e-Learning Proposal:

Redesigning

PTC 601: Advanced Professional & Technical Communication

New Jersey Institute of Technology

MS Professional Technical Communication

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Summary

This e-learning proposal outlines a user-experience instructional design model for PTC 601: Advanced Professional Technical Communication at NJIT. Using student voices and experiences—both current and past—this project offers:

- An immersive participant design
- Maximum exigency and authenticity
- Instructional design opportunities for students based on an immediate requirement for their subject matter expertise
- A service learning project model minus the confines of external corporate or non-profit structures and timelines
- Student engagement in the details of their program of study
- Alumni’s continued investment in the program goals and learning outcomes
- An avenue for PTC to market the rest of the program’s core and elective course offerings

E-learning tool and course development remains a multi-billion dollar market annually; some statistics estimate the field will double again in the next few years. Massive open online courses (MOOC) are emerging in every field from general education opportunities to corporate training. TechComm students can capitalize on the opportunity to gain the skills required to develop these learning engagement programs.

This dynamic process has the potential to evolve into a continual reverse engineering road map for course updates based on feedback and new student participation. The concept could be a novel paper or conference presentation for a bleeding edge merger of usability/experience design + instructional design.

Why? Addressing a Knowledge Gap

The technical communication program at NJIT has untapped potential for a more cohesive cross-curriculum design that needs to begin with the cornerstone: PTC 601. This redesign will offer a primer course that incorporates highlights from each course offered (electives and core) in a way that gives students from any faculty a preview of what they could learn if they chose to enroll in the next course.

Student feedback in Moodle forums has noted that if certain concepts were addressed earlier, they could have been used as building blocks.
throughout the program. A major example of this would be the student portfolio requirement. Portfolio submissions and assessments could be revisited not only from the level of requiring a standard technology platform (e.g. the AFS site, Moodle e-folio, google sites), but addressing tone, design, and projecting an ethos. In hindsight, students would have structured their assignments to project a more professionally oriented presentation rather than a student based presentation. Practice for this skill set is something to build upon across the curriculum.

As a student from an educational background sparse in English and Humanities courses, I personally struggled to decipher the application of concepts such as rhetoric. Science and engineering classically do not discuss rhetoric; recent research suggests many disciplines are still not convinced that language cannot be a not neutral conduit (Katz). After four semesters, I am gaining an understanding of how rhetoric is part of daily life and a critical part of TechComm. A knowledge gap exists in the program for application of certain theories to students from non-humanities disciplines.

These two recent examples of knowledge gaps can be further supplemented by students, alumni, and faculty.

**What? Project Concept & Scope**
Fifteen weeks of project modules/course development need to address all eight core competencies for the program in a manner that introduces future course content in building block fashion. This project would continue to serve the current objectives and stakeholders of PTC 601 while approaching the course materials in a novel, experience design fashion.

**PTC 601 Quantitative Objectives to Maintain**
Independently, PTC 601 introduces students to the 8 core competencies of technical communication in a wholly online learning environment.

Within the larger context of the program(s) and NJIT, PTC 601 operates on three levels:

- As a foundation for the certificate in Technical Communication Essentials
• As an introduction to technical communication to students from other faculties who may/may not take another course in the department
• As the cornerstone of the MS in Professional Technical Communication graduate degree

Stakeholders to Consider
The PTC 601 redesign project would operate as a collaborative knowledge-making exercise:

1. Students enrolled in PTC 601 Fall 2014
2. Instructors in the PTC department
3. Present students in any of the certificate or degree programs served by PTC 601
4. Alumni of any of the certificate or degree programs in TechComm
5. NJIT as an innovative educational institution
6. Future student by an iterative design process
7. The growing field of TechComm as a society with professional designation

How? Approach and Phases of Course Development
A user-designed TechComm primer course by volunteer input rather than for credit would offer a great service learning project as a portfolio piece showcasing a number of competencies. The idea can be scaled up or down depending on interest, and broken down into small groups for team work.

Concept Development
The user-based design begins with the users as the experts. Starting with the MSPTC LinkedIn group and currently enrolled students we can explore the level of interest in this project.

Providing a timeline for the module development, we can evaluate numbers of past or present students who may be willing and able to participate. Different levels of participation could involve simply providing information, module development, or module testing.
I envision a short initial survey to list top 10 skills that students estimate to be the most useful. Alumni can input by ranking the 10 most important TechComm skills (learned in the program or not) for their job. These surveys can be coded for themes like a narrative analysis. Fifteen themes (one per week of semester) that line up with the core competencies taught across the curriculum (as agreed by the faculty) can be posted. Participants can sign up to work on the module of their choice.

At a minimum, the concept development engages current students to have a voice and give back knowledge they have gained and maintains alumni connections to and investment in the program.

**Design & Testing**

A cohesive module outline will be given for each group. Participant groups will fill in the blanks for objectives, skills, technology, evaluation rubrics, etc.

The basic ADDIE instructional design model (in one of its many versions) can be employed:

- Gap analysis for competencies via survey
- Design of an overall syllabus, objectives, outline, with faculty
- Module development by smaller groups
- Implementation can involve the pilot course modules tested by past and present students or other groups
- Evaluation by future students will determine if we met the objectives for learners and become iterative with their input and designs in the future

**Expected Deliverables**

For students as instructional designers

A number of competencies and combination skill sets will immediately be employed in this project:

- Rhetoric: learner needs assessment, audience analysis, content and context analysis
- Writing and editing content: drafts and iterations
- Designing a module within the context of a larger design/purpose
• Collaboration and team work within a small group and a larger one
• Technology proficiency with Moodle as the industry standard for presenting e-learning courses and whatever technology used within their module
• Special expertise for design within the participant’s chosen module
• Communication Project Management: use of SMARTe objectives and one of the many ADDIE models of instructional design to collaborate on a major project in service of our own industry.
• Usability and experience testing in the pilot implementation and evaluation stages.

For students in the redesigned PTC601 course
Students enrolled in the fall 2014 section should realize a few novel benefits in addition to the course learning outcomes:

• Material presented in each module will offer a different perspective on relevancy based on the experience of a broad range of current students from diverse backgrounds (from relatively new to almost graduated)
• Address the most up-to-the-minute job market skills as defined by alumni working in various fields

For PTC faculty
Highlights from each course offered in PTC showcased within PTC 601 could hold interest for faculty members:

• Cross-curriculum requirements can be addressed outside their own area of special expertise and offer a more cohesive approach to their material
• Instructors can offer more depth to their material if the introductory elements are offered elsewhere
• Interest in the material could improve future enrollments
• Feedback can be incorporated earlier
Resources Required
TBD further

Communication and Coordination Structure
TBD further