Trainers of Student Employees in University of Hawai'i Libraries:

A Case Study

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Abstract

The University of Hawaiʻi (UH) Libraries, encompassing over a dozen facilities on thirteen campuses statewide, use student employees as the primary service providers to charge out library materials. The level of service provided at these service points is thus determined by the training the student employees receive from the full-time staff. However, the researcher found scarce information on how these students were actually trained. The researcher assumes that the student employees were trained by non-librarians—University of Hawaiʻi library technicians and library assistants—using a WebCT (Web Course Tool) resource that provides access to a variety of training tools.

This case study focused on the use of WebCT resource materials for training at the University of Hawaiʻi, and examined the diffusion of training innovations through the library social system. Three primary questions guide this research: How are non-librarian trainers of student employees at the University of Hawaiʻi libraries using the Circulation Services and Training WebCT? How do the trainers benefit from the WebCT resource? And what can be done to improve the WebCT resource?

The findings show that the WebCT resource serves as a repository for standardized material and directly supports the sharing of local as well as general materials. There are numerous benefits, including reduced work for individuals due to sharing of resources in a central location. Improvements needed include removing content from the secured environment so that it might be more easily available, updated, and expanded; improving training materials and access to them by trainers; and most importantly providing support for the trainers.

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CHAPTER I

Introduction

In the University of Hawai'i libraries, student employees constitute a major

portion of the work force. To foster good library services, it is critical that these

employees receive the best training possible. Experienced library staff ideally provide the

student employees with learning experiences that take into account individual learning

styles, thereby ensuring that the students both learn the necessary tasks, and are

motivated to work at the libraries throughout their college careers. The library staff

provides this training. This work is in addition to their regular job duties, and entails little

release time or other support. The training also frequently happens at the beginning of the

academic semester, when the influx of start up services and new students makes it a very

busy time for library employees.

To enable library staff members to succeed as trainers, while also fulfilling their

regular duties, a WebCT-based resource was created for the University of Hawai'i

Voyager Circulation Services Steering Committee (UHVCSSC). This resource stores

materials in two main areas: Circulation Services and Circulation Training. The

committee members and many of their co-workers heavily use the Circulation Services

section. In contrast, the committee members or their staff do not use the Circulation

Training section. Its main users are actually non-library staff, who use the materials to

create WebCT modules on Information Literacy. The WebCT materials can provide an

experience that incorporates a variety of instructional methods and tools available in the

academic library setting. The goals of this case study, then, include determining if the

training materials available via the WebCT resource benefit the trainers of library student workers, and how the materials can be improved.

The trainers in this study instruct student employees in providing circulation services in a University of Hawaiʻi university or college library. The primary services the student employees provide include charging and discharging library materials to authorized library patrons. Other duties include shelving materials, searching for lost materials, processing holds (a request to be the next person to get a book), processing recalls (requesting that a patron return materials within a specific time frame so it can be used by another patron), providing general information, and assisting patrons with use of the library's online system.

Library trainers have access to learning tools designed for use with university and college students, and to specialized tools designed for use by student employees. These tools, which are used in addition to mentoring and coaching, include web-based products, handouts, illustrated procedures, tip sheets, and videos. These innovations hopefully improve training and minimize staff involvement. The researcher focused on the WebCT resource, which serves as a clearinghouse for training materials. The trainees are accustomed to instructional innovations used in their academic courses, but in this study, the researcher examined the trainer's use of the WebCT resource.

WebCT is courseware used by classes in the UH system to provide a virtual space that directly supports both online and face-to-face classes. This courseware is being used in a unique way to support the UHVCSSC. The committee is being treated as if it was an ongoing class, and the WebCT resource supports not only the materials for the committee to function, but also the work of UH libraries statewide. The main pages of this resource

are depicted in the following three figures. The site has open enrollment to anyone in the

University of Hawai'i System, and may be found at

http://wct01.Hawai'i.edu/public/uhsyslibrary1/
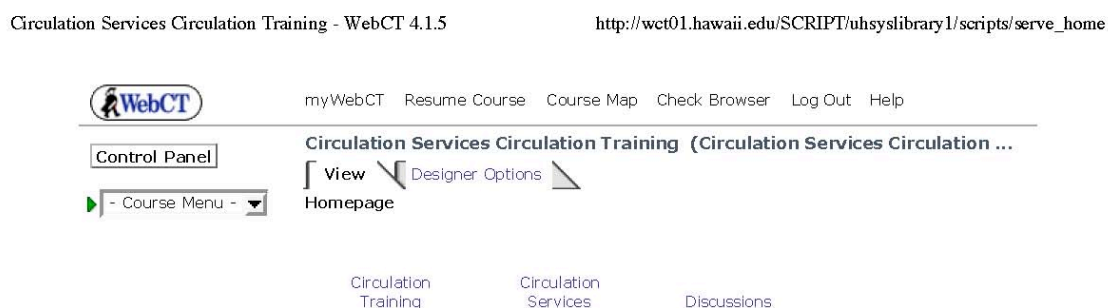
Figure 1. WebCT resource main page.
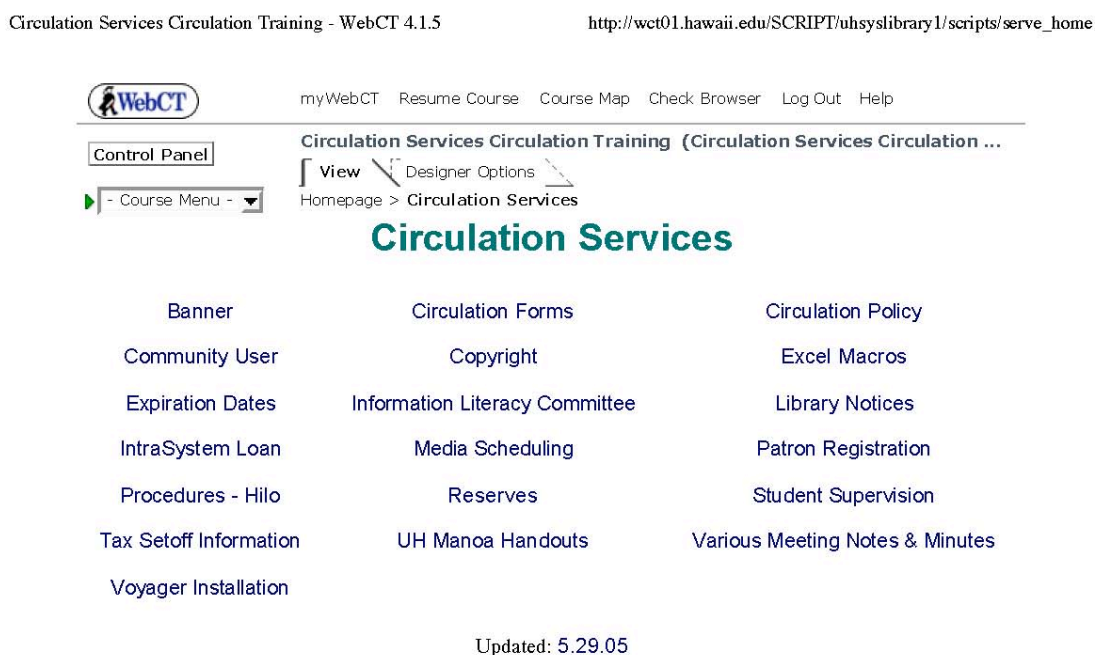
Figure 2. WebCT resource Circulation Services page.

Circulation Services Circulation Training - WebCT 4.1.5   http://wct01.hawaii.edu/SCRIPT/uhsyslibrary1/scripts/serve_home

Figure 3. WebCT resource Circulation Training page.

Most items found on the Circulation Training section are links to publicly available web pages, such as Voyager tutorials, training tutorials, student evaluation and hiring, and Quick Facts.

Statement of Problem

The University of Hawaiʻi has thirteen campuses statewide, each of which has at least one library. In the University of Hawaiʻi libraries, non-librarians train the majority of the student workers, but little information is available on how non-librarians train student employees. Staff members have been provided with a WebCT resource that includes a component on training. The Circulation Services component of this resource includes forms and documents which UHVCSSC members and other library circulation staff are required to use, but there is scarce data about how the Circulation Training area is used. Consequently, a variety of questions may be addressed. What training is being offered student employees? How are the training materials accessed? Are trainers using the WebCT training materials? What training materials are they using that are not in the WebCT resource? Are student employees being trained in a one-on-one environment?

How are the tasks presented and explained? What techniques and tools are used? Are written procedure manuals used to give students the information they need, are web-based products used, or are students using trial and error to figure it out on their own? Is there a system of training, or are students trained haphazardly, as new tasks arise? Are the trainers provided with tools to use in training? Are the trainers given instructions on how to train? Are the trainers given time away from their routine job tasks to train? Do the trainers benefit from the currently available resources? How can existing resources be improved?

To provide a general and practical framework for understanding the use of the WebCT resource by trainers of student employees, the researcher distilled these areas of concern into three general questions:

How are the trainers using the WebCT resource?

How do the trainers benefit from the resource?

How can the resource be improved?

Little information currently speaks directly to these questions. In fact, few qualitative studies knowledgeably observe or analyze non-librarian trainers of student employees. Farmer (1997) and Baldwin, Wilkinson, and Barkley (2000) focus on the supervision, evaluation, and learning styles of library student employees. These studies offer instruction and advice for trainers, but do not examine the trainers themselves. Non-librarians are distinctly different in that they usually have significantly less training and education than librarians and yet frequently work directly with the public who assumes they are librarians. As a search of Digital Dissertations Abstracts, the largest online database of original research materials, confirms, studies on student employee training

emphasize the students or librarian trainers, but none focus on non-librarian trainers. This study provides that missing perspective.

<div align="center">Purpose of Study</div>

In considering how non-librarian staff members train student employees using the WebCT resource, the researcher focused on three community college campuses in the University of Hawai'i System. The use of the WebCT site was considered within the context of the UH libraries' social system, and the researcher analyzed the data as a multi-case study where the reports consist of a cross-case analysis (Yin 2003, p. 148). The study thus provides information on the use of the WebCT resource, with the goal of gathering information about improving this tool.

The researcher correctly assumed that the trainers at UH are taught how to train student employees in a one-on-one environment, using the techniques of modeling and trial and error, with few written or electronic resources to assist the learner with retention, and with direct observation as the main assessment tool. A combination of predecessors, co-workers, bosses, high-level student employees, or their supervisors taught the trainers. Little time is allocated for the training of new staff, and much is learned on-the-job. In the best of situations, there were manuals to assist in the learning process. Verbal instruction, modeling, and trial and error, however, are time-consuming for the trainer. The incorporation of appropriate standardized tools for instruction could thus improve the effectiveness of the training and the trainer's use of time. The use of the training materials provided in the WebCT resource innovation, developed through an instructional design process and subject to formative evaluations, may improve effectiveness and help standardize training. Using tested materials means that the trainer does not have to

develop new material, or may be able to customize or update existing training tools, thus potentially saving precious time and possibly increasing trainer efficiency, once the new tools are mastered.

Student employees are first and foremost students at the University of Hawai'i, and their educational experience generally includes innovative instructional tools. The student-trainees have thus come to expect on-the-job instruction to make use of the innovative educational techniques used in classes to engage students and improve learning (Alexander, 2000). The non-librarian trainers, however, have less current educational experience than the trainees. Trainers are expected to have at least a high school education, but a B.A. is not required. Thus the trainers overall cannot be expected to be familiar with the trainee's educational experience. The trainers, in short, often have little experience with the innovative instruction tools used in the university environment, so the training cannot meet the student trainees' expectations without direct support of the trainers, by librarian-developed innovations.

These non-librarian staff members are generally given little time to prepare training materials or to do the training, as their normal jobs still need to be done. The trainers also need the trainees to learn quickly, due to library understaffing and the need for immediate assistance. The WebCT resource provides training tools that can be freely used by the trainers. The trainers can then have the student employees use these tools from within WebCT where they are collected for ease of use, or from other diverse publicly available websites. It is not possible to link directly to individual pages within WebCT. The UHVCSSC collects training tools from member libraries. Therefore, although the WebCT resource makes use of current educational techniques, the

foreignness of these techniques to the trainer may be a barrier to their use. Furthermore, while the UHVCSSC requires that its members can access and utilize any of the materials located on the Services area of the WebCT resource, the use of the training area is left to the discretion of the individual members. The WebCT resource allows for use of these materials while protecting them from unauthorized viewing. To register for access to WebCT, a UH username and password are needed. This organization, though, leads to the three questions that are the focus of this study.

Research Questions

- ✓ How are the trainers using the WebCT resource?
- ✓ How do the trainers benefit from the WebCT resource?
- ✓ How can the WebCT resource be improved or changed?

The WebCT resource has been available for two years. It was created by members of the UHVCSSC as a secure website to post the most current versions of shared documents, including training materials. In answer to the first question, though—how are the trainers using the WebCT resource—more than two years after its creation, there is still no documentation of its use.

The WebCT resource provides access to shared policies, procedures, and training materials so the trainer does not have to re-create them. The hope was that the shared resources of the WebCT site would save time and enable standardized training. But again, data is lacking to answer question two: how, in fact, does the WebCT resource benefit trainers?

One of the best ways to review a product is to look for improvements and changes. The librarian who created and maintains the WebCT resource will have time in 2006–2007 to improve or change the way access is provided to the currently supported materials. Research question three—what changes or improvements in the WebCT resource would benefit the trainers—will thus provide guidelines, ideas, and inspiration for the further development of the WebCT resource, as well as a foundation for future projects.

Definition of Terms

The specialized language used in this study requires a definition of terms to clarify the discussion. For the purpose of this study, the following definitions apply:

Adoption refers to a decision to make full use of an innovation as the best course of action available (Rogers, 2003).

Adoption categories refer to classifications of the members of a social system based on their innovativeness (Rogers, 2003).

Cautious Adopter refers to an adoption category. This group has a critical role in the social system: waiting to adopt innovations until they are ready or rejecting innovations that are dangerous or inappropriate. Cautious adopters include members of what in other contexts are called the Late Majority, which according to Rogers is skeptical, cautious, pressured by peers, and constrained by economic necessity, and the Laggards, who possess no opinions, lack leadership roles, isolate themselves, are suspicious of innovations, and deliberate—making the innovation-decision process lengthy—and who view resources as limited.

Circulation refers to the process by which library materials are charged and discharged to library users.

Diffusion refers to the process in which an innovation is communicated through certain channels over time among members of a social system (Rogers, 2003).

E-learning refers to any technologically mediated learning, whether from a distance or face to face in a classroom setting.

Early Adopters are an integral part of the local social system. Characteristics include a high degree of opinion leadership and peer respect. They serve as role models for other members of society, and are considered successful.

Hesitant Adopters, or the Early Majority, interact frequently with peers, seldom hold positions of opinion leadership, and deliberate before adopting a new idea.

Innovation refers to an idea, practice, or object that is perceived as new by an individual or other unit of adoption (Rogers, 2003).

Innovators, as described by Rogers (2003), comprise the venturous 2.5 percent who create and adopt innovations first. This group can deal with a high degree of uncertainty, and can understand and apply technical concepts. They easily accept innovations, and have the resources to absorb the losses that may occur.

Innovation-decision process refers to the process through which an individual passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation and the use of the new idea, and to confirmation of this decision (Rogers, 2003).

Innovativeness refers to the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system (Rogers, 2003)

Library staff refers to employees who are categorized as library technicians or librarian assistants. They are not librarians, administrators, specialists, or student employees.

Perception or *attitude* is used broadly, and refers to an individual's degree of positive or negative feelings about the use of technology in electronic authoring.

Student employee refers to a University of Hawai'i student employed by a library to assist with tasks related to the circulation of library materials.

Trainers are the library technicians and librarian assistants who work in a circulation department of the University of Hawai'i system, and who train student employees working in the same library circulation department.

University of Hawai'i System (UH) Libraries refers to the libraries on the thirteen main campuses and educational centers in the Hawai'i an Islands.

WebCT Web Course Tool refers to courseware used to provide secure access to circulation services, procedures, and shared documents, and to materials available for use in the instruction of student employees at University of Hawai'i libraries.

<center>Assumptions and Delimitations</center>

This study assumes the trainers' familiarity with the WebCT resource and its materials for use in training library student employees, that the trainers know how to properly use the training innovations, and that accessible equipment and resources are not a limiting factor. The researcher also assumes that the WebCT resource serves as an

appropriate and accurate innovation in this particular training environment, and that since the trainers are working at university libraries in the UH system, they come from similar social systems, with similar support for the adoption and diffusion of innovations.

The study limited the examination to the University of Hawai'i System libraries, and specifically to three trainers involved in the creation and use of the WebCT resource. The UHVCSSC introduces changes to operating procedures, educates circulation staff about them, and archives changed documents in the WebCT resource. This steering committee has provided statewide standards for circulation services. An example of the results of the standardization process can be found in the following table from the WebCT resource setting out the policies for community borrowing privileges. Although the rules are not the same everywhere, the UHVCSSC has worked to create a standard policy, and then to indicate which campuses do not comply. Standardization simplifies the procedures and directly supports shared resources by clarifying the procedures and policies for the users.

The case study participants were selected by the UHVCSSC as a representative sample, and included one advanced user or innovator, one moderate user or early adopter, and a beginning user or hesitant adopter. The subjects were willing to be observed, and to discuss their activities. Because the computer-based WebCT innovation reveals a pro-technology and pro-innovations bias (Rogers, 2003), trainers willing to be studied tended to be more self-assured.

Libraries of the University of Hawai'i System Community Borrower Cards

	Community User	Hawai`i State/City Agencies	Research Organization	UH Retiree
Criteria to Get Card	18 years or older One of the following: Hawai'i Drivers License Hawai'i State ID Kingdom of Hawai'i ID Military ID	Complete application form for Hawai`i state and city agencies Request printed on departmental letterhead signed by fiscal or other authorized officer Include name(s) and ID number(s) of the individuals	Memorandum of understanding contract Photo ID and number for each individual	10 years of service in the University of Hawai`i System. The following is required: A photo ID. A memorandum from your department chair or campus personnel officer, signed and dated on official letterhead, stating that you have worked 10 or more years in the UH system.
Cost Non-refundable	6 months $30 1 year $60 Hawai`i residents 60 years and older: 6 months $20 1 year $30	First two cards, no charge Additional cards $50 each	Up to two cards $110 Additional cards $50 each	10 Years FREE
Borrowing Privileges Books	10 books	10 books	10 books	10 books
Loan Period	28 days	28 days	28 days	28 days
Renewal of Items	1 renewal	1 renewal	1 renewal	1 renewal
Borrowing Privileges AV	In-house AV viewing free with card at UH Manoa & Kapiolani Community College In-house AV viewing at other campuses $23 per item Borrowing $23 per item No AV viewing or borrowing at UH Hilo and West Hawaii In-house AV viewing free with card at UH Manoa & Kapiolani Community College			
Replacement Fee	$5 per card	$5 per card	$5 per card	$5 per card
Card Issued Non-Refundable	Immediately upon payment	7 days after signed department letterhead and application form are received. Card issued & renewed at **Hamilton Library**. For more information call (808) 956-7203. Card issued & renewed at **UH Hilo** For more information call (808) 974-7344.		Immediately upon completion of required forms.
Eligible for Borrowing at the Following Campuses *	Hawai'i Community College Kapi`olani CC Kaua'i CC Leeward CC Maui CC UH Hilo UH Mānoa: Hamilton Library & Sinclair Library UH West O'ahu Windward CC			
Services Not Available	Intrasystem loans, Interlibrary loans, Computer Labs, Group Study Rooms, Lockers, and Remote access to restricted online databases. No in-house access to Library PCs or laptops with internet access at UH Hilo and UH West Hawaii			
*Not accepted at		Honolulu Community College UH Center, West Hawai'i UH School of Law UH School of Medecine		

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Figure 4: University of Hawai'i community borrowers

The trainers are library technicians and library assistants, not librarians or student

employees. These trainers do not have formal instructional design training, and

frequently have had fewer formal educational experiences than the trainees. The WebCT resource may be the trainer's only experience with courseware and web-based training tools. The trainers do not have the skill or time to create and test training tools, but due to staffing shortages, they are highly motivated to provide training. They need self-sufficient student employees as quickly as possible.

The delimitation of the pressures of time, and discomfort with change, may cause trainers to reject innovations. Trainers must balance normal workloads in addition to training, and thus may have difficulty finding time to work with new items, including the WebCT resource. This study dedicates some time primarily to the examination of the resource, which may affect the rate of adoption.

<div align="center">Significance of the Study</div>

This qualitative study of WebCT use by library staff to train student employees provides administrators, librarians, and trainers with an understanding of WebCT resource use at three UH campuses in summer 2005, in the context of the diffusion and adoption of innovations. This limited research cannot be generalized to the general population, but this understanding may influence the future of adoption and diffusion of new training innovations.

The Circulation Services area of the WebCT resource has been adopted by the UH circulation services community. The community must use the WebCT resource to access standardized documents and procedures. This area has gone through all the progressive diffusion steps, but the training area, which was introduced later, has not. Rogers (2003) defines diffusion as the progression by which (1) an innovation (2) is communicated through certain channels between (3) the members of a certain social

system (4) over time. This process involves five stages in which trainers will (1) learn about instructional innovations; (2) investigate the innovations; (3) decide to adopt or reject them; (4) implement them; and (5) confirm their decision to adopt or reject the innovations.

People embrace change at various rates. Some are predisposed to innovations and adopt early on, while others exercise caution, and wait until new techniques have become the standard before adopting. Rogers describes five categories of adopters: innovators, early adopters, early majority, late majority, and laggards (2003). Innovators are risk-takers and leaders, who initiate and encourage change. Laggards are cautious, and resist change until they are pressured into it, or wisely, they may never adopt a bad innovation. The researcher uses these concepts to describe the adopters of instructional innovation in library training, their attitudes toward innovation, and their rejection or adoption of it as it leads to the diffusion of innovation.

The pattern of adoption outlined by Rogers indicates a gradual growth, followed by rapid growth that tapers off before stabilizing and declining. Innovations are judged based on relative advantage, compatibility, complexity, trialability, and observability (2003, p. 266). Trainers thus would adopt instructional innovations that have an advantage, a compatible training style, and minimal complications; have been tested before adopting; and have observable results.

Scant research examines the training process and the diffusion of innovations in the social context of staff training. There are some studies of *student* training, and publications advising how to do it; in fact, most of the library literature that is available explores how students learn, and how faculty, instructors, and librarians teach. However,

there is little discussion of how the librarian assistant or library staff train, or how they access training materials. The experiential data gathered here is a rich source from which to develop a perspective on this understudied practice. This case study is designed to inform the training process for academic libraries dependent on student employees trained by technicians. By studying this particular innovation—the use of the WebCT resource to train library student employees—this project may also foster a better understanding of that innovation, its use by and benefit to trainers, how it may be improved, and how better to introduce other innovations.

CHAPTER II

Literature Review

Overview

This chapter focuses on the literature that addresses factors that encourage or impede the adoption and diffusion of innovations by library staff engaged in training student employees. The literature review begins by considering the value of a case study technique for examining this problem, an exploratory approach that provides insight into the factors affecting the diffusion and adoption of the WebCT innovation.

The literature review continues with an overview of related innovations in instructional technology, subsequently presenting views of the effect that instructional innovations have had on academic library research instruction. The researcher then examines how the learning environment connects the training factors used with library part-time student employees to the techniques used for training. This section is followed by an overview of innovation diffusion theory that describes factors affecting the adoption, rejection, or discontinuance of new technology. The literature review then finally addresses the connection between the adoption of innovations and library work in general.

The culture where library employee training takes place, in general, supports the adoption of innovations. The staff members providing the training have unknowingly witnessed and participated in the diffusion of technological innovations in library reference services. Because they use what they know, the staff uses library research instructions for the public as a model for training their student employees. For example, finding aids created to help the public locate books in the library stacks, and flash

tutorials on how to search the library catalog, also created for the public, are used to teach

student employees as well. Over the last twenty years, the library has adopted various

automated systems, and each time new training tools have been created by librarians to

help the public, the staff has first been trained in their use. The time spent in this training

familiarized the staff sufficiently with these tools so that they could be adapted by the

staff to train the student employees. Thus, even though these tools were not designed to

train student workers, staff members continue to use them, simply because they are

available, easy to use, familiar, and known to work, even if imperfectly.

Exploratory Case Study

Yin notes that an exploratory case study must state a purpose, as well as criteria

by which the study can be judged successful (1994, p. 21). According to Stake, the

process of an intrinsic case study is used to understand a specific situation (1995),

because the researcher's focus is on understanding this particular case, and not

necessarily on generalizing findings to a larger population. By these definitions, this

project is an exploratory, intrinsic case study. Its purpose is to describe and understand

how the WebCT resource is used by trainers in three UH libraries. A successful study

would include a description of that use, and an analysis that provides the researcher with

suggestions on the development and improvement of the WebCT resource as an

innovation for supporting trainers in UH library circulation departments.

Interviews are known to be an effective tool in case study methodology for

learning about how people train other people. For instance, a discussion with library staff

on how they use the WebCT resource to train student employees might provide some

insight. The interview process would allow the researcher to hear the "whole story" from

the trainer's perspective. As Yin notes, a well-planned interview by an investigator with "an inquiring mind" can achieve a deeper understanding of the complexity and richness of the situation being studied (2003). This holistic approach is a critical part of making meaning from actions (Seidman, 1998).

Observation provides another key element in the process of documenting human behavior in a comfortable environment. The researcher's role causes less disruption when acting as a participant-observer within the social system. Participant-observation also lends a depth of understanding that would not otherwise be possible (Yin, 2003).

For this case study, the researcher is providing assessment using triangulation, via observation, interviews, trainer process logs, and questionnaires on the use and benefit of the innovation (Hatch, 2002). This allows patterns to emerge in the interpretation of the information collected.

Innovations in Training and Instruction

Teaching tools such as Web-based models and e-learning environments have become common in teaching and learning, and such tools are included in the WebCT resource. Web-based training (WBT) provides an opportunity to introduce newer technologies into the traditional instructional setting. These technologies allow for dissemination of information, and often are an important and effective means of providing instruction to greater numbers of students without large increases in personnel or physical resources (Rada, 1998). However, Rada does not consider the additional time required for increased student-teacher interaction that this method demands. Studies of distance education, and in particular of undergraduate education (Zhao et al. 2003), indicate an increase in student/teacher interaction and effectiveness. By going outside the

traditional education framework, e-learning provides a new way to apply the extensive existing research into motivation, distribution, and reinforcement.

The psychology of e-learning has a long pedigree, since it refers to instruction that makes use of products available before the World Wide Web. E-learning and WBT need to include interaction between students and instructors to be effective, however, and to keep the interest of the students, for them to learn (Kaupins, 2002). Challenges to e-learning include, for example, the lack of the visual body language signals that assist communication, but the addition of voice in virtual classrooms assists communications, as intonation is a critical part of verbal communication (Goodridge, 2002). A vital need thus exists for improved methodologies and tools to guide the design and development of high-quality technology-based instructional materials (Merrill, Li, & Jones, 1991).

WBT and e-learning are common in the learning environments of university and college libraries. Librarians have used the face-to-face reference interview as the primary tool for assisting students with their research, but Web-based training and e-learning help deliver the basic instruction in indices and in searching full-text databases. Methodologies that require student-instructor interaction apply to the librarian's relationship to both students and researchers (Library, 2004). In 2004, as discussed in the following section, library instructional technology included chat rooms, email, instant messaging, phone calls, web-cams, resource management software, and posting on discussion forums, as university and college faculty and instructors jointly developed online instructional environments with librarians (Thistle, 2004).

Library Skills Innovations

The field of library skill instruction constantly introduces, adopts, discards, disseminates, and rejects innovation. Many tools in the area of reference work have followed the adoption and diffusion process. Libraries have come a long way from the days when librarians "policed" the stacks, to the current adoption and dissemination of innovations for virtual stacks. Today, librarians and library staff at colleges and universities do far more than pointing out the right book, or even the right way through the computer indices (Thistle, 2004). Research assistance occurs when the librarian not only assists, but also guides the researchers in determining how to go about their studies in an in-depth and efficient manner.

Tools or innovations that help with this process include library guides or pathfinders, which outline or summarize the steps necessary to accomplish a particular task. These started as paper products, and over time have evolved into online tools. When first introduced, these tools assisted the faculty with their preparation of specific resources. Now such tools have become common, and are considered a fundamental feature of an academic library.

Academic libraries also now commonly use web-based training innovations in self-paced and resource-based skills instruction. The successful dissemination of web-based tutorials (Bonk, 2002; Driscoll, 1998, 2002; Kilby, 2002; Steed, 1999) have prompted academic libraries to develop a variety of online tutorials for today's generation of learners (Smith, 2001). UH-Windward Community College, for example, introduced one of the University of Hawai'i -based online tutorials for using the library catalog by putting it on the library website. It can be found at Windward Community Colleges

website (Severns, 2002). The UH statewide library instruction steering committee

considers this a valuable innovation for learning about our libraries, but the diffusion

process has been slow, and the use of online tutorials for library instruction has not

reached the University of Hawaiʻi system society as a whole.

Libraries in Hawaiʻi have also developed e-learning stems by sharing and

adopting existing e-learning at other libraries. North Carolina State University (NCSU)

recently joined the University of Hawaiʻi system in this process. NCSU created a library

skills instructional product called Lobo, which can be found at

http://www.lib.ncsu.edu/lobo2/ (Library, 2004). Through the careful coordination of

librarians with English faculty teaching an introductory English course, English 101,

NCSU created a product used in 100 percent of the English 100 classes. The

dissemination of this innovation is comprehensive. The UH system is emulating this

model, adopting the process with modifications that take into account the social system in

Hawaiʻi. The Lobo product is licensed to the UH system, and the branding and system-

specific exercises, videos, and tutorials have been adapted to the locally available UH

library catalog and electronic resources. In Hawaiʻi, the Lobo product is called Lilo, and

it supports the beginning-level English resource instructors, as it does in North Carolina.

This innovation has reached the diffusion stage in NCSU's English classes and social

system. It has transported well to the UH system, and has been adopted by individuals so

that it becomes a productive innovation in library skills instruction (Libraries, 2005).

Lilo and Lobo are examples of library skills instruction products designed to aid

research learning (Gagné, Briggs, & Wager, 1992). Other studies, such as Bonk (2002)

and Conner (2004), of how students learn and use technological innovations such as web-

based instruction and e-learning, have helped in the development of new training tools.

Still other research considers the supportive role a particular culture, such as the

University of Hawai'i, plays in the adoption of e-learning (Bossert & Wedemeyer, 1999).

Innovations have also been created to train library student employees, and studies such as

Baldwin (1991), Bard (1999), Boone, Yee, and Bullard (1991), Farmer (1997), and White

(1985) offer insight into how librarians meet the challenges of instructing student

workers. An examination of research about library student employees follows.

Training of Student Employees in Libraries

Students have worked in school, college, and university libraries since the 1800s.

In a report of the Librarians' Conference in 1853, G. B. Utley noted that some university

librarians had only student assistants, while others had no help (Stone, 1977). Initially the

tasks delegated to the student workers included cleaning the floors and windows, and

organizing books (Baldwin, Wilkinson, & Barkley, 2000). Over the years student

employees have become essential to the operations of the college and university library,

especially large libraries (Farmer, 1997), and today, student employees can be found

doing every type of task possible (Libraries, 2002).

In the early years, training involved a gradual progression from simple to complex

duties. Unstructured training was provided to small groups or individuals. Today, large

academic libraries still lack sufficient full-time staffing (Libraries, 2002). To keep the

library open, full-time employees regularly, repeatedly, and quickly train students, who

must learn complex tasks very early in the process. The introduction of computers and

electronic resources has added a new level of complexity in libraries. Not long ago, the

most complex task student employees would be asked to complete was filing cards in the

card catalog. Students are now expected to handle complex technical tasks in the first days of work. In this type of situation, it is especially important to have a well-developed training program (Blanksby and Association of Assistant Librarians, 1988). The WebCT resource supports that effort.

Crucial differences exist between training part-time student employees and regular, full-time staff. The part-time and student status means the trainees have only a partial commitment to their employment, and usually only a limited knowledge and understanding of a library's function and purpose. Because it takes an average of four students to work the same number of hours as one full-time staff member, training is more complicated and time-consuming (Kathman & Kathman, 2000). Due to high turnover, and the dependence on these employees to provide public assistance, the training needs to be completed quickly and frequently.

An effective student employee training program at an academic library reinforces and enhances the student's lifelong learning competencies and attitudes toward education. The student employees learn competencies needed to be successful employees in their chosen careers (Bard, 1999). To train well, one must have a conceptual model for training student employees, and a definition of training and instruction (Zhang, 2002). Overall, library student employee training programs follow hierarchical methods for training. This step-by-step methodical approach assists in the retention of information so the student can approach work logically (Baldwin et al., 2000). As Kathman and Kathman note,

> Good training is designed around specific tasks of a specific job. Measure
>
> success by how well a person can do those specific tasks after training.

Well-trained employees will be capable of doing better quality work, and

for many the personal satisfaction of doing a good job is a powerful

motivator to do an even better job in the future (p. 27).

Although established, effective training programs are essential, the researcher could find

few libraries that have such models in-place. The WebCT resource is such a program, but

the questions arise: How is it being used? How is it beneficial? And how can it be

improved?

Library Staff Who Train Student Employees

Library staff members that train student employees may or may not be aware of

training theories and practices. Unfortunately, there are few training programs for library

staff, and consequently they have not had the in-depth responsive staff training

recommended by Messas (1997) and Trotta (1995). The UH library staff learns primarily

through one-on-one peer training, on the job experience, and trial and error. In some

cases, there is an adequate procedure manual, and the staff is given time to learn.

The UH library staff then provides training for library student workers. With little

external direction or support, the staff must develop training systems for the students.

UHM Library performance indicators use library patrons' email comments and periodic

surveys to report that they are pleased with services from the circulation workers, which

leads the library managers to believe that these student employees are either well-trained

or successfully self-taught.

Library staff trainers vary in their use of innovations for training. In this case

study, the researcher specifically examines how the trainers use the WebCT resource. A

description of the trainers themselves informs the researcher when examining this usage,

the benefits they report, and their requests for changes. In the following section, the

researcher uses Rogers's (2003) diffusion of innovation terminology to describe the

library staff trainers.

Diffusion of Innovation Theory

Because the creation and introduction of innovations happens frequently, the

study of how these new ideas and technologies diffuse into society is particularly

important. In the *Diffusion of Innovation Theory*, Everett Rogers (2003) defines diffusion

as the process by which an innovation is communicated through certain channels over

time among the members of a social system. Rogers defines four elements as present in

the diffusion of innovation process: (1) Innovation—teaching tools perceived as new; (2)

Communication Channels—the World Wide Web or circulation meetings may be the

starting place of new ideas; (3) Time, with its three factors—(a) the innovation-decision

process, (b) the relative time of the adoption of an innovation, and (c) the innovation's

rate of adoption; and (4) Social System—for example, the collection of interrelated

library circulation units engaged in solving the problem of how to train student

employees, with a common goal of providing the best library services possible.

The integration and use of innovations rarely happens immediately. Rogers

defines the diffusion process as "the spread of a new idea from its source of invention or

creation to its ultimate users or adopters" (2003, p.5). The diffusion process occurs when

the innovation spreads within society. In contrast, the adoption process pertains to when a

group or individual includes the innovation in their current practice. Rogers defines the

adoption process as the mental process through which an individual passes from first

hearing about an innovation to final adoption. He suggests that adoption by individuals is

the first step taken toward the diffusion of innovations, as essentially adoption of an

innovation leads to diffusion, which in turn affects the social system.

Rogers breaks the adoption process down into five stages: (1) awareness, (2)

interest, (3) evaluation, (4) trial, and (5) adoption. In the awareness stage, the individual

lacks complete information about the innovation. At the interest or information stage, the

individual is curious and seeks additional information. At the evaluation stage, the

individual applies the innovation to a present or future situation, and then decides

whether or not to try it. During the trial stage, the innovation introduction begins. At the

adoption stage, the innovation becomes part of the normal practices. This has happened

for the WebCT resource in the area of Circulation Services.

Rogers also defines adopter categories, describing (1) innovators as venturesome,

(2) early adopters as respected, (3) early majority as deliberate, (4) late majority as

skeptical, and (5) laggards as cautious (2003, pp. 282–84). Although additional names

and titles for the adopters of an innovation have been used in other research studies

(Bruenjes, 2002), these five adopter categories are the preferred or standard for the field.

Alternative terms such as innovator, early adopter, hesitant adopter, and cautious adopter,

however, are more appropriate and sensitive for describing the library employees used in

this study. The researcher therefore uses these terms to provide insight into how the case

study participants fit into the library social system.

It is important to understand the dominant characteristics of each of the four

adopter categories used in this study. As described by Rogers, innovators comprise the

venturous 2.5 percent who create and first adopt innovations. This group can deal with a

high degree of uncertainty, and can understand and apply conceptual technical

knowledge. They easily accept innovations, and have the resources to absorb any losses that may occur. The early adopter is an integral part of the local social system. Characteristics include a high level of opinion leadership and peer respect; they serve as a role model for other members or society, and are considered successful. Characteristics of the hesitant adopter or Early Majority include interacting frequently with peers, seldom holding positions of opinion leadership, and deliberating before adopting a new idea. The cautious adopter is a combination of the late majority and the laggards. This group has the critical role of waiting to adopt innovations until they are ready or rejecting innovations that are dangerous or inappropriate.

It is important to remember that an individual may be considered an innovator for some innovations and a cautious adopter for others. An individual may also be described very differently in various social systems. These characteristics describe behavior in relation to innovations within specific social systems, and not universal labels.

In the library field, for example, an innovator may be someone who creates a web-based tutorial on how to renew a book. An early adopter may use this web-based tutorial in the first few months it is available. The hesitant adopter may use the tutorial after others have used it, and after the hesitant adopter has had a chance to test it personally. The cautious adopters may only use it if directly commanded to do so, or after it is so commonplace that it is the standard. Alternatively, they may not use it at all because they know that for their students another technique is highly superior or at least equally good, and so there is no need for them to change. The circulation services area of the WebCT resource has been fully adopted by even the cautious adopter, because it is

the standard storage site for the most current copy of shared resources, as shown in

Figure 4, or for common forms like patron registration.

Understanding the framework behind innovation helps us understand the adoption

of innovations within social systems. For example, innovations are introduced regularly

in larger academic libraries. Fundamental areas of instructional technology inform the

current innovations, and this influence may be seen more quickly in the larger

institutions. These innovations may then be made available to the library staff, leading to

the questions of how staff members use an innovation and benefit from it, and how the

innovation can be improved.

Summary

This case study employs the diffusion of innovations as a well-founded method

enabling us to understand the ways in which change occurs. Despite the reviewed

literature on regularly introduced innovation in the area of instruction, on the adoption of

technology innovation, and on the use of WBT and e-learning in training student

employees to provide library services, the training of library student employees from the

perspective of the trainer is an area that still needs to be addressed. Few formal studies

have investigated how library staff members approach the process of training new student

employees**.** Research on the diffusion of innovations provides valuable insight into the

training process, and into the resources selected by the trainer. Multiple case studies of

WebCT use add to the depth and wealth of available information, and to the ability to

analyze cases through a descriptive cross-case analysis. The following chapter provides

an in-depth look at the methodology of this exploratory, intrinsic case study (Stake,

1995).

CHAPTER III

Methodology and Research Design

Restating the Problem

The WebCT resource Services area appears to have been adopted by the community as a whole, as a place where shared standardized materials are stored and from which they are accessed. The Training area of this same resource, however, does not appear to have been adopted. Following diffusion of innovation theory, in considering how innovations are disseminated, adopted, and rejected, examining the people, place, and things involved helps to determine why innovations such as new technologies are not embraced. In this case study, the people are non-librarian library staff members who regularly train student employees. Because face-to-face training is very time-consuming, librarians created a WebCT resource, a clearinghouse for library circulation services and training. The availability of training tools saves staff time, while providing students with an interactive environment introducing them to the basic functions of their new job. This case study investigates how three UH library staff members use the WebCT resource, the benefits they receive, and suggestions for improvement of the resource.

An Exploratory Case Study

Yin notes that an exploratory case study must state a purpose and criteria by which the study can be judged as successful (1994, p. 21). This case study examines the use of the WebCT circulation resource by trainers in three UH libraries. A successful study would result in a description and understanding of how the WebCT innovation is used, enabling the researcher to provide suggestions for developing and improving support for trainers in UH Library circulation departments.

The focus of this study is on:

- ✓ How are the trainers using the WebCT resource?

- ✓ How do the trainers benefit from the WebCT resource?

- ✓ How can the WebCT resource be improved or changed?

This study reveals how the WebCT resource—adopted by some and rejected by others—benefits the trainers. Examining how the three participants use and benefit from this innovation, will result in accurate and specific data on how UH trainers are using the innovation—which was, after all, developed for their use. That information provides direction on how the WebCT resource should be changed. The study thus points toward future research. In consolidating and examining the data, the researcher uses Roger's diffusion of innovation theory to provide a societal framework in which to interpret the information collected.

The researcher uses a combination of methods to collect and interpret information, with the goal of triangulating the results so that they provide better understanding of the use of the WebCT resource. The tools used in the case study are included in Appendices A–I. The methods include a demographic survey, skills and attitudinal questionnaire, an interview script used to collect information on the trainers' techniques for using WebCT, an observation script, and a WebCT resource process journal for each trainer to use for one month after being interviewed.

The Institution

The University of Hawaiʻi System (UH) includes thirteen main campuses and educational, training, and research centers across the six principal Hawaiʻian islands (Hawaiʻi, 2004). As the public system of higher education in Hawaiʻi, UH offers

opportunities as unique and diverse as the islands. The total student enrollment in 2002 was 48,173, and faculty and staff totaled 8,646 (IRO, 2004). According to Student Employment and Cooperative Services, approximately 7,000 students are employed on the UH campuses (SECE, 2004); Figure 5 lists the average staff and student employees at each campus library. This case study looks at trainers of student employees at three of the campuses.

Library Resources in the University of Hawai'i System

The UH System includes world-class library collections, and as library science rapidly transforms from stacks of books and periodicals to new electronic resources, UH libraries are immersed in that transformation. The libraries house more than three million books and journals, a century of Hawai'i an language newspapers, the world's largest collection of English-language documentary videos from Asia, photo archives, electronic journals, digitized rare and historical documents, congressional papers, botanical and fine art prints, other special collections, and computer labs (Services, 2005). Library resources are available to UH students statewide. Most materials are also available to the public for in-house use.

An overview of staffing in the UH libraries shows that there are many fewer librarians than most people think. The staff is made up of collection services librarians who work behind the scenes, and public services librarians whose responsibilities include selecting materials for the collections, and working with the public to assist with research. Other full-time staff members are library technicians and library assistants of various levels, who help the librarians and—in the case of circulation services—work with the public. These workers rarely have academic training in library and information

science, and usually are only required to have a high school degree, although in the UH system many have BA degrees. In academic libraries, student workers are actually the largest category of employee. These student workers are the people the public most commonly see working at the circulation desk, checking materials in and out, and in the stacks shelving books. Most people do not realize that these essential and pervasive workers are neither librarians nor in school training to be librarians. The number of student employees varies, but students at libraries work with the public and provide support for the library staff, while acquiring work experience and training. Figure 5 provides the numbers of staff and student employees at various levels within the major UH system libraries; note that the larger the full-time staff, the larger the number of part-time student employees (Quirk, 2005). In some cases, the student employees outnumber the full-time staff—sometimes by a very large factor. Therefore, student employees are the face the public sees in an academic library. In two cases, the head librarian trains the student employees; in most cases, one library assistant/technician from each campus does the training for all the circulation students at that campus.

There are thirteen official University of Hawai'i libraries statewide, not including the numerous reading rooms and departmental collections. The official libraries vary greatly in staffing size and in the use of student employees. The smallest library is in Kealakekua on the island of Hawai'i: it supports the UH Center–West Hawai'i. This library has one librarian, one staff person, one student employee, and a collection of about four thousand items. The librarian and library assistant do the training cooperatively. This library can provide excellent services utilizing intersystem loans through the University of Hawai'i at Hilo and University of Hawai'i at Manoa libraries. The largest library is Hamilton

Library on the Manoa campus, with 143 full-time employees and approximately 200 part-time student employees (Quirk, 2005).

Campus Library	Librarians	Administrative Professional Technical (APT)	Assistants & Technicians	Student Employees
Manoa Haml, Sinclair, Law, Med	59.5	13	76.5	230
Hilo & Hawai'i CC	7	0	12	45
Honolulu Community College	5	0	6	7
West O'ahu	1.5	0	1	4
Leeward Community College	4	0	8	15
Maui Community College	4	0	4	2
Kauai Community College	4	0	3	2
Kapi'olani Community College	4	4	7	12
Windward Community College	3	1	6	10
UH Center - West Hawai'i	1	0	1	1

Figure 5: *University Library staffing Dec 2004*

The libraries used in this study are on community college campuses. Trainers from these three campuses volunteered, with approval from their head librarians. These campuses represent the average size of staff and number of student employees (notes from committee meetings).

Participants

Students are regularly employed in college and university libraries in the US, where they often work in circulation services that loan, discharge, and shelve materials. The particular audience for this study is University of Hawai'i System library workers who train student employees in circulation services. The sample includes three library

assistants—civil service employees who support professional staff in providing the

primary services that keep the library open, such as circulation and shelving of materials.

This staff relies on student employees to accomplish many of the simpler and more

repetitive tasks, and the library assistants train and supervise the student employees in

these tasks. The participants in this study are volunteers who have an interest in training.

A consent form was used to inform them about the study (Appendix A), a process that

was approved by the University of Hawai'i Committee on Human Studies.

The UHVCSSC, an advisory group, assisted in the selection of the participants,

who each had at least six months experience working in library circulation, and who were

currently involved in training student employees. The participants also represented

various levels of involvement in using WebCT for training.

There are similar studies, such as Bruenjes (2002), dedicated to diffusion research

(Rogers, 2003), but the researcher believes that a closer look at library staff members

provides insight into the pace at which innovation diffuses through training practices. The

researcher also believes the sample selected represents the varied adoption rates relating

to the use of the WebCT resource. The terms used for the researcher's observations and

notes in this study reflect Bruenjes (2001), rather than Rogers (2003): innovator and early

adopter, hesitant adopter (rather than early majority), and cautious adopter (a

combination of late majority and laggards).

The Social System

The selected subjects are volunteers, approved by the Librarian Council. This

council consists of the head librarians and representatives from the UH campuses. It is a

collaborative group that governs issues affecting the libraries in the UH system. Although

not required, the researcher decided to request permission from this group to ensure they

would be aware of the study, and to bring to their attention the importance of the work of

training student employees. The Librarian Council controls resources and determines the

direction of innovations and technology for the libraries. Lack of support from this group

could thus very well be a factor in the diffusion rate. The researcher agreed to report in

August 2006 to the Council any findings that will assist them in supporting their staff in

training student employees.

The University of Hawai'i Voyager Circulation Steering Committee, an

authoritative decision-making group, is comprised of representatives from each of the

circulation units in the UH System libraries. This group serves as the researcher's advisor

on library circulation concerns. Bi-monthly meetings occur either face-to-face or via

video conferencing. Staff members in some libraries participate in this group only via the

email list. In short, the UHVCSSC comprises the de facto experts on circulation services

in the UH System, and assisted in the selection of the subjects from the volunteers. This

group remains open to innovations as a whole, but its individual members range from

innovators to cautious adopters. The three participants volunteered from this group, while

preparing fo
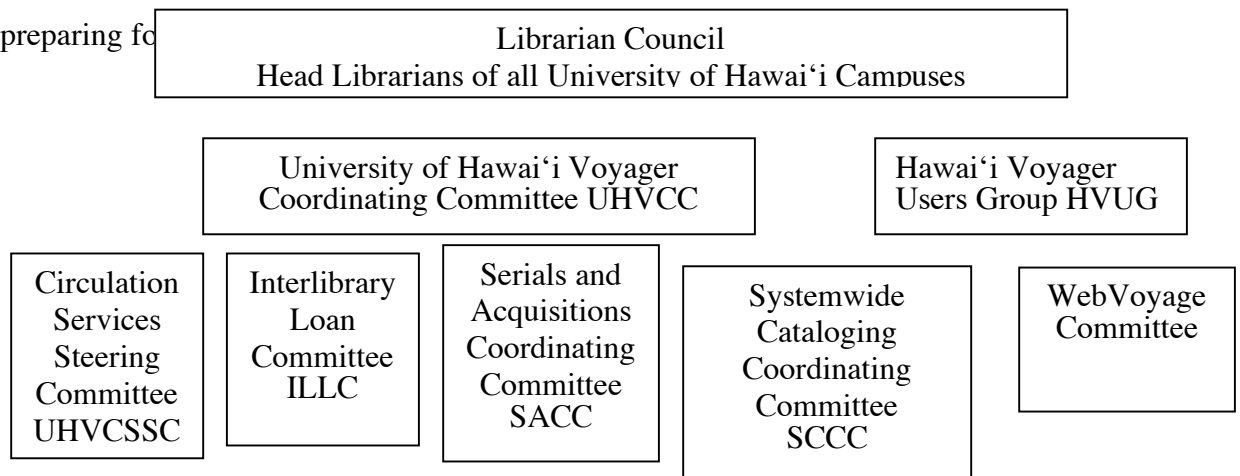
Figure 6: Diagram of University of Hawai'i Statewide Voyager Committees

The Researcher

The researcher has been employed by the UH libraries since 1979, first as a student employee and then as a librarian, from 1982 to the present. The researcher's experience training UH faculty, staff, and students started as a student employee in 1980, training faculty in the use of statistical software such as SPSS and SAS. Since then the researcher has personally trained approximately two hundred people in face-to-face environments, and several hundred more in group settings. The training topics have ranged from how to set up a modem and use a computer terminal (1980), to maximizing the use of Google (2005).

The researcher has held formal, semi-formal, and informal interviews of staff, clients, and students for twenty years, and is well versed in behavioral techniques for interviewing (Deems, 1991). The researcher also has twenty-three years experience as a systems analyst, and extensive practical experience in observation and recording. These skills were heavily used in the early years of library automation, when they were fundamental to assisting and training staff in converting from paper-based tasks to computer tasks. During that period, the researcher spent hundreds of hours observing library tasks to ensure the required results.

Process

The process of this exploratory case study is multilayered, utilizing a variety of techniques to create the best picture of the use, benefit, and changes needed for the WebCT resource. The study occurred in July and August 2005, and the volunteers did not come to any harm as a consequence of their participation. Their identities are kept confidential in the record keeping and reporting, but due to Hawai'i 's close-knit

environment, people may be able to guess the participants' identities in the resulting reports. To ensure that this study does not cause any harm to the participants, and to preserve anonymity, the researcher reported the information so that it does not relate to an individual institution or person.

The initial stage of the case study included three components, and was conducted at a convenient time for the participants. The data collection took place at the libraries where the trainers work; the researcher went wherever it was easiest and most comfortable for the subjects. Each participant took part in a thirty-minute written survey and questionnaire, and an hour semi-formal, face-to-face interview, followed by an observation of the trainer using WebCT. The goals of the interview were to build rapport with the participants, to document their experiences and attitudes toward training student employees, and to identify concerns they have about this project.

The survey and interview collected information on the trainer's computer and training experience, current use of technology, and infrastructure issues. The subsequent observation allowed the researcher to see how WebCT was used by the trainer. The researcher used the script for the observation session to take notes. Each trainer was given a process journal to record one-month's use of WebCT: to record what they searched for, what they found, the benefit derived, and their suggestions for changes. This journal allowed the participants to record their use when not being observed, and provided a place for reflection. The follow-up interview and observation focused less on use and more on benefits, and on the suggestions for improvements in the content and presentation of the materials included in the WebCT resource.

This process was thus designed to examine each trainer's attitude, ability, and use of the WebCT resource, the benefits derived, and to reflect on what changes are needed.

Validity and Bias

This case study incorporates qualitative research involving a combination of quantitative data and qualitative information. The information builds on an understanding of the use of the WebCT resource, and how this relates to the diffusion of innovations. The researcher has a pro-technology bias, and a personal learning preference that favors the use of online resources. This bias is addressed, though never completely resolved.

Data Analysis

The analysis of a qualitative study is a matter of giving meaning to first impressions and final compilations (Stake, 1995). To accomplish this, the researcher kept organized written notes and practiced listening skills, while maintaining an open collegial atmosphere. Furthermore, the researcher sought to minimize subjective reporting by acknowledging personal interest, so the awareness of how such subjectivity influences the research was monitored (Janesick, 2004).

The researcher was known to all the participants, who were motivated to participate in the study at least in part by the fact that they would be working directly with her. The participants were willing to demonstrate freely their use of the WebCT resource, and to provide suggestions for improvement, because they trusted that the researcher would be able to see that their suggestions were not personal criticisms, but were offered for the improvement of the resource.

This study focused on three questions: How are the trainers using the WebCT resource? Is it of benefit to them? How can it be improved? Analysis of the data began

after the completion of the first interview. The researcher divided the observation

information into categories to be examined according to the areas of consideration for

improvement or adoption of the innovation (Janesick, 2001). The researcher wanted to

examine for continuity and consistency the administrative policies on support of staff

training and on providing a valuable training environment for student employees.

However, no such policies exist at the campuses where the study took place.

The researcher observed the library staff's uses of the WebCT circulation training

resource, recording in a written observation log the techniques and methods the subjects

used to access the tools in the WebCT resource. Interviews provided information about

the trainers' own training skills, and their experience with the technology needed to use

the WebCT resource. The trainers also kept process logs, which were used to validate or

contradict the information gathered through the interviews and observations of techniques

and methods for utilizing the tools in the WebCT circulation training resource.

Information from all these data-gathering techniques was then analyzed to determine the

level of adoption of the innovation, and its relationship to diffusion in the social system.

Neither the researcher nor her advisors have found any significant study that

focuses, as this one does, on non-librarian trainers and the training methods they use.

Consequently, a study that focuses on this specific area—library technicians or library

assistants, rather than librarians, as trainers of student workers—clearly addresses an area

of research that needs to be explored,

CHAPTER IV

Presentation and Summary of Findings

Overview of Data Collection Process

The study involves three subjects, referred to by the pseudonyms Coral, Daisy, and Pohaku. The researcher met twice with each subject, in initial and follow-up sessions, in one-to-one settings at their workplaces. The initial meetings lasted about three hours each, and the follow-ups about two, as each session included a scripted interview, demographic and subjective skills questionnaires, and scripted observation of the subjects using the WebCT resource.

As will be explained, because of the participants' indispensable positions in their work environments—college-level, academic libraries—the choice of summer as the data collection period was critical to the project's success, as it provided the greatest possible interaction with the subjects with the least disruption to their workplaces. Initial data collection took place from July 11–15, 2005, the second week of the second summer semester, and the follow-up sessions about thirty days later, from August 15 to 19, in the interim before the fall semester started. The late summer time frame was also appropriate as the trainers were developing their plans for the most intense training they do all year: the Fall semester student employees.

The sessions began with the subjects giving the researcher a tour of their work areas, which allowed the researcher to provide other staff members with a brief explanation of the project, and to answer any questions. The hope was to create an environment where the research sessions could take place with minimum interruptions—with mixed results, as would be seen. The researcher and subject announced that they

would take a twenty-minute break at a specific time and place, and would be available then to answer any additional questions. At the end of the initial research session, the researcher gave the subjects process log sheets to track their use of the WebCT resource for thirty days, encouraging them to work with the resource.

Description of the environment.

The University of Hawai'i libraries, where this research took place, are small, close-knit social environments where outsiders are viewed nervously. Even though a librarian and an employee of the UH library system, the researcher was an outsider to these particular social systems. To overcome that perception, the researcher first involved the heads of the libraries and of the University of Hawai'i Voyager Circulation Services Steering Committee in selecting the participants. Most campuses have only one person who is in charge of training student employees. Critical staff members, these colleagues may be the only ones who can resolve problems arising in the circulation services area; hence, taking them away for several hours to participate in a research study would be perceived—by the subjects and their co-workers—as a burden to the rest of the staff.

To help the participants feel comfortable with taking time out of their busy schedules, minimize any negative feelings, and provide a positive environment for the study, the researcher explained the project to each interested library staff member, and brought food for the morning coffee break, where she thanked the other staff members for their support as they were invited to enjoy the treats.

Interview and Observation environment: The environment throughout the interview and observation sessions was informal. The subjects appeared comfortable, and were forthcoming with comments and suggestions, as conversations flowed freely. The

researcher used scripts for both the interviews and observations (Appendices D and E), which allowed her to redirect discussion when it strayed from the topic.

Two of the interviews were done at the subjects' desks. Located in the staff area behind the public circulation counter, these desks were visible to the public, and the subjects were available for staff questions, which was slightly distracting. In one case, co-workers were so close by they could overhear everything that was being said. The subject would ask co-workers questions, and they would interject occasionally, if they felt it useful. At one point, for example, the subject asked a co-worker, "Do you use the training tutorials?" While that person replied "What tutorials?" another, non-library affiliated co-worker then chimed in, "We use them in the WebCT course for Library Literacy." This interaction provided the researcher with an unexpected revelation; at that campus, non-library personnel were using the tutorials more than library staff.

The other staff desk was sufficiently far from co-workers and the public circulation counter that our conversations were not overheard. However, staff and student employees did come by and ask questions about work activities.

Because the third subject's desk was similarly close to colleagues and the public, the subject shifted the interview to a meeting room. This provided privacy and minimal distraction, although even there the research process was interrupted for discussions with a staff person and with a potential library services representative.

No interview environment was completely private or distraction-free. Libraries are busy places, and the subjects of this study are vital leaders in the circulation area of their library services. They were only willing and able to participate in the project with the understanding that during the research sessions they could make themselves available

to others for critical questions. These unplanned interruptions in fact added to the study, as they allowed the researcher to observe directly the subjects' use of the WebCT resource in the work environment.

Consent forms. The subjects all signed, without question, the consent form outlining the research methods and purpose (see Appendix A), which the researcher had sent them by email when setting the date for the meeting.

Participant information. The subjects were asked to provide their job description and copies of materials they used in training. All the participants willingly agreed to provide these things, and much of the information was sent electronically within a week of the interview and added to the WebCT resource in July 2005.

The subjects were also given a demographic survey and skills questionnaire (Appendix D and C), but were told that if they were uncomfortable answering any question, they could write N/A (not applicable). Commenting, "I never know what to put on these forms," one subject thus left the ethnicity information blank. In summary, the three participants, all Hawaiʻi born, raised, and educated, include one male and two females; one person is aged 25 to 35, and two are over 45. All three are high school graduates; one has an AA in library science, and one a BA in history. Each has had some job-related computer training, taking courses in MS-Access, email and Internet browsing, and Voyager library software; one has also taken a course in copyright laws and procedures. None have taken any training-related courses.

Two participants have worked in libraries for about ten years, and one for over thirty. None are new to their positions: one has been in the current job for over two years, one for over nine, and one over twenty-five years.

Critical Demographic Data	
Education	**1 - high school degree**
	1- AA in library science
	1 - BA in History
Other Training	**3 - MS Access,**
	1 - Copyright,
	3 – Email & Internet browsing,
	3 – Library software (Voyager)
	0 – Training to be a trainer
Computer resource	**1 - Windows 2000**
	2 - Windows XP

Figure 7: Critical Demographic Data

The participants differed in computer skills and interest, from an adept, enthusiastic user to a cautious, uninterested computer user. One has a PDA and a home computer, and knows how to accomplish some advanced technical work, including updating registers to modify the desktop to display self-created html pages. A second participant also has a home computer, and has taken some computing classes. The third participant neither has nor wants a home computer.

The participants also differed in their exposure to the WebCT resource. Because of lengthy service on the UHVCSSC, one had used it since its creation in 2001; a second had only been using Circulation Services section resources since it became the authoritative place for standard documents. The third subject, although also on the UHVCSSC, had never logged in, noting, "I just did not know how to get on, and every time I tried I failed." It turned out there was a technical problem that did not allow the subject to log on, but the researcher reported it to the University of Hawai'i Information Technology Services (ITS) department, who repaired the problem. The subject's

explanation—"I thought I was doing something wrong. I did not want to look stupid, so

when I needed something I asked someone else to find it for me . . . and usually they

would just find it and send it to me as an email attachment"— and the fact that the subject

could work successfully for more than a year without directly accessing the WebCT

resource provided strong anecdotal evidence for the researcher about the current use and

value of the site.

    Computer Skills and WebCT Confidence and Knowledge Levels. The research

process began with the researcher giving the subjects questionnaires about their WebCT

use, knowledge, and confidence levels; partial results are shown in Figure 8, full results

are available in appendix J.

July Responses to Questionnaire.

8. Please rate your CONFIDENCE level for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2		1
Circulation Training	3		

9. Please rate your KNOWLEDGE for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2	1	
Circulation Training	3		

August Responses to Questionnaire

8. Please rate your CONFIDENCE level for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services		1	2
Circulation Training		1	2

9. Please rate your KNOWLEDGE for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2	1	
Circulation Training	3		

Figure 8: Confidence and Knowledge Level responses.

For the purpose of this study—which is, to track the use and efficacy of the WebCT training resources—the most telling data revealed in this chart is that initially all three participants judged their confidence levels and knowledge of the Training resources as low, and even after the thirty-day research period, while confidence levels were up, all three still rated their knowledge as low. In contrast, in initial self-evaluations concerning the Circulation Services section, the most computer literate subject recorded a high confidence level and moderate knowledge, while the other two participants recorded low for both. But thirty days later, while two still assessed their knowledge as low and one as moderate, two subjects rated their confidence level as high and one as moderate—even though that person's log showed no record of having personally gone to the training section of the site! Overall, the data reveal that increased exposure to WebCT raised the subjects' opinions about the site's utility and ease of navigation, as well as their satisfaction levels with the knowledge and skills gained from the training materials.

Interviews. Designed to determine whether computer skills and the work environment are contributing factors in the use or benefits of the WebCT resource, the hour-long scripted interviews focused on computer experience; on the subjects' work experience in training others; and on support for the trainer in the workplace, including ongoing training, professional development, and evaluation processes for both trainer and trainee. The subjects could ask questions and provide additional information.

The researcher collected the interview data on a laptop computer, demonstrating a pro-technology bias, and followed the interviews by observing the subjects' use of the WebCT resource, allowing them to demonstrate what they had discussed.

The subjects all agreed to keep a process log of their WebCT use for the next thirty days. At the end of these first sessions, the researcher set a date for the next interview, confirming it in a follow-up thank you email that summarized the requests for information. The week prior to the final interviews, the researcher emailed thank you notes to the participants for what they had provided, and reminded them of what else was needed.

The exit sessions, held in the same locations at the initial interviews, began with the subjects providing their process journals (Appendix F), and completing the WebCT questionnaire again (Appendix G), allowing the researcher to rate their knowledge and development, and to clarify any log entries. The researcher then briefly interviewed the subjects about their WebCT use, and what they saw as the benefit of the resource (Appendix H), while soliciting suggestions for improvements and additions. The interviews led to a second observation session, directly paralleling the first (Appendix I).

One participant, because of being out of town for a week, had actually asked a co-worker to review and comment on the training materials, and to log her own WebCT use. The notes from the co-worker were easily distinguishable. These double results were particularly interesting because the participant, who regularly used the Services section, never used the training section, as reflected in the process log and reinforced by the researcher's observation.

The log of another participant indicated that the WebCT resource was used at least once every day, and on some days multiple times. Prior to the first observation session, this participant had never logged on to WebCT, and hence saw the research

process as a personal "class" in the resource, and felt that it was "homework" to explore and utilize it fully.

The third participant's log showed use of the WebCT resource to find known items once or twice a week—a higher than normal rate, according to the participant, because of getting ready for training new student workers for the upcoming semester.

Unexpectedly, the researcher discovered that the project itself changed the subjects' use of WebCT. The most inexperienced user's behavior changed dramatically, and the other two participants became aware of previously unknown aspects of the site. These results suggest the need to revisit the subjects at a future date to see the impact of the second interview and observation session.

In closing, the researcher asked the subjects for their input on the process, giving them handwritten notes thanking them for their insights, and providing the two movie coupons promised in the consent form.

In sum, all three participants had sufficient computer skills to use the WebCT resource, and have access to computers that are more than adequate for its use. Although they vary in their levels of confidence and knowledge, all reported an increase after the thirty-day study. This increase was partially due to interaction with a researcher who was very knowledgeable about the resource, and able to familiarize them with some of its features, but the largest factor was that the participants took time to examine and to try what was available on the resource to support training.

Techniques for Training. The three trainers indicated that they train the way they were trained—in one-to-one, face-to-face environments, using proven material. While trained in how to do library work, they were not trained in how to be trainers. All were

encouraged to go to professional seminars and training sessions relating to their non-training library duties, which each has done to learn new skills, but none of them felt that they had time to take courses in how to train. Much of what they know about training is thus from self-exploration, using time-consuming trial and error.

Though willing to try new things, during the regular semester the trainers are too busy to consider new or different things. This is why scheduling the project for a summer period allowing reflection and experimentation was appreciated by all the participants. This also explains the lack of materials created by the trainers, and why instead there is a reliance on materials created by predecessors or co-workers.

Some participants, for example, train student workers to shelve books and to shelf read by using call number pathfinders, or flash cards created by their predecessors. Some refer their trainees to library literacy self-paced instruction modules created by non-librarian colleagues for the general public. These modules, which some campuses require library student employees to take, were made using the online tools in the WebCT resource that is the focus of this study, and include instructions in the Library of Congress call numbers used to shelve books. These courses are available to anyone with a University of Hawaiʻi username; these courses include Library Research Unit (Library Research Unit—Windward; Instructor: Tara Severns), and LILO (Learning Information Literacy Online; Instructor: Kevin Roddy).

Initially only one trainer used the WebCT resource online training tutorials for learning the Library of Congress call numbers. By the second interview, all three subjects reported that the tutorials would be used, though in different ways. In one case, it was actually a co-worker who recorded an interest in using this tool, while a second subject

"put the online tutorial on the computer where I train the students," so they can review it when not busy. The third subject encouraged the students to use the online tutorials when off the circulation desk, but otherwise to practice with flash cards, because they are "easier to put down" when a patron asks for help.

Trainer and trainee evaluation, The researcher had hoped to explore the relationship between how the trainers were evaluated and how they themselves evaluated their student trainees. However, because the subjects were not evaluated as trainers, this was not possible. All the participants are civil servants, subject to a formal evaluation process, but how they train is not a topic of evaluation. One subject remarked, "My supervisors do give me verbal kudos for a job well done, but that is about it." The subjects did say they would welcome reviews of their training work, because that would provide opportunities for a dialog with management on training procedures and support. As a supervisor, one subject pointed out, "My formal evaluations look at what my unit accomplishes," and hence judge "the results of training, such as how well books are shelved," without specifically addressing training challenges and processes. Because training is a recognized part of the job, with specifiable goals "like getting a form to evaluate the students and creating a training manual," another participant concluded that at "my next annual review I will ask that my work as a trainer be included."

All three subjects recognized the importance of evaluating their student workers, as that process was seen to play a key role in directing and motivating the trainees, and even in determining their retention or promotion. As for the evaluation tools, only one subject was adopting a WebCT resource as an evaluation form for her student workers,

while another, who had been evaluated regularly at a previous job, adopted that process upon becoming a library staff member, modifying the forms for the student trainees,

Observation. Providing firsthand information on how the subjects worked in the WebCT environment, observations focused on several areas: access security, content, format, navigation, communication, resource sharing, and standardization. For each one of these foci, the researcher concentrated on the benefits, and areas to be changed and improved.

Access security: logging on. Users need to log on to access the WebCT resource. None of the subjects could make it to the site on the first try, which informed the researcher that the resource was not used regularly enough for them to remember the URL. Only one had it bookmarked correctly.

A subject who had only logged on once before admitted "I am not sure of the address. I thought I had bookmarked it but it does not look the same today." WebCT has more than one entry point, and this participant was at a page that requires the user to link to the actual log on page, leading the subject to question the need for so much site security. Another participant also thought she had the page bookmarked, but actually was using a link to the prior version of WebCT, which had been replaced a year before. The researcher provided the correct address, and helped edit the bookmark. The subject interviewed in a meeting room had the WebCT site "bookmarked at my desk," but volunteered to access the site from memory, which however proved faulty, as the subject typed http://www.Hawai'i.edu/webct for the correct address, http://webct.Hawai'i.edu.

Thirty days later, all the subjects had the site correctly bookmarked, and one could type in the correct address from memory. However, because of the site security,

one noted, "I really don't think my students could manage to log in to get to this stuff. So I am providing access to the materials on open websites outside of the WebCT resource."

Access—simply finding the correct place to go—seemed to be a stumbling block for all the subjects, since the site was not linked from their homepages or regularly used pages. The observation sessions thus confirmed that improved access would have to be an important feature of any revised product. Initially the three participants had no opinion of the need for WebCT resource site security; after the trial, one still felt a secure site was necessary, one disagreed, and a third strongly disagreed, seeing it as a major hindrance to using the resource.

Navigation: where to go and how to get around. Upon first entering the WebCT resource, a screen offers two choices: Circulation Services or Circulation Training (Figure 3). A menu also provides access to these same choices, and to other components of the resource, and is still available even after selecting Services or Training. In addition, breadcrumb links showing the path taken into the site allow for direct navigation back to a particular level in the web resource. During the observation, all the subjects chose a link from the first page, and did not use breadcrumbs or menus—and actually were not even aware of them until the researcher pointed them out at the end of the initial observation period. The researcher found in short that the subjects treated the website hierarchically, not taking advantage of opportunities to navigate other than from the main page. This implies a minimum level of technological knowledge in the use of the World Wide Web.

To navigate the site, the subjects used the links on the main frame of the pages and the browser back button. In fact, Coral and Daisy stated they use main screen links and the back button whenever they are on the web. They were not aware of the go or

history features of their web browsers. Nevertheless, they did not appear to get lost, and when asked, did not have any comments on how to improve navigation. One participant acknowledged having seen breadcrumbs, but not knowing what they were, while another responded, "I know they are there, but I find using the back button or the go menu works best to help me remember where I am and get back and forth."

After the thirty-day trial, the researcher again asked about navigation. One participant reported using the breadcrumbs, "unless they don't work and I have to use the back button, but the other subjects still only used the main page links and the browser back button. To improve navigation and find ability, particularly because "so much stuff is buried in the meeting minutes," one subject suggested, "It would be great to have a search feature that indexed the documents too."

Despite their own reports, direct observation confirmed that navigation was definitely a problem for the participants. They were not sure where to look for things, or how to get from one place to the next without going back out to the main menu. They were not even sure what was located behind the labels that do exist on the WebCT site although they did suggest that the links on the main pages include descriptions of the contents. These observations suggest that rethinking the architecture for inexperienced users who approach websites hierarchically should also be part of any resource revision.

Format. Documents on the site are mounted in four formats: HTML, PDF, FLASH, and DOC. During the second interview, the researcher asked which formats the participants used, what were the benefits of each, and which, if any, could be eliminated. Pohaku clearly favored keeping the HTML web pages, "because I can see right away if it is what I am looking for: on the other hand the FLASH documents are good for

instruction but they take a long time to watch, so they are not good for fast answers."

Coral generally printed out the HTML versions; she and Pohaku used Word documents

for material that they need to change or customize. While only one subject acknowledged

using the PDF files, for "forms or policies that need to be printed or downloaded just the

way they are," one of the creators of the Library Literacy WebCT courses reported that

on their sites they "usually download the PDF version to use or link to. It prints better and

many students don't have Word, but they can get the free Acrobat reader." The data on

format were thus inconclusive, suggesting that they all had some value and should be

kept.

Content. The content of the WebCT site, which serves as a central depository of

documents and procedures, comes directly from the members of the UHVCSSC. The

materials may be introduced in meetings or via email. They are then added to either the

Circulation Services or Circulation Training subdivision of the site.

The data revealed, in short, that the content was not being fully utilized by any

subject, primarily because of lack of familiarity and difficulty of navigation. The

observations and interviews showed the subjects to be more comfortable in the

Circulation Services side, which all three reported using to access policies, procedures,

and statewide rules and forms, but even there use was limited. As one participant noted,

"my predecessor had printed out everything when she left . . . so I only needed things that

had changed since then"; while another added, "I will keep printing what I find and keep

my binder up to date," because the paper copies were easier to work with. Using the

Circulations Services site was, however, found to be, with practice, quick and efficient,

saving staff time and work. "I immediately have answers," one participant noted, while

another particularly liked being able to link to material "when my staff needs it," so "I don't have to worry about keeping it on my computer or keeping binders and print copies." All the subjects in fact recommended expanding the Services site, by adding committee sources and policy manuals from all the campuses. The subjects also appreciated the communal and archival character of the resource. Having access to tested policies and procedures from throughout the system, noted one subject, "takes the pressure off me as a resource," and as an archive, the site guarantees long-term but secure access to seldom used but indispensable material.

The observation sessions revealed that none of the participants were using the Circulation Training modules, primarily because of a lack of familiarity. After being tutored by the researcher, however, they all saw potential value in the material. Daisy "thought the tutorial scripts was taking me to some kind of technical thing," but discovered they "are really useful"; Coral particularly liked the training quizzes. Exhibiting the classic behavior of a cautious adopter, one subject saw no need to use the site, because "I have materials I have been using that are working fine," while another admitted showing the training materials to the Library Literacy WebCT course designers, and "now I just have my students take that course rather than me using the materials."

The data confirms that no matter how needed or desired the content, if users do not know it is there, or cannot decipher how to access it, the material loses value. A redesign of the resource to include some of the recommendations, such as a global search feature and descriptions for the various headings, might prove useful, but could only be implemented outside of WebCT, which does not support a global search, or directly linking to pages within a site. The participants' responses also strongly imply that

personal training would be needed to maximize the contents of even a redesigned site; in the words of one subject, the researcher "should show them again, and go to everyone for one-on-one training."

Standardization. The sharing of common procedures, forms, and policies began in the University of Hawai'i Library System with the introduction of the Voyager Library software in 2001. Statewide the libraries began to share one large database, and all the related patron and financial information had to be standardized so that the system could work well for faculty, staff, and students statewide. The subjects all valued having a central repository for standardized and regularly used materials, making it easy, as Daisy noted, to "be sure our library is following the standards for the University of Hawai'i Library system." As Coral acknowledged, however, "we don't really all follow the standard," so the subjects also liked having access to localized but tested procedures and policies that could serve as models for their own libraries—although as a consequence, one subject warned, variants should be documented so that the library staff can correctly respond to queries from library patrons.

The subjects all recognized that as a repository of standardized tools, WebCT is only valuable if it is kept up to date, which means that the people updating documents need to be able to either post their own updates or clearly understand who to send them to for posting. "Having someone keep track of the information from meetings" was also seen as critical.

Applications: implementation and use. As shown in the standardization and communication foci, the WebCT Services applications have both current and potential

value, while the Training applications were discussed primarily in terms of what could be done in the future, demonstrating again how little the training resources are now utilized.

Each subject noted something of potential value in the Training subdivision. Daisy would "use the tutorials to improve student training," believing both that the students would learn better, and that the training would make less demands on her time, since the students could take the tutorials themselves. Pohaku also saw the tutorials as timesaving, and would even encourage his staff to take them—"to think of WebCT as the expert before they ask me." Personally, he used the site "for remembering how to do things I don't do much, like proxy patrons or traces," and for accessing hard to find policies and meeting minutes. Coral was especially pleased by the standardized WebCT quizzes, which she could assign at the beginning of each semester to "help keep our staff and student workers up to date."

Communications. Although day-to-day communication among access services staff members is by local staff meetings, phone, and listserve and other emails, the activities of the subjects in this study show that they view the WebCT resource as a valuable aid to communication, with great potential as an archive of stored information, suggesting that a link to the listserve archive would thus be a beneficial addition to the resource. The site only houses established, agreed upon information emanating from the bimonthly UHVCSSC meetings. Drafts are not usually posted, and discussions are not held within WebCT, but are conducted in person or via email. Thus, particularly for newcomers to this service area, the site is the place to find agreed upon forms, procedures, and policy decisions; as one subject admitted, it "helps me not panic when a lot is going on."

Resource Sharing. A library shares resources by lending materials freely to its users, and to other libraries' users via interlibrary loans. The members of the UHVCSSC also share resources in the areas of policies, procedures, and training materials, as discussed in the standardization section. One of the goals guiding the creation of the WebCT resource was to enable easier sharing. The data from this study suggest the results are mixed. While the Circulation Services information seems to be widely shared, problems with access, navigation, and familiarity seem to be hampering the sharing of training resources.

Benefits derived from use of the WebCT resource. The current benefits of the WebCT resource are clearly found in the Circulation Services areas of resource sharing, standardization, and communication. Future benefits may be found in improved training of student workers, but follow-up study is needed to show if this change actually happened for these subjects.

The primary benefit of the resource, the participants agreed, is its support of statewide standardization. A shared University of Hawai'i Library system, one subject noted is "a big benefit"; "the more library services function as a statewide system, the better for students," another declared. Even though the participants recognized that they each do some things differently, having standardized policies and procedures, and items like ID forms and interlibrary loan labels, readily available at one site saves appreciable staff time and effort. Equally as valuable as the standardized resources, the subjects appreciated having access to the variant materials from the individual campuses, so "we can borrow and use other peoples' ideas and share ideas," or "see what is available" in tested resources for student training and staff review.

The participants also agreed that the main drawback to the site's role in statewide standardization is difficulty of access and navigation. During the project, the subjects themselves had problems accessing some areas of the site, and none let their student trainees use it. Thus, better access, and "easy access for students" were considered essential to realizing the full benefits of the resource—which, as Pohaku noted, "only needs minor tweaking" to reach its full value.

All the participants acknowledged potential Training benefits of the site, as well, primarily in the areas of consistency and efficiency. Training with the online resources would raise the confidence levels of students, staff, and the general public, the subjects agreed, while students would receive consistent, structured training. The resource, all three subjects noted; could also improve staff efficiency, making the training faster and less frustrating for trainer and trainee. The tutorials were also seen as good refreshers for the staff, providing ample opportunities to review both common and little used procedures. By the end of the project, the initially cautious Daisy was enthusiastically committed to using "the visuals and scripts for training, and tutorials for student workers. Usually," she noted, "I have to spend all day for the first four Saturdays" of the semester training students. The WebCT resource, particularly incorporating redesigned access and new media, was seen as greatly reducing the need for time-consuming one-on-one training.

While acknowledging the content's potential, however, one participant was less sanguine about the value of the shared online resource, envisioning instead printing out and customizing, with the campus WebCT specialist, the online tutorials and scripts, thereby achieving greater control over the material shared with the trainees: "I would not

show trainees the circulation services, but print for them what they need. Sometimes you don't want to give them too much information."

What can be done to improve the WebCT Resource? The participants' suggestions for improvement have to do primarily with ease of access to materials, currency of materials, and additional content. Some suggestions, like a site search or index, and the need for more clarity about how to share resources and how to interact with the Webmaster to keep the site up-to-date, were shared by all the subjects.

For ease of use, all three recommended including something "like a site map, index, or general search," as well as more information on the main pages, such as lists of what is on the page, and a description of what is in each section. The subjects also strongly recommended taking the resource out of a secured environment—"make it public," in Pohaku's words. The unanimous demand regarding the Circulation Services subdivision involved keeping the resources up to date. Consensus suggestions included posting on the opening pages where to send corrections and updates, deleting out of date material, and adding approval dates on all the posted policies and procedures.

The primary content value participants recommended adding involved providing more campus-specific material, thereby increasing the site's value as both an archive and a laboratory, where locally tested content could be reviewed and adopted. The subjects also suggested adding links to more Library Council and related committees and reports, and to other helpful sites, such as the Hawai'i Voyager Users Group site or useful freeware for screen shots or PDF to Word conversion.

Clearly recognizing its value as "a resource sharing environment," where users need to be able to add and update material, one participant noted that "in respect to copyright it should be made clear that it is okay to borrow and modify documents."

In at least one case, a suggestion for improvement pointed to an existing strength of the resource, of which the subject was obviously unaware. In response to the comment, "I'd like there to be a public page to give instructions on logging in and instructions to update the WebCT site," the researcher took the subject to the existing page that does this, while observing once again that content and features, no matter how valuable, are of little value if unknown or unused.

Focus areas	Benefits	Improvement
Access	Password protected, UH ID needed to use, but open enrollment.	No longer need security, need to be able to directly link to contents. Personal training needed.
Content	Central depository for policies, procedures, forms, and documents to provide immediate answers.	Must be kept up-to-date, Need more campus specific information.
Navigation	Breadcrumbs, Menus, Links on main pages, Browser back button.	Index documents, global search, and Site map. Content page description.
Communication	Archive of information	Clarify update process, and contribution process.
Format	PDF, HTML, DOC, and Flash each have specific value.	New Tools such as Blogs, RSS,
Standardization	Ease of use of Library services by faculty, staff, and students.	Document variants in policies by campus.
Resource Sharing	Do not have to reinvent wheel, saves time, and money.	Copyright commons license, Include information from more campuses.

Figure 9: Summary of Benefit and Improvement Findings

Summary Results

How are non-librarian trainers of student employees at the University of Hawaiʻi Libraries using the Circulation Services and Circulation Training WebCT resource? The WebCT resource was being used as a place to store current copies of shared policies, procedures, meeting notes, and decisions of the UHVCSSC. The training component was being used only minimally.

How do the trainer's benefit from the WebCT resource? The primary benefits of the WebCT resource were in its support of resource sharing, communication, and standardization of Access Services throughout the University of Hawaiʻi Library system.

What can be done to improve the WebCT Resource? The participants' experiences suggested that the WebCT resource could be improved in many ways, in all the focus areas examined in this study. The use of blogs, for instance, might aid in keeping information current. One major improvement mentioned by all the participants would be to take the resource materials out of the secured WebCT environment, and make them available through a publicly accessible website. Based on the participants suggestions, this case study clearly could serve as a basis for a larger user survey to discover what other tools could be implemented to improve resource sharing, communication, and standardization.

Chapter V

Discussion and Analysis

As described in the previous chapter, the thirty-day trial project resulted in

qualitative data relating to the following three questions: How are non-librarian trainers

of student employees at the University of Hawai'i Libraries using the Circulation

Services and Circulation Training WebCT resource? How do they benefit from that

resource? What can be done to improve it? The researcher analyzed this data as a multi-

cased study where the reports consist of a cross-case analysis (Yin 2003, p. 148).

As Stake notes (1995, p. 7), the analysis of a qualitative study "is a matter of

giving meaning to first impressions and final compilations." For this case study, the

researcher recorded these "first impressions" in open-ended questionnaires and surveys,

initial and final interviews, subject usage logs, and personal observations that required

practiced listening and recording skills and maintaining an open, collegial atmosphere

among the researcher, participants, and the participants' home libraries. Perhaps the most

surprising result to emerge from the compiled impressions, the researcher found that the

participants treated the WebCT site as if it were two separate resources. The participants,

and the library community as a whole, have adopted the Circulation Services side, and

even new, cautious users are drawn into its acceptance and adoption, as job requirements

entail using the contents. The Training section, on the other hand, remains un-adopted,

with rejection or diffusion still uncertain.

Many factors contribute to this, but three in particular are of interest here. First,

the majority of the materials in the training section are also available on openly accessible

web pages, and therefore users do not need to access the protected WebCT site. Second,

one campus created most of the materials, which have not yet been modified to reflect a more standard appearance, and it is difficult to use the training materials as a standard until the instructional examples are broadened to accommodate situations common to all the campuses. Third, there is no mandate, requirement, or outside motivation to utilize the training section. Consequently, not only are few people using the resource, even fewer people have invested their time in developing the materials for it. To counter these factors, and thereby increase use of the Training subdivision, the content needs to be diversified by including the training materials used at other campuses besides UH-Manoa, and the steering committee needs to review the materials included for compliance with agreed upon standards.

At the beginning of this study, the three participants were all aware that the WebCT resource existed, although by comparison to the Services component, they were only marginally aware of the Training section. During the course of the project, mirroring Rogers's three-step awareness process (p. 177), the subjects moved from the initial awareness of the innovative technology to wanting to know how to use the basic functions of the resource within their personal contexts and social systems. The participants' active investigation of the resource over the course of the study shows a generally positive perception of the innovation—what Rogers calls interest (p. 174)—demonstrated by the participants' suggested future applications of the resource, described in the preceding chapter.

This interest clearly made the subjects want to try the WebCT resource. In fact, because a large peer group is already using parts of it—the Circulation Services modules—inexperienced users, like two of this study's participants, are much more likely

to try, and then to adopt, the training innovations as well. These participants' places in their communities, and their particular social systems' attitudes toward adopting innovation, thus exemplify the value of what Rogers calls "trial by others." Overall, in fact, although the Service parts of the WebCT resource have been fully implemented, its Training section has barely moved from the low awareness to the trial stage, as shown during the concluding interviews. The enthusiasm of all the participants was tempered with uncertainty regarding the consequences of adopting the training tutorials and other training tools. The researcher will conduct a follow-up study at the end of Summer 2006 to provide additional information on the ultimate adoption or rejection of these innovations.

It is in this final adoption stage that participants evaluate the trial use of the materials, in this case by asking if the student workers reach an acceptable level of understanding, and if the materials save time or provide an improved process for the trainers. Adoption of the WebCT resource would mean deciding to make full use of its components because it is the best course of action available. As can be seen from this study, that decision differs from one individual to another. People do not adopt a new resource all at the same time; instead, individual factors, such as having the time and the technical and material support to explore and try a resource, are critical. In this study, the University libraries and ITS department furnished the material support, and the researcher provided the technical support. This was not foreseen as a feature of the study, but the nature and skills of the individuals involved resulted in this being a benefit of participation in the project.

To better understand the diffusion of the WebCT technology—or the lack thereof—through the socials systems of the UH libraries, the researcher selected Rogers's innovation adoption categories to describe the participants' places in those systems, as the participants' communities responded variously to the WebCT training innovations. Because of what the researcher discovered about the bifurcated response to the resource, the participants actually reveal different characteristics for the Circulation Services and the Circulation Training sections. Overall, though, by the end of the test period, one participant had become an innovator, regularly using the WebCT resource, and contributing documents and online training tools to be included in it—and in fact mounting those resources on the site. For the circulation counter terminal and other computers that the students use, this subject had created innovative wallpaper that is really a web page providing access to commonly used resources. While acknowledging that the "tutorials are a great resource for reviewing what they need to know," the WebCT architecture itself was seen as a deterrent to its own diffusion: "it is too hard for the students to use through WebCT" was the conclusion generally acknowledged by the participants. Therefore, the subject created the web-page wallpaper, making it easy to "use the tutorials we can access from the library web page."

Another participant was an early adopter of only the Circulation Services section, using specific components like policies and procedures, and contributing to it if asked, but a hesitant adopter for the training modules—to the extent of having a co-worker review and make comments on the Circulation Training components. This participant has indicated that the online training tools are not as useful as the current training tools, which have been used for years. "I can see how training like this would make the process

more consistent, " the subject admitted, "but I really feel the face-to-face environment is the way to go for initial training. This is where we build the relationships and get to know" the trainees. However, seeing the online training as a valuable place for students "to go to review what they have been taught," this participant was willing to have the WebCT resource introduced to the social system by co-workers for their own training of student workers and library patrons. As noted earlier, current training modules are designed for the UH-Manoa libraries, and as one participant described, the libraries are not as yet all standardized: "we don't use the Voyager software to do reserves and media, so those sections would not be useful for us at all." In short, for this hesitant adopter, "the way we do it works, so no need to change it."

The participant who began as a cautious adapter of the resource, and who had only accessed its materials by asking a co-worker to retrieve them, showed the greatest development. After the first interview, which included a one-on-one introduction to the resource, the subject became enthusiastic about using it in the upcoming school year, and ultimately wound up contributing training checklists to the site. This subject, in short, became an early adopter, and an active advocate for the use of the shared materials available through this resource, promoting it to other hesitant and cautious adopters on the UHVCSSC. "I know this is going to save me so much time," this subject declared:

> I will not have to work all the weekends at the beginning of the semester now. I can have the student employees go through the online tutorials and use the printed versions of the tutorials to train and review. It will take longer for them to get through training, but I will be able to do other things while they are doing the tutorials. I hope not to get so far behind this semester; I also think they will learn

better. I now have to often times show them the same thing several times. I am

hoping they can review it online instead.

As described in the literature review, innovation scholars clearly recognize that

individuals can be characterized differently in regards to different innovations, and to

their varying places in overlapping social systems. During the study, the researcher

realized the importance of also applying Rogers's innovation adoption categories to

describe the subjects' particular campus libraries as part of larger UH statewide social

systems. Two of the campuses could be described as hesitant or cautious adopters. Within

that context, then, it can be seen that the subjects are partially responding to their local

environment. The participant who started as a cautious adopter but became an

enthusiastic supporter of the WebCT in its totality, for example, would be considered an

innovator at her or his own campus, even though within the UH system, the subject

would be thought of as an Early Adopter. The participant who would be considered an

Early Adopter or Innovator in regards to WebCT use works at a campus that also would

be described as an Innovator—so again the local environment is influencing the subjects'

behavior. The realization of the impact of the resource users' home culture confirmed for

the researcher the importance of involving all the levels of the participants' social

systems in the project, as will be seen in the concluding section on "Implications and

Recommendations." Senior library administration, that is, can greatly encourage or

discourage innovation diffusion, establishing for the researcher the need to address

possible reforms of the larger social system in planning any WebCT resource redesign.

How are the trainers using the WebCT resource?

At the time of the initial interview, the use of the WebCT resource by the research subjects ranged from no use to minimal use for Training, and from minimal use to regular weekly or even more frequent use for the Services section—primarily for confirming policies and procedures. Thirty days later, at the time of the final interviews, participants were using WebCT resources variously to create documents and confirm policies for use of materials. One participant had already seen specific benefits from WebCT use:

> For the Circulation services side, I took the materials and have created a policy and procedure manual. I had to make some changes but it was really great to have things to start with. Thanks to working with you on the WebCT resource, in one month I finished this project I have been trying to get done for two years.

"My boss is very happy with me," the subject added.

By the end of the research period, all of the participants had become aware of the scripts for the training tutorials, which they then printed out and used to support training. One of the participants had found a particularly valuable use for these materials:

> we use this a lot since we create the student IDs. I never realized the scripts were the written versions of the tutorials. These are more useful for finding an answer then the tutorials themselves. It is faster to just read through to find what you need. Of course, when it is something we don't do much, like creating a proxy patron, the tutorial is a big help. It is so confusing to do this. I really need to see it on the computer screen. This way I can see what is really happening.

In addition to the training scripts, the subjects had also become more aware of the training tutorials themselves, both the animated and the written versions, and had decided to use one or both formats for training their incoming student employees. The subjects had been reluctant to have their students use the WebCT site itself, which had stopped them from using the tutorials, but once they realized that they could get to the animated material through the Sinclair Library website, they decided to use it for training. As staff, they could access the written versions of the tutorials and edit them for local use. They could also request that a localized version of the tutorials be created for their use. In addition to their own involvement, the participants had also introduced co-workers to the tutorials, and to the printed scripts, instructing staff members to use the tutorials to review various procedures. As one participant concluded, "I think these tutorials will be good for the staff too, for reviewing things we don't do frequently, like traces."

The research process itself had a direct effect on both the reported use and planned use of the WebCT site. The researcher's enthusiasm for and knowledge of the WebCT resource were certainly factors. A larger factor reported by the subjects was that participating in the research process forced them to take time from their schedules to examine carefully the WebCT resource, and to consider it seriously as a tool for their jobs as trainers. Previous to this project, the subjects only used the WebCT resource to find things they knew were there, and that directly related to their responsibilities as members of the UHVCSSC. It was not the researcher's intent nor expectation that participating in this research project would have this effect on the subjects, but those consequences did not detract from the process.

What this project thus makes most obvious is that taking time to focus attention on a tool or resource allows a newer, fuller relationship to develop. The researcher now realizes that, as suggested by Coral, before any further development of the resource, dedicated time is needed for training in its use.

Is the WebCT resource of benefit to the trainers?

The participants' comments reveal that the primary benefit provided by the WebCT resource is the centralization and easy access to policies, procedures, and materials that are only secondarily related to the process of training student workers. The WebCT resource provides a mechanism for sharing the materials developed at various campuses; as an archive and shared resource, it minimizes reinventing the wheel. These components are found in the Circulation Services area of the site. Resource sharing, communication, and standardization, as promoted by the WebCT resource, lay the groundwork for better training, but are not directly linked to its execution. The well-established benefits of using the Circulation Services components of the WebCT resource in fact help unify the UHVCSSC, and all the workers represented within its units.

The participants in this project described the Training area of the WebCT resource as having similar potential. Before joining this study, the subjects simply had not extensively investigated or used the training features. Surprisingly, the heaviest users of the site are actually the WebCT course developers who create modules for teaching library literacy at three University of Hawai'i community colleges. These users are co-workers of the student worker trainers who are the focus of this study. They hold educational specialist positions, and the library is just one of the many communities they serve. However, their use of the site was described during the interview and observation

sessions. In this study, the researcher did not examine the resulting courses, made using the WebCT resource, but these courses have now been added to the resource site itself—an interesting example of educational reciprocity, revealing the many interrelated areas of library training at the University of Hawai'i.

How can the WebCT resource be improved or changed?

The researcher found that the subjects were pleased with the resource, and the support it offered to the UHVCSSC. Suggestions for improvement reflect how information technology and user expectations have changed since the resource's conception. The suggested improvements would increase ease of use, accessibility, and updating, and the accuracy, currency, and comprehensiveness of the resource. The intended patrons of the resource—library employees directly charged with training student employees—want and need a resource that will not only work for them, but that will be appealing and appropriate for their student employees to use without needing an interpreter or coach.

Through the project, the researcher discovered that the resource was not being fully used, but that the content was desired. The subjects clearly felt a need for the resource, but agreed that changes in format that would make the materials easier to use would thus greatly add to their value. Implementing the suggested improvements would in fact allow the materials to be utilized as envisioned by the Webmaster for the resource.

Implications and Recommendations for Future Research.

As shown by the success of the Circulation Services components of the WebCT resource, and the potential of the Training components, the UHVCSSC clearly needs a resource-sharing tool. A more extensive user survey should be conducted to determine

what form of resource would be most beneficial. Inclusion of new communication tools such as blogs, RSS, and a website that can be updated by numerous authorized individuals are just a few of the areas that could be included in a newly renovated resource. The Internet knowledge and skill levels of library staff members increases regularly, as suggested by this study. Just by being given a few hours of dedicated time, over a thirty-day interval, to spend with the resource technology, the confidence and knowledge increased for all the subjects in the study. In addition, these participants were working with a technologically dated resource, which does not make full use of current technologies. Although its content is desired, the participants' use logs and comments tell us that the resource's current format does not meet expectations for an electronic resource within the academic community.

The implications of these findings lead the researcher to recommend eight courses of actions to improve the UH library system training resources and procedures.

1. Present the findings from this study regarding benefits and suggestions for improvement to UHVCSSC and then the Librarian Council.

2. Conduct a brief survey of all users of the WebCT resource to gather more data and suggestions for improvement to add to the results of this project. Then present those findings to the UHVCSSC, focusing again on use, benefit, and suggestions for improvement.

3. Maintain the original WebCT site, and implement those improvements suggested by this study and the follow-up survey that can be done simply. This requires approximately 10 hours a week on average if utilizing student employees.

4. Conduct a usability study to prepare an alternative website that provides access to the content currently in the WebCT resource. The alternative site would utilize additional tools that might support group discussion, like blogs, RSS, and links to listserve archives. This would take a team of three librarians to dedicate approximately 40 hours each over a 3 month time period.

5. Prepare from the usability study a new website that incorporates the desired tools and the presentation format most recommended by study participants. This would take a professional website creator approximately 150 hours. It is critical that this process include non-Manoa involvement.

6. Conduct training seminars/workshops that provide assistance in using the newly created web resources for providing access to Circulation Services and Training materials. The Hawaiʻi Voyager Users Group (HVUG) has regular conferences that would be an appropriate venue for these workshops/seminars. This would require approximately 100 hours of librarian preparation time.

7. Encourage the Librarian Council to support the mandatory training of trainers of student employees, and to include evaluation of that training as part of the trainers' overall performance evaluations.

8. Encourage the Librarian Council to dedicate permanently one-third of a librarian position to support the training of trainers in the library setting statewide. This position would annually provide direct, on-site support to the trainers of student employees. It could perhaps be created from an existing librarian position that could be freed up for three months during the summer, when library services are less busy.

The holder of this "trainer of trainers" position would visit all the campuses, with a four-fold purpose: 1) to observe on-going training procedures and policies, and collect any new or modified training tools to add to the centralized training resource; 2) to provide on-going training for staff involved in the training of student workers; 3) to gather suggestions for improvements to the training process; and 4) to serve as an intermediary to the Library Council and the UHVCSSC.

The researcher sees this position as important to the success of any training program redesign. As the participants in this study demonstrated, the most salient factor in successful adoption of training technology is time spent with the resources and with a knowledgeable training advocate. In addition, the creation of this position would signal a change in the statewide library social system by publicly recognizing the systemic value of the work of student employees and their trainers.

Conclusion

Shared resources such as the WebCT site are invaluable tools for creating and unifying a group of libraries like the University of Hawai'i system. Over the last five years, the efforts of these libraries toward standardization and increased resource sharing have benefited the faculty, staff, and students of the University of Hawai'i as a whole.

Over time the technologies of resource sharing and of providing tools that support standardization change. A resource such as the one examined in this study has fulfilled its purposes well, but may now need to be changed so that the UHVCSSC can be better served. Change takes time, of course, as does the diffusion of innovation through social systems. The acceptance of using the WebCT resource to store shared circulation services information has taken a couple of years. Over that same period, the Training component

has not yet been accepted. Rather than working to increase its adoption in its current

form, it would be better to modify the innovation into a form that takes into account the

latest technologies while retaining tools that work well—using PDF, HTML, FLASH,

and DOC formats for storing and retrieving materials, for example.

Sharing resources is common in the library world, but it needs to be clearly stated

and understood that any materials posted on an open website will be used by non-library

community members. This could be easily done using a Creative Commons License.

Making it clear that this is permissible, and ensuring the legality of any shared resources,

will be even more important once the now closed-access WebCT environment is shifted

to a more usable open web page.

The experiences of the participants in this project show that the model of a shared

WebCT resource is successful, and should be continued. Taking into account the

information collected in this study, the use of Circulation Services types of materials

should be continued and expanded, and a broader WebCT user survey during the Summer

of 2006 should examine the extent of the adoption or rejection of the training modules,

while soliciting suggestions for their improvement. Combined with the present study, that

data, along with a consideration of current e-learning technology, could inform the choice

of how much of the existing training components would be valuable to include a

renovated UHVCSSC web resource. In addition, this model for "training trainers," and

the use of a shared web site, could be used to support all of the statewide Voyager

committees listed in Figure 6.

As show by this study, a key factor in the success of the Circulation Services

component of the WebCT resource was the direct involvement of its users in its

development. This includes the contribution of materials, shared maintenance of the site, and mandatory, consistent use. Because it truly belonged to the group that created and used it, the Services section was successful despite the need for an improved virtual environment for the materials. The Training section in contrast appears to be used largely by either WebCT resource creators looking for content to include in their sites, or by some trainers on the campus that created it. It was underutilized by the campuses represented by the subjects of this study. The key issues of personal involvement and connection thus seem to be crucial to the success of the resource, as shown by the specific and practical suggestions for WebCT resource improvement made by the participants in this study. This project also demonstrates the strength of one of the crucial premises underlying recent innovation diffusion theory: that innovation must be understood as a social as well as a technological process, and that successful diffusion depends as much on the socio-cultural context and support as on the innovative technology itself.

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APPENDICES

Appendix A: Consent Form

Agreement to Participate in Trainers of Library Student Employees Study
RuthMarie Quirk MLS
Primary Investigator
808-956-8525

This research project is being conducted as a component of a master's thesis. The purpose is to learn how trainers at University of Hawai'i libraries are using the WebCT Circulation services and training resource. You are being asked to voluntarily participate because you are a known trainer of student employees.

Participation in the project consists of being observed, completing a questionnaire, keeping a process log for a month and being interviewed by the investigator. The observation will focus on using the WebCT Circulation services and training resource. Interview questionnaire will focus on background information, your computer, and training experience. Data will be summarized into categories. No personal identifying information will be included with the research results. The observation will take 30-60 minutes, the interview will take 45-60 minutes, the questionnaire will take 15 minutes and the process log will take 2-3 minutes a day for one month. Three people will participate in the study. Interviews will be audio recorded. This study focuses on exploration and non-evaluative recording of how the trainers use the WebCT resource.

There is little risk from participating in this research project. Participating in this research may be of some direct benefit to library training. It is believed the results from this project will help the University of Hawai'i libraries better understand student employee training. As compensation for time spent participating in the research project, you will receive two Consolidated movie coupons.

Research data will be confidential to the extent allowed by law. Agencies with research oversight, such as the UH Committee on Human Studies, have the authority to review research data. Research records will be secured on the investigator's laptop and paper copies will be stored in a secured file in the primary investigator's home office for the duration of the research project. Participation in this research project is voluntary. You are free to withdraw from participation at any time during the duration of the project without penalty, or loss of benefit to which you would otherwise be entitled.

If you have any questions regarding this research project, please contact the researcher, RuthMarie Quirk 808-396-8883. If you have any questions regarding **your rights** as a research participant, please contact the UH Committee on Human Studies 2540 Maile Way Honolulu, HI 96822 Phone: 956-5007

Participant: I have read and understand the above information, and agree to participate in this research project.

_____
Name (printed)   Signature   Date

Appendix B: Demographic Survey

**Please complete this to provide the researcher with demographic information
Thank you for your time.**

Please check or write in the appropriate response.

    1. Gender   Male _____ Female_____

    2. Age: 18-25____, 25-35 _____ 35-45_____ 45+_____

    3. Ethnicity _____

    4. Origin: where were you raised? _____

    5. Education: indicate all that apply

    GED _____

    High school degree _____

    Years of school past High school 1, 2, 3, 4 Schools: _____

    AA degree list school and major _____

    BA degree list school and major _____

    Graduate degree and Major _____

    6. List any training that is not covered above:

Appendix C: Questionnaire

Darken the circle next to your answer.

1. Describe the frequency with which you access WebCT.
- o Daily
- o Weekly
- o Monthly
- o 2-6 times in the past year

2. Have you had any training in the use of WebCT, BlackBoard or other courseware?
- o No
- o Yes. Describe training _____

_____

3. Have you taken any class that included an online component
(e.g. TALENT 101, ETEC 442)?
- o No
- o Yes. List courses taken and describe online component

  _____

_____

_____

Please circle your response.

4. WebCT circulation services and circulation training resource is easy to navigate.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

5. The materials included in the WebCT resource are useful for me as a trainer.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

6. The security features of having to join the resource and log on are important and need to be retained in any future website for training materials.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

7. I am satisfied with the knowledge and skills gained from the training materials provided in this resource.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

8. **Please rate your CONFIDENCE level for using the WebCT resource.**

Procedure	Low	Moderate	High
Circulation Services			
Circulation Training			

9. **Please rate your KNOWLEDGE for using the WebCT resource.**

Procedure	Low	Moderate	High
Circulation Services			
Circulation Training			

10. Additional comments / Suggestions:

Appendix D: Interview Questions

About your library job:

Identifier:

Campus /Library

Current position title

Time in circulation _____years _____months

Time in current position _____years _____months

Brief description of training responsibilities

Personal Computer experience,

Where was your first computer experience?

Home_____

School_____

Work_____

What did you learn to do?

When was your first experience with computers?

How did your computer learning progress?

Personal Computer Ownership

Do you own a computer?

How do you use this computer?

Offline software

Word processing_____

Spreadsheet_____

Access or other Data storage_____

Calendar_____

Asynchronous communication

Email _____ Pine or Web-based

WebCT Discussion_____

Blog_____

Synchronous communication

Skype_____

IM_____

Chat_____

Online Work

Internet browsing_____

Electronic Databases_____

Other_____

Do you own a PDA?

If so what kind,

How do you use your PDA?

Offline software

Word processing_____

Spreadsheet_____

Access or other Database_____

Calendar_____

Home budget _____

Other_____

Asynchronous communication

Email _____

Synchronous communication

Phone_____

IM_____

Chat_____

Online Work

Internet browsing_____

Electronic Databases_____

Other_____

Work Computer Use

What kind of computers do you use at work?

Do you have a computer at your Desk?

Do you know what operating system is on the computer?

How do you use this computer?

Offline software

Word processing_____

Spreadsheet_____

Access or other Data storage_____

Calendar

Asynchronous communication

Email _____ Pine or Web-based

WebCT Discussion_____

Blog_____

Synchronous communication

Skype

IM_____

Chat

Online Work

Internet browsing_____

Electronic Databases_____

Other_____

How were you trained to use work computers?

Who trained you?_____

How were you trained to use this computer?

Take a class_____

One-on-one_____

Watching someone_____

Reading a manual_____

Using online help_____

Trial and error_____

Communicating about training

How do you communicate with the student trainee? (Indicate all that apply)

In person_____

Leave a note_____

On phone_____

Discussion board_____

IM_____

Chat_____

Email_____

Your Training Experience

When you were hired, did you know you would train student employees?

If not, when did you find out?

How long have you been training?

How many people do you train in a semester? A year?

Has your supervisor ever offered to send you for training?

If yes, describe:

Have you attended any professional development or training on how to train?

If yes, describe:

Who else does training?

Training Resources

Describe or show me training materials you currently use.

How did you come up with your current training materials?

Training Student Employees

Describe what a student employee is trained to do

Charge_____

Discharge_____

Shelve_____

Shelf read_____

Deliveries (mail etc)_____

Help patron search shelves_____

Answer directional questions_____

Answer questions about use of Voyager_____

Answer telephone_____

Specialized work_____

     Reserves_____

     Interlibrary loans_____

     Business_____

     Microcomputer support_____

     Web Page maintenance_____

     Other_____

Approximately how long does it currently take to train a new student who will be

working at your circulation counter?

Do you think training students takes too much staff time?

Support and Infrastructure issues.

What type of training environment support do you have?

Equipment?

Space?

Materials?

What type of support do you have from your co-workers?

What type of support do you have from peers at other campuses?

What type of training environment support do you need?

Equipment?

Space?

Materials?

What type of support do you need from your co-workers?

What type of support do you need from peers at other campuses?

Is the training you do evaluated?

Is the training rewarded or acknowledged in any way?

How could your library administration support you in the training of student

employees?

Volunteer?

How did you decide to volunteer for this study?

Appendix E: Observation Form

Date/Time   Participant   Location

Please go to WebCT and demonstrate how you use it. Please talk out loud about what you
are doing.
Note: login okay? Services? Training?

Description of Observation	Reflection
Okay let's go to WebCT.Hawai'i.edu and have you log in. Where do you usually go first? Circulation Services or Circulation Training? What are you looking for today? Which section header would it be in? Does the header make sense? If not what would you call it? Are there headers or sections you need? Which document is the one you want? Is it what you wanted? Have you retrieved this before? Yes, Was it the same version? No, Where do you think it will be? Do you use the flash, html .doc or .pdf version? How will you use this resource? How does this resource benefit you? How does this resource benefit your trainees? Which other resources do you use? Do you go to the other main Section? (Circulation Services and Circulation Training) Let's go there now and look at what is there. What looks useful to you here? Okay so that looks useful? How would you benefit from it use?	

What would you use it for?

How could I make it easier for you to find what you need?

What else would you like that is not here?

Have you used these other ways to get around the website?
 (Course menu, links on webpage, breadcrumbs)

How do they benefit you?

How can they be improved?

Comments made throughout use including suggestions for improvements.

Trainers of Student Employees

Appendix F: Process Journal

Please record daily use of the WebCT resource. If you did not use it indicate no use.

Date	Where did you search?	Did you find what you wanted?	Did you benefit from what you found?	Suggestions for improvement	No Use

Appendix G: Questionnaire to be completed 1 month after the initial visit

Darken the circle next to your answer.

1. Describe the frequency with which you access WebCT.
- o Daily
- o Weekly
- o Monthly
- o 2-6 times in the past year

2. Have you had any training in the use of WebCT, BlackBoard or other courseware?
- o No
- o Yes. Describe training _____

_____

3. Have you taken any class that included an online component (e.g. TALENT 101, ETEC 442)?

- o No
- o Yes. List courses taken and describe online component
  _____

_____

_____

Please circle your response.

4. WebCT circulation services and circulation training resource is easy to navigate.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

5. The materials included in the WebCT resource are useful for me as a trainer.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

6. The security features of having to join the resource and log on are important and need to be retained in any future website for training materials.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

7. I am satisfied with the knowledge and skills gained from the training materials provided in this resource.

Strongly Agree   Agree   Strongly Disagree   Disagree   No Opinion

8. **Please rate your CONFIDENCE level for using the WebCT resource.**

Procedure	Low	Moderate	High
Circulation Services			
Circulation Training			

10. **Please rate your KNOWLEDGE for using the WebCT resource.**

Procedure	Low	Moderate	High
Circulation Services			
Circulation Training			

10. Additional comments / Suggestions:

Appendix H: Closing Interview

Date/Time   Participant   Location

Thank you for all your help.

Can I have your Process Journal?

While I look at it, can you complete this questionnaire (Appendix G)?

So how did it go?

Did you find yourself using WebCT resource any more or less this month?

Did you share what you know about the WebCT resource with any of the other staff?

Did you discover any 'new' resources?

What benefit was derived from the WebCT resource?

What improvements would you like for the WebCT resource?

What additions would you like?

What organizational changes would you like?

Are there resources you need to help you make use of WebCT?

How do you feel about the interview process?

Anything else you'd like to share?

Appendix I: Observation Form Two

Date/Time   Participant   Location

Please go to WebCT and demonstrate how you use it. Please talk out loud about what you are doing.
Note: login okay? Services? Training?

Description of Observation	Reflection
Okay let's go to WebCT.Hawai'i.edu and have you log in.	
Where do you usually go first? Circulation Services or Circulation Training?	
What are you looking for today?	
Which section header would it be in?	
Does the header make sense? If not what would you call it?	
Are there headers or sections you need?	
Which document is the one you want?	
Is it what you wanted?	
Have you retrieved this before? Yes, Was it the same version? No, Where do you think it will be?	
Do you use the flash, html .doc or .pdf version?	
How will you use this resource?	
How does this resource benefit you?	
How does this resource benefit your trainees?	
Which other resources do you use?	
Do you go to the other main Section? (Circulation Services and Circulation Training)	
Let's go there now and look at what is there.	
What looks useful to you here?	
Okay so that looks useful? How would you benefit from it use?	

What would you use it for?

How could I make it easier for you to find what you need?

What else would you like that is not here?

Have you used these other ways to get around the website?
 (Course menu, links on webpage, breadcrumbs)

How do they benefit you?

How can they be improved?

Comments made throughout use including suggestions for improvements.

Appendix J: Results of Questionnaires

Initial Questionnaire

1. Frequency of Use. Two: 2-6 times a year. One: Monthly
2. Three reported no training in WebCT or blackboard
3. Three have not taken any course with an online component
4. One agreed that WebCT was easy to navigate; the other two had no opinion
5. Material useful as a trainer: One strongly agreed, Two had no opinion
6. Security features are important: Three had no opinion
7. Satisfaction with knowledge and skills gained from training materials. One agreed,
    Two had no opinion
8. Please rate your CONFIDENCE level for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2		1
Circulation Training	3		

9. Please rate your KNOWLEDGE for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2	1	
Circulation Training	3		

10 Comments: None

Final Questionnaire after one month

1. Frequency of Use. Two: Monthly during the year, weekly during the last month.
preparing for the semester, One: Daily during the last month and weekly during the
semester.
2. Two had no training in WebCT or blackboard, one indicated that she felt what we did
the first session to be training for WebCT, how to log in and navigate.
3. Three have not taken any course with an online component
4. Two agreed that WebCT was easy to navigate. One strongly agreed.
5. Material useful as a trainer: Two agreed. One strongly agreed
6. Security features are important: One agreed. One strongly disagreed. One disagreed.
7. Satisfaction with knowledge and skills gained from training materials: One agreed
Two strongly agreed
8. Please rate your CONFIDENCE level for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services		1	2
Circulation Training		1	2

9. Please rate your KNOWLEDGE for using the WebCT resource.

Procedure	Low	Moderate	High
Circulation Services	2	1	
Circulation Training	3		

10. Comments: Would like to see more and updated information. I also want to
encourage my staff and students to use WebCT.