most helpful manner for each participant. At the end of the session be prepared to share the following with the entire class:

- What were similarities that you found in participant understandings about the field?
- What were differences that you found in participant understandings about the field?
- What new insights did you gain from sharing the draft concept maps and talking about them?

You will have 40 minutes to complete this activity; thus, you will have to be efficient and use your time wisely. Come to the main room at any time if you have questions for the instructor, when the instructor is in another room, please be patient and wait for her to come back to the main room.

Name Order	Role	Responsibilities
3 rd	Conversation Facilitator	The Conversation Facilitator is in charge of making sure that the group discussion is on task by starting the conversation and checking in with all members that the group understands the assigned task. Once the conversation starts, the Conversation Facilitator is responsible for reminding the group when 10 minutes, 20 minutes, 30 minutes, and 40 minutes pass from the beginning of this activity to help the group stay on time. During the meeting, if there is a group member who forgot to turn his/her microphone/video on, then the Conversation Facilitator will politely ask the person to turn his/her microphone/video on.
1 st	Information Gatherer	The Information Gatherer is in charge of making sure that all participants have a chance to share ideas. If the group has not heard from a member in a while, the Information Gatherer will find a moment and ask "By the way we have not heard from X in a while, what do you think about Y?" The Information Gatherer will also make sure that there are no noise distractions in the room. If there is a group member whose

		microphone needs to be turned off due to feedback or background noise while the member is not talking, the Information Gatherer will politely request the member to turn his/her microphone off until the next time s/he is ready to speak.
2 nd	Spokesperson	The Group Spokesperson will make sure that main ideas of the group discussion are recorded during the breakout activity on the whiteboard. Other group members can contribute to recording on the whiteboard, but the Spokesperson is responsible for making sure that the group agrees to what is recorded on the whiteboard. During whole group discussion the Spokesperson will share these ideas with the class.
All others	Active Participants	All others in the room are responsible for being engaged in the discussion.