Faculty Support at San Jose State University

An instructional design internship designing end-user support documents for the Incubator Classroom

Executive Summary

The Center for Faculty Development at San José State University hired two interns, Menko Johnson and Allegra Ullrey, to develop support documentation and training for faculty members teaching in San José State's Incubator Classroom in Fall 2006. The goal was to create an instructional guide to several of the new technologies in the room. For each major technology a four section guide was created with the following elements, literature review, classroom implementation, job aid, and poster. Once complete, the guides would be distributed to all Incubator Classroom faculty to help guide their teaching practice.

The project was overseen and guided by Mary Fran Breiling, the Interim Associate Director of the Center for Faculty Development. The documentation focused on four major new technologies introduced in the classroom: SMART Boards, Tablet PCs, Classroom Presenter 2-way collaboration software, and Turning Point student response systems. All of these technologies were selected by a committee guiding the design and development of the learning space before the interns began working.

Analysis and development of the project began in June 2006 and the project was completed September 20th, with the opening of the Incubator Classroom. Faculty support continued outside of the scope of the project starting September 20th, 2006.

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Analysis

The SJSU Incubator classroom was slated to open on August 23, 2006, then pushed back to September 20th. From the beginning of June until that time, the interns' job was to learn how to use, to research best practices, and design instructional materials for four major pieces of technology new to the SJSU Incubator Classroom. These four technologies were: Table PCs, Classroom Presenter software, SMARTboards, and Turning Point Student Response System (SRS).

The stakeholders of this project include:

- ☐ The faculty of San José State
- ☐ The student body of San José State
- ☐ Mary Jo Gorney-Moreno, Associate Vice President of Academic Technology and the rest of the AT dept.
- ☐ Mary Fran Breiling, Acting Director of Center For Faculty Development.
- ☐ Menko Johnson, Instructional Designer, AT
- ☐ Allegra Ullrey, EDIT Intern

While the technologies to go into Incubator Classroom were predetermined by the Academic Technology Department, Menko Johnson and Allegra Ullrey were directed toward our content by the requests of the Usage Proposals from the faculty. Nearly twenty faculty members responded to the Center for Faculty Development's Call for Proposals in late June 2006. By early July, the Academic Technology Department decided which faculty members had the most feasible and effective proposals to used the various technologies and granted them classroom time in the coming semester. From this, Menko and Allegra determined the direction of the instructional materials to be created. They

determined that for each technology there would need to be time to learn how to use it, to research best practices, and to create the job aides. (It was mapped out to start with the TabletPC and Classroom Presenter technologies first, then moving to the SMARTBoards and Turning Point SRS. An Excel spreadsheet was created and maintained to keep track of progress and keep Mary Fran Breiling apprised of the work being created (Appendix E).

Figure 1 shows a schedule of work completed on the project

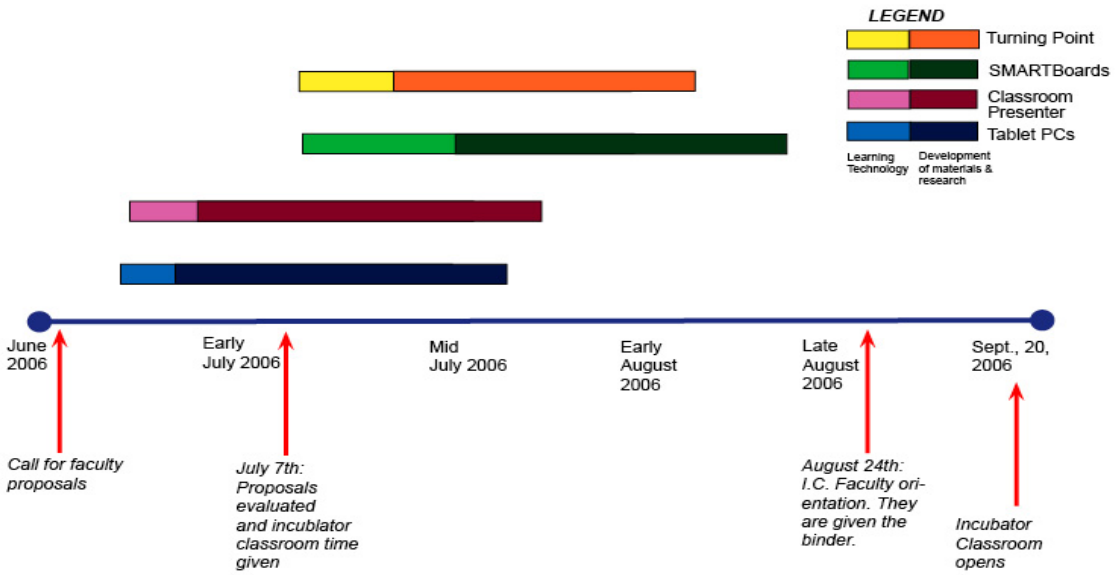

Figure 1: Timeline for Materials Development

Design and Development

In the beginning, Menko and Allegra spent a large amount of time practicing and learning how to use the technologies. While adapting to the basic functions of each item, attention was paid to how a student or a faculty member would view using these pieces for the first time. In addition, experiencing these technologies "cold" as it were, was a good way to decide what a new user would want to know first and foremost before getting into the advanced function of an item.

From there, a great deal of time was spent investigating each technologies manufacturer's website and training materials to help in the development of job aides, and to provide extra resources for those who would eventually use them. The University of Washington's website for Classroom Presenter (as this school created the software) was extremely helpful in instruction of the basic uses of the software and best practices. Likewise, SMART Tech Corp.'s website – www.smarttech.com – had extensive and helpful tutorials and online trainings. This was also true of the Turning Point SRS company websites, which were essential in learning how to use the RF "clickers" with the laptops and their software. The learning curve for all of these technologies was very steep and used many of our internship hours.

After this research was completed, Menko and Allegra collaborated in designing the job aide materials, research, literature review, and posters. Generally, Menko took on the responsibility for the research and literature reviews, while Allegra created the format for and designed all the job aides and binder materials.

A binder was created with sections for each technology. Within that, job aides and quick guides all in the same formatting were inserted, as were bullet point lists of best practices, related websites, and a literature review. These binders will be housed as reference copies in the Incubator Classroom. Before this, however, Menko Johnson gave the faculty members who will be teaching in the Incubator Classroom individual copies. Eventually, PDF files of all these materials will be available on the CFD/ Incubator Classroom's website.

During the development stages of the materials, the majority of the first drafts of the job aides were sent to the instructional technology consultants who work for the University IT Help Desk for formative evaluation. They reviewed the materials and gave a modicum of suggestions for change. Edits were incorporated and materials changed based upon a second round of comments from the same team of technology consultants.

Implementation

The Incubator Classroom project was much larger than the scale of the internship, and students and faculty will have their first taste on September 20, 2006 when the classroom is scheduled to open. The narrow focus and time constraints of the unpaid internship dictated that the project focused primarily on design and development of the materials, with little time spent examining implementation and evaluation. However, outside of the scope of the internship Menko Johnson has consulted with several faculty, developed new training courses around the use of SMART Boards, and distributed the materials to Incubator and non-Incubator faculty members as a teaching tool and to gather feedback. During the Fall semester of 2006, Menko will be spending twenty-five hours a week supporting Incubator faculty, and will have an opportunity to fully examine

and evaluate the implementation of the materials and their role in preparing faculty to utilize the space to the best of their abilities. Our sense is that this documentation will be used more for reference than as a stand-alone learning tool, as faculty become more familiar with the features of the learning space.

Additionally, faculty are not under no pressure to reach a specified level of proficiency with any part of the classroom technology, so we suspect they will not plan ahead or spend time practicing what they hope to implement before the class begins. Since Menko will be providing on-site assistance and support, the incentive to learn on their own before class time is somewhat low.

Evaluation

During the development of the materials, several different formative evaluations of the materials were undertaken by different members of the Academic Technology department at San José State University, including Mary Fran Breiling and other Instructional Technology Consultants. The feedback gained from these review sessions was incorporated into the next draft of the documentation and through several iterations and experimentation sessions. As of this writing, no summative evaluation of the materials has been conducted by either the users or Mary Fran Breiling, but this process will occur outside the timeframe of the internship. During the Fall 2006 semester Incubator faculty will be invited to participate in several learning opportunities, including workshops, an online learning community, and individual consultation with an instructional designer from the Center for Faculty Development. During the course of these interactions, more summative evaluation will take place that will help determine what further changes to the documents needs to occur and how useful these tools were to them. At the conclusion of

the fall semester, a formal, summative evaluation will be undertaken by the Center for Faculty Development.

Appendices

Appendix A: Resume

Menko Johnson

228 Madrone Street. Apt#5 Redwood City, CA 94061
650.780.0902 (home), 650.465.3787 (cell) menkoj@gmail.com

Objective:

- Obtain a position as an instructional designer
- 6 years of experience working in Technology fields as a Teacher, Curriculum Designer, Trainer and Professional Development Specialist.

Experience:

Instructional Designer, SJSU, Center for Faculty Development, May 2006 – Current.

- Consult directly with faculty on instructional design and technology implementation issues surrounding teaching and learning.
- Main instructional, technological and support person for SJSU's Incubator Classroom.
- Reviewed and evaluated faculty teaching proposals to determine which faculty members would fit well with the new high-tech classroom.
- Responsible for designing training ,curriculum, and self-guided tutorials and supporting faculty teaching and planning in the Incubator Classroom.
- Design and teach courses in the Center for Faculty Development on technology and pedagogy to support faculty at SJSU.
- Design surveys and other assessments to evaluate the impact of technology integration on the student experience at SJSU.
- Managed and maintained the Center for Faculty Development Website.

Instructional Designer, Stanford GSB, September – October 2005.

- Contracted to create an implementation plan for introducing Salesforce.com into a small office environment.
- Designed and managed the instructional system including needs assessment, instruction development, online help documentation, web-based survey creation, database management and interface design.
- Responsible for creating formative and summative survey instruments, designing training curriculum, and self-guided tutorials for end users.

District Technology Specialist, Columbus Public Schools, August 2001 – June 2005.

- Extensive experience in all levels of professional development, curriculum design, and instructional technology in a large urban district.
- Created professional development materials for several district projects and provided online and face-to-face professional development to teachers.

- Developed and taught additional professional development courses for teachers on technology use and integration.
- Certified as a Blackboard.com "Facilitator," with over 200 hours of training and extensive experience teaching online courses.
- Selected to be part of a 5-member team that authored the new curriculum guide for all Middle School technology teachers in the district.

Professional Specialist, Kingswood Data Center June 2004 – June 2005.

- Evaluated and assessed the effectiveness of district programs and initiatives.
- Conducted needs analyses to design evaluation and write reports.
- Planned, created, and executed surveys using Magenta and Remark survey software, undertook extensive work manipulating large district databases using SAS and Access/SQL.

Technology Instructor, Crestview Middle School, August 2001 - June 2004.

- Taught 6th, 7th, and 8th graders how to use computers as part of an integrated curriculum with core content areas.
- Focused on word processing, HTML, presentation software, graphics, desktop publishing and internet skills.
- Developed integrated curriculum focused on hands-on, project-based learning.
- Spear-headed school team that wrote and administered a $180,000 state grant for using wireless technology and online content delivery.

Skills:

- Computer knowledge of both Windows (95/98/2000/XP) and Macintosh (7-10.4), HTML, UNIX, Networking.
- Strong background in Word, Excel, Powerpoint, Access, Frontpage, SAS, SPSS, and SQL.
- Design experience with Macromedia/Abobe products, Dreamweaver, Fireworks, Flash, Illustrator, Photoshop, & InDesign
- Extensive work on Technology Professional Development within Columbus Public Schools focused on creating materials and training teachers
- Thrive in dynamic and challenging work environments
- Computer technical support experience, able to deal patiently and efficiently with phone clients.
- Very flexible and able to learn new skills and programs quickly and effectively.

Education/Awards:

Graduate:

M.A. Education, Instructional Technology focus, San Jose State University (expected June 2007)

M.Ed. Education, Ohio State University 2001, Ohio 5 Year Teaching License, 1st-8th Elementary (2010), CA Multi-Subjects Credential.

College:

Bachelor of Arts in Psychology, University of California, Santa Cruz, March 1994.
Highest Honors in Psychology, College Honors, Recipient of Dean's Award for Research Excellence

References:

Robertta Barba, IT Professor, San Jose State University (408) 924-3613 rbarba@email.sjsu.edu
Steven McGriff, IT Professor, San Jose State University, (408) 924-3654 smcgriff@email.sjsu.edu
John Clapp, Art/Design Professor, San Jose State University, (925) 413-1176, jdclapp@comcast.net
Bob Carpenter, Music Dept Chair, Columbus Public Schools, (614) 263-8210, acotmusic@aol.com
Linda Resch, Instructional Technologist, Cyberbee Learning Systems, (614) 436-8238, lresch@cyberbeelearning.com

Appendix B: Student Information Sheets

STUDENT INFORMATION SHEET

Name Menko Johnson Email menkoj@gmail.com

Phone (H) 650-780-0902 Phone (W) _____

PRESENT EMPLOYMENT: San José State University, Center for Faculty Development
SIGNIFICANT PAST EMPLOYMENT OR OTHER EXPERIENCE: Instructional Design at Stanford University. Worked for Evaluation Services and as a Technology Classroom Teacher in Columbus Public Schools.
MAJOR INSTRUCTIONAL TECHNOLOGY INTEREST, PROFESSIONAL OBJECTIVE: Gain experience doing curriculum design, delivery or training, preferably with an elearning or other educationally focused company.
EDUCATIONAL EXPERIENCE TO DATE: (Degrees: what, when, where, majors) BA Psychology, University of California, Santa Cruz, 1994 M.Ed. Elementary Education, Ohio State University, 2001
SPECIAL SKILLS YOU HAVE (Graphic, photographic, management, curriculum etc.)
IT COURSES ALREADY COMPLETED (Please list by title rather than number)
TELL ME WHAT YOU WOULD LIKE TO DO FOR THE PRACTICUM
ANY ISSUES THAT MAY IMPACT YOUR PRACTICUM (vacation, work schedule etc.)

Appendix C: Internship Placement Report Summaries

Appendix D: Non-disclosure agreement

Appendix E: Logs

Menko Johnson Internship Records

Date	Task	Hours		Total Time	92.5	hours
6/22/06	Classroom Presenter	2.5	First attempts at getting Classroom Presenter to work with 2 tablet PCs. Investigated how the wireless networking would function.			
6/23/06	Tablet PC/Classroom Presenter	3.5	Looked into uses of tablet PCs in Education. Practiced with Ad-hoc networks and how presenter would work in the Incubator classroom. Set goals for the next week on development of materials with Allegra.			
6/26/06	Smart Board	1	Examined first smart board and setup and old one for practice use in the office.			
6/28/06	Turning Point	2	Demonstration with Turning Point trainer on how to create presentations			
7/3/06	Smart Board	3	Hooked up computer to smart board, practiced using it and designing ways of using it in the new classroom. Divied up Classroom Presenter jobs and planned to meet on Wednesday.			
7/5/06	Tablet PC/Classroom Presenter	3	Worked with Allegra on an outline for Classroom Presenter Job Aid and Ad Hoc Networks. Found out we have to use wired networking to comply with Comcast wireless regulations			
7/6/06	Document Camera, Smart Board	2	Researched document camera functions and documentation to prepare a job aid and instructional uses for document cameras			
7/10/06	Turning Point	2	Found research articles on classroom uses and implementation strategies for use. Looked closely at a few case studies at other universities that deployed different SRS school-wide. Also reviewed the actual software and notes I took during the demonstration last week. Need to create a powerpoint document with the sample graphs in it to start simulating use of the instrument.			
7/11/06	Smart Board	2	Investigated innovative uses of Smartboards, especially auxilliary boards that complement the main screen. I still need to investigate the physical layout of the A/V setup and how these boards are going to run. Prepared for the Calibration and Demonstration on Wednesday morning.			
7/14/06	Turning Point, Smart Board,	2	Planned out timeline and method of attack. Talked with Turning Point about			
7/20/06	Turning Point	4	Designed outline for documentation, sample PPT			
7/25/06	Smart Board	6	Worked with Allegra to outline smartboard documentation and necessary components. Started to assemble packet			
7/26/06	Smart Board	3	Worked with Allegra to outline smartboard documentation and necessary components			
7/28/06	Research	3	Worked on finding more articles and summarizing, also worked with Allegra to organize documentation we currently have			
7/29/06	Research	4	MORE articles, finding it difficult to find good research that is quantitative in nature			
7/30/06	Research	3	Researched articles about Smartboard for Classroom implementation component			
8/1/06	Turning Point	3	Started tutorial pieces and organizing layout			
8/2/06	Research	4	Researched SRS and Smartboard			
8/4/06	Smart Board	2	Experimented with recording video for podcasting and archiving with Peter			
8/5/06	Smart Board	2.5	Investigated the WS100 wireless controller for smartboard & found documentation			

8/7/06	Video Recording	3	Met with Apple to see how we can try to capture the smart board and other video signals for archiving
8/9/06	Classroom Presenter	2	Finished the 2nd draft of the Classroom Presenter information, included new sections based on Mary Fran's input
8/10/06	Smart Board	3	Training on the SMART Board
8/14/06	Research	2	Searched for Student Response information
8/15/06	SMART Board Airliner Docs and Play	2	Learned to use the new airliner and incorporated documents. Started layout changes, waiting for feedback
8/21/06	Creating Packet	4	Worked on putting the packet together, having to put focus on the quick start guides, and not the implementation and research pieces. They will have to wait until after the internship & opening
8/22/06	Creating Packet	3	Printed a test packet for the Incubator Faculty to have at the lunch
8/23/06	Creating Packet & Lunch	4	More layout and work in indesign to make the packet. Reviewed parts with Allegra and started TOC
8/24/06	Edits	4	Revised several parts of the indesign docs, created new sections for the research sections
8/25/06	Packet Assembly	5	Created new pieces for the packet
8/29/06	Assembled binders	3	Assembled and packaged packets for distribution

Appendix F: Site Supervisor Evaluation Form

Appendix G: Intern Evaluation of Host Site Form

Student Evaluation of I.T. Practicum Experience

Date: _____9/10/2006_____-

Student Name: ___Menko Johnson_____ Phone: ____650-780-0902_____

Company: ___San Jose State University Supervisor: ____Mary Fran Breiling_____

Organization type (government, K-12, corporate, etc.): _____Higher Education_____

Rate the skills and activities that you were involved in (rate only those that apply).
(1-poor 2-needs improvement 3-average 4-above average 5- excellent)

3_ Needs Assessment	4_ Task Analysis	4_ Instructional Design
5_ Instructional Development	__ Implementation	3_ Evaluation/Testing
2_ Web-Based Design	__ Media Selection	__ Survey Development
5_ Communication Skills	3_ Promptness/Reliability	4_ Initiative/Resourcefulness
4_ Technical Skills	3_ Research/Data Analysis	4_ Administration Tasks
__ Other_____	__ Other_____	__ Other_____

Please rate your experience as a practicum intern (rate only those that apply).
(1-poor 2-needs improvement 3-average 4-above average 5- excellent)

2_ Treated as a professional	5_ Current skills utilized	3_ New skills developed
5_ Included in the organization	5_ Adequate office space	5_ Adequate resources
2_ Supervision	5_ Description of tasks/duties	2_ Professional role models
5_ Interest shown in intern		

How will the practicum experience effect your employment decisions for the future (check all that apply)?

✓ Increase level of responsibility	__ Changing from current field	✓ Acquired new knowledge
__ Discovery of "ideal" job	__ Made new contacts	__ Other_____

Would you recommend that other practicum students complete their practicum at this organization?
Yes or No. Briefly provide reasoning.

No. The timing of this project with the overall launch of a new technology center meant that very little oversight was given. While normally this is desirable in a project, in this case it lead to a disconnect between the timeline for completion and the amount of effort required to learn the new technologies. Because the experience is intended to guide students in a mentoring style relationship, I don't feel the current staff at the center is prepared to grow experienced IT students.

Appendix H: Recommendation Letter

San José State
UNIVERSITY

Center for Faculty Development & Support
Dr. Mary Jo Gorney-Moreno
Interim Director

One Washington Square
IRC 213
San José, CA 95192-0245
Voice: 408-924-2303
Fax: 408-924-3065

October 22, 2006

Menko Johnson performed in an excellent manner as an instructional technologist in the Center for Faculty Development at San Jose State University during the summer of 2006. Menko is an extremely dedicated and talented instructional designer. He designed an extremely well organized, attractive and effective series of materials that provide instruction in the use of the technologies within the Incubator Classroom, an experimental learning space in the newly remodeled Clark Hall.

For each of the following technologies, Menko designed a tutorial, a quick start guide and promotional materials: SMART Board software, Tablet PCs, Classroom Presenter, a software that permits collaboration among other Tablet PC users, and Turning Point student response system. The instructional materials that Menko designed are an excellent resource for the university campus and will be extremely useful to the broader educational community.

In addition to designing the resource materials for the Incubator Classroom, Menko has been a very effective team member in the implementation phase of opening the Incubator Classroom. He solicited support from the Stanford Wallenberg Hall team, researched the technologies and worked with the CompView audiovisual contractors to find solutions to implementation problems.

Menko has excellent interpersonal skills and a strong commitment to excellence. He performed extremely well in her position as an intern for the Masters of Arts in Instructional Technology program. I heartily recommend him for a beginning instructional technology position.

Sincerely,

Mary Fran Breiling
Interim Associate Director, Center for Faculty Development
Director, Wireless Laptop Project

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