BCIT

Project Name:
Integrating Technical Writing with Visual Design & Logic

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25 August 2016

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Needs Assessment

Course Name

Integrating Technical Writing with Visual Design & Logic

Overview

This proposal describes the need for a new course that will link writing skills technical writers know with graphic skills they need in the workplace.

1. Current Situation

There is a need for entry-level technical writers who understand the communication implications of visual design and logic in technical writing. A lack of integration between written and visual media causes poorly constructed technical documents.

While many higher-learning institutions provide courses that cover technical writing and graphic design, there are no courses that provide students with ways to bring together these two disparate skill sets into a meaningful whole.

2. Need for Course

Current training doesn't prepare technical writers with a comprehensive overview of documentation creation—it's too silo oriented. The proposed course will answer two key questions in the industry:

- How can emerging technical writers gain the skills they needs to gain entry-level technical writing jobs?
- How do students synthesize the vast range of skills needed to be successful technical writers?

The need for this course has been assessed from the following sources:

- Two current curricula from Vancouver higher-learning institutions
- Skills assessment survey of technical writing students

Two Current Curricula

Research was done into two Vancouver institutions that provide technical writing and computer training: British Columbia Institute of Technology (BCIT) and Simon Fraser University (SFU). While both institutions provide a wide range of program offerings, neither provides skills training adequate to entry-level technical writers. The result of this creates a *Catch 22* for these writers, because they need job experience to gain the skills they need to get a job where they can gain skills.

Simon Fraser University offers a number of technical writing and graphic design courses, but does not integrate the skills into a comprehensive job-related training program. One exception is their *Technical Writing: Advanced Workshop*, which is an advanced-level course; although, the need is to introduce these skills at an entry level.

BCIT makes passing reference to visual logic and design in one of its writing courses, but with no software experience, students are unable to do more than observe instructor presentations. More hands-on training is needed.

Student Software Skills Survey

The following skills survey gathered information from students enrolled in the technical writing certificate program at BCIT. Students assessed their software skills according to the following skill-level criteria:

- Expert skills
- Advanced skills
- Intermediate skills
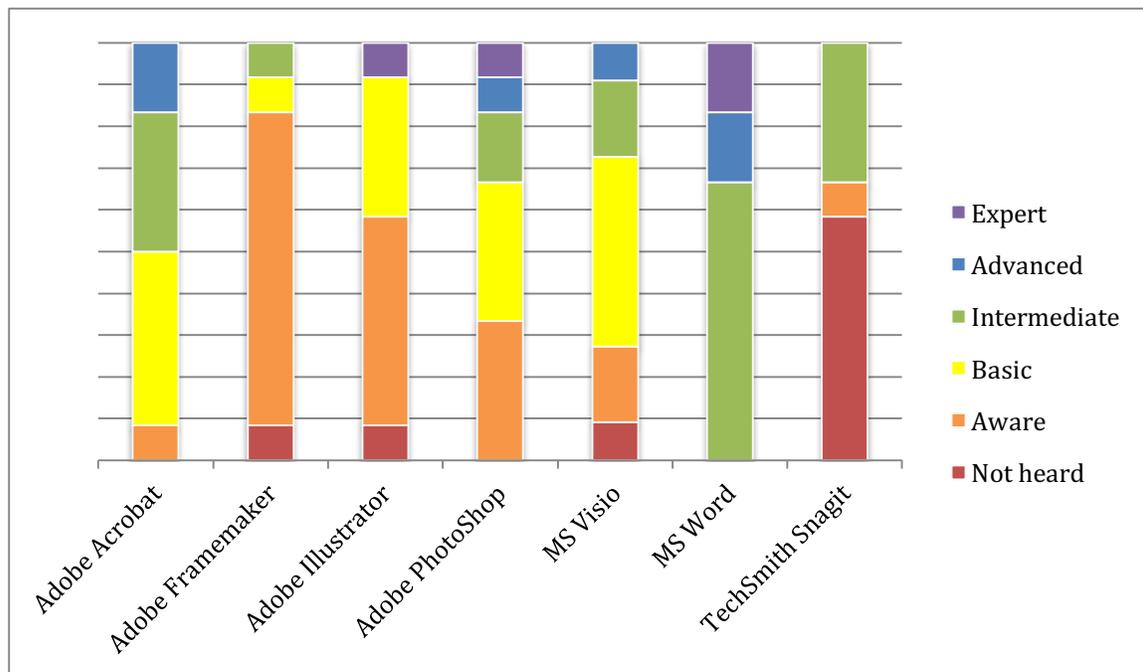- Basic skills
- Only know it by name
- Never heard of it

Figure i.　Student survey taken 15 October, 2009 - BCIT

While a number of students indicated intermediate to expert skills in some software programs (most notably Microsoft Word), the majority indicated a knowledge level of basic or less. Most notably, students scored themselves at a very low level of knowledge about Adobe Framemaker and TechSmith Snagit, two programs listed in most jobs as core.

Conclusion

Current training approaches do not adequately prepare students of technical writer programs how to do the following needed skills:

- Use job-related software
- Manipulate images
- Integrate images in document narratives

3. Purpose of Course

The main purpose of this course will be to expose students to industry-standards for integrating visual structure and logic into technical documents. To accomplish this, the course balances classroom theory with computer lab experience. Students will learn basic skills needed by technical writers to integrate text and visuals using popular software. These skills are *foot in the door* skills, giving students the opportunity to apply for jobs they might not otherwise be qualified for.

4. Course Description

This course introduces students to the principles of integrating technical writing with visual design and logic to make documents effective, attractive, and accessible. Methods for assessing the impact of graphic components (page layout, templates, tables, lists, illustrations, and photographs) on the overall narrative in technical documents is complemented with hands-on experience planning, designing, and inserting graphic elements into documents. Students learn several industry-standard software programs to gain job-ready skills in document creation.

Implementation

Delivery methods will involve classroom and computer lab learning situations.

Course Content

This course is organized into two main categories: classroom training and computer-based training.

Classroom Training

Classroom training presents the theories and practices of visual design and logic:

- Apply principles of visual design
- Apply formal elements of design
- Write structured documents
- Assess visual elements
- Design templates
- Explore graphical software types and uses

Computer-based Training (labs)

Computer-based training tasks focus on objectives learned in classroom. The course provides hands-on experience with the following software programs:

- Edit text and styles using MS Word
- Capture screen shots using TechSmith Snagit
- Create graphics using Adobe Illustrator
- Edit photographs using Adobe Photoshop
- Design schematics using MS Visio
- Design templates using Adobe FrameMaker
- Output source files using Adobe Acrobat Pro

5. Demand for Course

This course would be appropriate to those with the following backgrounds:

- New technical writers
- Established technical writers wanting to upgrade their skills
- Graphic designers who work with technical content
- Project managers and communications directors wanting an overview of the documentation process

Appendix I. Resources

Books

- Intercultural Communication in the Global Workplace, Linda Beamer & Iris Varner
- Presentation Zen, Garr Reynolds
- Technical Editing, Carolyn D. Rude

Survey Results

- BCIT software skills survey of current participants in technical writing certificate program.

Publications

- *The Importance of Document Design*, Whitney Quesenbery, Society for Technical Communication
- *Why Illustrations Aid Understanding*, David Kirsh, Department of Cognitive Science, University of California, San Diego

Web Sites

- architeacher.org   Elements of Architectural Design: Technical
- bcit.ca   BCIT Learning Centre
- bcit.ca   programs & courses
- sfu.ca/cstudies/   programs & courses