Best practices of textile and clothing museum website development

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Best practices of textile and clothing museum website development

by

Tekara Shay Stewart

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Textiles and Clothing

Program of Study Committee:
Sara B. Marcketti, Major Professor
  Sara Kadolph
  Ana-Paula Correia

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Ames, Iowa
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ABSTRACT

The internet offers museums a variety of educational outlets. With the rising use of internet technologies in the everyday lives of millions of Americans museums are able to connect to a larger and more diverse audience. The internet itself, as well as internet technologies such as: podcasts and blogs have the potential to assist the collection in making its objects accessible, transferring knowledge of historic costume and textiles, increasing public awareness, and broadening its audience. This master’s thesis reviews the best practices used by museum professionals in the textiles and apparel discipline in an effort to better understand the Web and internet technologies to: disseminate information, present textiles and clothing collections and to enhance the virtual museum and collection experience.

Eleven museum professionals of textile and clothing museums were interviewed to better understand the methods, procedures, factors of effective website design, and display preferences, and to understand the purpose and mission of a textile and clothing museum and collection website.
CHAPTER ONE: INTRODUCTION

This master’s thesis reviewed the best practices used by museum professionals in the textiles and apparel discipline in an effort to better understand the Web and Internet technologies to: disseminate information, present textiles and clothing collections and to enhance the virtual museum and collection experience. The purposes of this study were: 1) to better understand the methods, procedures, factors of effective website design, and display preferences, and 2) to understand the purpose and mission of textile and clothing museums and collection websites.

I interviewed a group of eleven museum professionals that oversaw the maintenance of their textile and clothing museum and/or collection websites. I also conducted a content analysis of ten of the textiles and clothing professionals’ museum websites. With this knowledge, textiles and clothing collections and museums may refine and further develop their online presence.

Objectives

This research included: 1) the gathering of qualitative data in order to better understand the use of the Web and the Internet by textiles and clothing collections and museums and 2) the examination of the websites of these museums. The researcher sought to study this topic because of her interest and involvement in the Textiles and Clothing Museum at Iowa State University (see Appendix A for a history of this Collection).

1 Two of the professionals that I interviewed were employed by one institution, thus, there were a total of ten distinct institutions represented in this study.
Importance of the Study

Central to many museum mission statements are education and the dissemination of pertinent information (Honeysett, 2007). With the rising use of Internet technologies in the everyday lives of millions of Americans (Grove, 2007), museums are able to connect to a larger and more diverse audience. The Internet itself, as well as Internet technologies such as: podcasts and blogs have the potential to assist the collection in making its objects accessible, transferring knowledge of historic costume and textiles, increasing public awareness, and broadening the museums’ audience (Lin & Cassidy, 2008; Sauro, 2009; Wallace, 2001). The effectiveness and availability of the Internet allows for greater productivity and thus, more effective education to a large audience (Honeysett, 2007). Further, Honeysett (2007) warns that if museums fail to develop their own presence online they risk having misinformation published by non-authorized individuals and organizations.

A survey conducted by Pew Internet & American Life Project in July 2005 revealed that eighty-seven percent of American teens between the ages of thirteen and seventeen use the Internet. An April 2006 survey revealed that seventy-three percent of American adults use the Internet (Pew Internet & American Life Project, 2006). With Internet use increasing rapidly and people around the globe becoming dependent upon its use, museums are able to connect to a larger and more diverse audience. Howes (2007) stated, “In the twenty-first century, museums need the worldwide exposure of the Internet to promote their collections and expertise and to bring virtual visitors to their physical doors” (p.68). Museums that take advantage of having an online presence have a unique opportunity to engage and entertain the public and effectively compete against other leisure establishments. Grove (2007) stated, “In an age where museums and history organizations seem to be competing more for the
leisure time of the public, it is important for decision makers to have access to data about the Internet, cell phones, handhelds, digital cameras, and other forms of new technology” (p.5).

Museums are able to deliver quick, authentic and reliable information through the Internet. Although Internet users primarily use the technology to retrieve information quickly, they are “…increasingly looking for personal expression, membership in social groups, learning opportunities and meaning-making” (Howes, 2007 p.70). Museums’ use of Internet technologies such as: Facebook, Flickr, and blogs can provide new and customized learning opportunities for both regular and infrequent visitors. Because the Internet and digital technologies change rapidly it is imperative to examine the best Web and content development practices used by museum professionals to establish an online presence or improve current websites. An online presence is essential to reaching non-traditional museum visitors because museums that use Internet technology “will be rewarded not only with increased visitor traffic back to the museum’s homepage but also a positive view of the museum as a valued contributor to the Internet world of shared knowledge” (Howes, 2007 p.76).

By interviewing textile and clothing museum and collection professionals about web and content development practices, themes of different preferences of site creation and development may be revealed. Gaining the perspective of museum professionals with a combined knowledge of website and content development will make it attainable for recommendations to be made to assist other textiles and clothing collections with digitization of their objects and development of virtual exhibits. Examining the ways in which Internet technologies can enhance the online museum experience may also improve already existing
textiles and clothing museum websites and other museums that aspire to create a digital presence online.

This study provides knowledge that will help museums to establish websites that are designed to meet the needs and missions of their historic costume collections/museums and their virtual visitors. The examination of best web and content development practices used by museum professionals is appropriate for three reasons: 1) Because of the rapid growth of the Internet and its’ increasing existence in the lives of individuals it is essential to study this form of communication, 2) To contribute to a larger body of knowledge concerned with making collections more accessible to visitors and potential visitors and 3) To develop an understanding of the use of technological applications by selected textile and clothing museums.

Research Questions

1. How are textile and clothing museum professionals making their collections and museums accessible online?

2. What are the preferences of the textile and clothing museum professionals on how to display objects online?
   - Are there methods and best practices used across the field?
   - What are the processes for making collections accessible online?

3. What Internet technologies are used to educate virtual museum visitors?

4. What Internet technologies are used to entertain virtual museum visitors?

5. What is the mission of a textile and clothing museum website?
   - Do the goals/objectives of a textile and clothing museum website differ from the goals/objectives of the physical establishment?
• Does technology assist a textile and clothing museum in achieving its mission? If yes, how?

• How do textile and clothing museum professionals see the use of technology benefiting the museum

6. What are the challenges textile and clothing museum professionals’ face when creating and maintaining a website?

Definition of Terms

Archive: A historical collection of data, documents or records. (Merriam-Webster’s online dictionary, n.d.)

Blog: A Web site that contains an online personal journal with reflections, comments, and often hyperlinks provided by the writer. (Merriam-Webster’s online dictionary, n.d.).

Collection: An organized group of objects which constitute the holdings of a museum.

Costume: The garments, accessories, and hairstyles worn by individuals during a particular period of time. Historic costume represents the prevailing styles of an era for a specific population of people at a point in the past. (Williams, 1997)

Dress form: Used to give a three-dimensional view of a garment

Facebook: A social networking site

Flickr: A web-based digital photo repository

Internet: The global communication network that allows almost all computers worldwide to connect and exchange information. (The American heritage new dictionary of cultural literacy, n.d.).

Internet technology: Technologies that are applicable online such as MySpace and Facebook
Jpeg: A computer file format for the compression and storage of usually high-quality photographic digital images. (*Merriam-Webster’s online dictionary*, n.d.).

Mannequin: A life-size full or partial representation of the human body, used for the fitting or displaying of clothes; a dummy. (*The American heritage dictionary of the English language*, n.d.).

Multimedia: The combined use of media, such as movies, music, lighting, CD-ROMs, and the Internet, for education or entertainment. (*The American heritage dictionary of the English language*, n.d.).

Museum: A building, place, or institution devoted to the acquisition, conservation, study, exhibition, and educational interpretation of objects having scientific, historical, or artistic value. (*The American heritage dictionary of the English language*, n.d.).

Museum Experience: A environment in which the visitor becomes part of a seamless array of mutually reinforcing contexts which separately and collectively support the museum’s goals. (Falk & Dierking, 1992).

MySpace: A social networking site

Online: Operating under the direct control of, or connected to, a main computer


Online Interactivity: the extent to which an online user and a website may be engaged

Online/Virtual Exhibit: A museum exhibition presented on the web

Online/Virtual Visitors: A person who visits a website with interest

Podcast: A program made available in digital format for automatic download over the Internet. (*Merriam-Webster’s online dictionary*, n.d.).
Social Networking: The use of a website to connect with people who share personal or professional interests, place of origin, education at a particular school, etc. (*Webster’s new millenium dictionary of English*, n.d.).

Still Picture: A photograph of an object that is in place

3D Panoramic: A digital application which allows for Internet users to see a three dimensional view of an object

Website: A connected group of pages on the World Wide Web regarded as a single entity, usually maintained by one person or organization and devoted to a single topic or several closely related topics. (*Dictionary.com unabridged*, n.d.).

Website Content: Information made available on the Internet for virtual visitors of the website.

Wikis: A website in which users are able to produce and develop content

World Wide Web: The complete set of documents residing on all Internet servers that use the HTTP protocol, accessible to users via a simple point-and-click system. (*The American heritage dictionary of the English language*, n.d.).

YouTube: A video sharing website where users can upload, view and share video clips. (*The free on-line dictionary of computing*, n.d.).

Zoom: To bring a subject, scene, etc., into close-up or cause it to recede into a long shot using a zoom lens and while maintaining focus. (*Dictionary.com unabridged*, n.d.).
CHAPTER TWO: LITERATURE REVIEW

Introduction

Museums encompass a variety of roles and purposes, including that of a public education institute, a venue for special events, and the housing of exhibitions for education and marketing purposes (Kotler & Kotler, 2000). Within the past decade, museums have also sought new marketing strategies to increase museum visitation. Kawashima (1998) found, “Due to increasingly fierce competition for visitors in the wider leisure market, and also out of a genuine desire to serve the public better, many museums have invested in improving the visitor experience” (p. 21). Maintaining or establishing a website can equip museums to compete effectively against other informal education institutes and entertainment establishments. Particularly in today’s highly competitive market place, the development of a website for a museum is not only as information provider, but also as a powerful marketing tool (Lin & Cassidy, 2008). Maintaining a website offers museums an opportunity to brand themselves and reach non-traditional museum visitors (Wallace, 2001).

Because of the subject matter of this research, the following topics were explored in the literature review: virtual museums, online collections, virtual exhibits, and types of Internet technologies. The literature review also explored how textiles and clothing museums utilized their websites to provide entertaining, engaging, and educating online experiences to virtual visitors.

The Virtual Museum

The definition of a museum according to Burcaw (1975) is “a nonprofit institution that collects, preserves and displays objects for educational or aesthetic purposes” (p. 9). Museums of the twenty-first century are education centers that also provide entertaining
experiences to its visitors. The need to disseminate information to the masses is a primary need for all museums. Although museums are institutions that primarily exist to display objects they also have “the function of communication and dissemination of knowledge” (Schweibenz, 1998 p. 187).

Schweibenz (1998) described the virtual museum as “a means to establish access, context, and outreach by using information technology” (p. 185). The homepage of a virtual museum serves several purposes which include introducing the mission of the institution, promoting on-site exhibits and programs, providing basic information about the importance of conserving the objects in the collection, and publicizing the institution (Schweibenz, 1998). The Internet is able to provide a connection between museums and online visitors which can be defined as “connectedness” (Hoptman, 1992). “Connectedness” describes the connection between museums, visitors, the collection and information with the help of information technology. Virtual museums transcend the limitations of the traditional museum in that information is presented to online visitors to access and explore twenty-four hours a day seven days a week. Museum websites are effective tools to provide access to museum information along with disseminating discipline-specific knowledge and creation of dynamic and attractive virtual exhibits (Lin & Cassidy, 2008).

Virtual museums are able to reach a very broad audience and may provide a unique learning experience. Having an online presence is essential for museums as this meets the educational needs and expectations of the twenty-first century museum visitor (Howes, 2007). In the twenty-first century museums must realize the importance of the Internet and other technologies as credible methods to communicate information and educate the public.
Bowen, Bennett, Johnson (1998, para. 2-7) identified several reasons why museums should use the Internet. They stated:

- Maintaining a presence on the Internet provides the potential for instant worldwide publicity.

- The Internet offers fast and convenient communication with colleagues and the general public.

- An important facility for museums is the possibility of virtual exhibitions, perhaps mirroring actual exhibitions in the galleries, both temporary and permanent, but also allowing access to material not otherwise generally available (e.g., objects in storage, normally the majority of a serious museum's collection, or those too fragile or sensitive for display).

- The network may be seen as an alternative, cheap, and complementary form of information provision.

- Remote access avoids the expense of travel, especially for international access. Availability of on-line material is not affected significantly by distance, apart from speed of downloading. Potential visitors who may not be able to appreciate a museum's collection in any other way can be given a chance to do so.

- An important development for the future will be increasing availability of on-line databases for remote scholarly research of collections (Mannoni, 1997). The possibility of searching across a wide range of information distributed around the world is now physically possible. If existing museum catalogues
can be digitized, research which previous took months or years could take significantly less time to undertake.

As stated earlier, Internet use is increasing and museums that harness the effective use of mass media are able to disseminate information more abundantly and quicker to the general public. Bennett et al. (1998) supported the notion that the Internet can be a very effective tool for museums to use to communicate with the online audience. Schweibenz (1998) stated the, “Internet has become a household word. Even institutions with more conservative attitudes towards information technology such as museums start to recognize the possibilities it offers for the dissemination of information to a worldwide public” (p. 186). The Internet offers museums an opportunity to create an environment in which virtual visitors are able to explore, research, browse and sometimes play within the collection or an exhibit. Visitors to virtual museums can do similar things in a Web space as in a physical gallery setting, such as learn, teach, socialize shop, participate, plan, research, and find entertainment (Howes, 2007). Museums that have or are in the process of developing an online presence have a promising future in meeting the needs of the public.

An online presence is essential to reaching both frequent and non-traditional museum visitors. The online museum experience can provide social interactivity among online users. The virtual museum not only provides useful information to visitors but also encourages them to reuse the website and may arouse their interest to visit the physical museum (Lin & Cassidy, 2008). Therefore it is important to understand the factors that virtual museums must take into account when developing content for online use. It is also important to consider the experience from the point of view of the virtual visitor and what they might wish to gain from a museum website (Lin & Cassidy, 2008).
The Textiles and Clothing Museum Online Collection

Museum collections on the World Wide Web are databases of records “that represent holdings from permanent and study collections. Typically, databases provide data about each object (accession number, title, classification, materials, date, dimensions, donor name) and in many cases, a digital surrogate of the object” (Kalfatovic, 2002). The impetus for many museums to put their collections online is the need to provide access to its collections globally. According to Trzeciak, McCann, and Martin (2006), “Online collections have the potential to bring the observer closer to an object” (p. 273).

Goodrum and Martin (1999) conducted research concerning digital museums, more specifically online historic costume collections. The researchers identified the need of putting Drexel University’s Historic Costume Collection online as bringing the “Collection out of the closet so that it can be accessed by a variety of users. Creating a searchable database of digitized images and supporting documentation for each piece offers a means by which the collection may be accessed by students, scholars, designers and other interested individuals around the world” (Goodrum & Martin, 1999, para. 3). Goodrum and Martin (1999) examined the process of developing a costume collection online. The staff of the Drexel Historic Costume Collection recognized the many benefits and advantages of having an online collection and as a result analyzed potential users and resources “to provide a user-centered framework for designing the database and to identify low cost methods for delivering the database” (Goodrum & Martin, 1999, Analysis of Needs and Resources, para. 4).

The authors identified three potential user groups for such a site including textiles and apparel students, textile and fashion designers, and scholars. For the textile and fashion
designer audience the authors found that this group typically looked for information regarding historical costume in books, articles, and by visiting museums. Having access to a visual image, being able to physically touch the garment, and information about construction were all very important to this group. Goodrum and Martin (1999) also found students studying in the apparel major had similar needs as the textile and fashion designers but were more comfortable with conducting research online, and using technical software such as CAD to examine details of a garments’ design. For scholars of historic costume the authors found that this group desired access to the physical object because visual representations lacked adequate depiction of texture and construction. After identifying the needs and learning the attitudes of potential users the authors concluded that all three groups required: 1) Access to a visual image of an object, 2) Access to multiple views of an object, and lastly 3) Additional information such as supporting documentation that listed provenance and bibliographies of published sources on objects. Providing virtual, digital images of collections helps the online audience understand the artifact. When developing an online collection it is important to study and identify the audience of online collections because as Boynton (1997) pointed out, the potential for an online audience is broader than for a physical museum space.

A challenge for many university collections is that only students and faculty within in a specific department have access to the collection. Although textile and clothing museums provide great resources for students, scholars, and the public, they are often underutilized (Lin & Cassidy, 2008). In order for online collections to be accessible it is necessary to analyze the needs of potential users, and to evaluate resources (Goodrum & Martin, 1999).
Particular challenges many museums face include lack of technological expertise and the funding to present the collection online (Maier, 1999; Saiki, 2008).

Saiki (2008) conducted an analysis of digital images featured on textiles and clothing collection websites and found that although having an online collection helped collections achieve its mission to educate the public that, “There was not an overwhelming number of websites utilizing Internet technology to the fullest that would help the clothing and textile museum audiences” (p. 108). The author suggested that if museum websites were recognized as a complement to the physical museum that museums would leverage costs and time restrictions. Saiki (2008) developed a guideline for collection websites which consisted of several basic procedures: 1) To display at least one or two feature pieces in an attempt maintain quality and reduce costs, 2) To provide enlargement features, 3) To display exhibits in groups, and 4) To provide interpretative text.

Historically, lack of funding has been an issue for textile and clothing collections (Saiki, 2008). Although having an online presence opens up many marketing and educational opportunities for many museums, challenges and difficulties that arise when digitizing collections outweigh the many benefits of an online collection. Saiki (2008) stated, “Creating visuals for costume, However, can be particularly expensive in that, similar to a physical display, substantial research is required to interpret the artifact for appropriate and accurate display, and more resources are needed to display and fit clothing on dress forms or mannequins” (p. 101).

Digital collections presented online are able to assist museums in achieving their mission to disseminate information, communicate, and teach the general public (Saiki, 2008; Swade, 2003). Saiki (2008) stated, “Virtual artifacts appeal to visitors and can be used as
interpretive media, interactivity and education” (p. 100). Online collections provide Internet users the opportunity to explore objects and gain a contextual understanding of clothing (Saiki, 2008; Trzeciak, McCann, & Martin, 2006). The online collection also has the potential to provide “a much greater number of viewers the opportunity for a more in-depth observation of an historic object” (Trzeciak et al., 2006).

**Virtual Exhibits**

An exhibit can be described as a themed presentation of objects that Kalfatovic (2006) described as having “a tight connection between its idea, objects, and script that ties them all together” (p. 3). Virtual exhibits can be featured at a physical museum, online or in both locations. Virtual exhibits provide the online audience the opportunity to explore collections objects without having to physically visit a museum. They may also encourage online visitors to physically visit the collection or museums (Kalfatovic, 2006). Virtual exhibits provide a meaningful addition to already existing museum websites. Museums that recognize the capabilities of virtual exhibits and understand the need for an online presence may be more able to efficiently produce effective websites.

In order for museums to design effective virtual exhibits, Sayre (2000) suggested 1) To provide an online version of events and information for visitors that are incapable of visiting the physical exhibit, 2) To provide additional information about an object, and 3) To document and archive the process for future reference. Production of virtual museum exhibits are very time consuming because of the lengthy preparation and planning stage (Kalfatovic, 2006; Sayre, 2000). It is important for museums to feature online exhibits especially for those institutions that rarely find opportunities to present live exhibitions (Sayre, 2000). In some instances virtual exhibits can affect the success of onsite exhibits. Sayre (2000) examined the
process of developing an online/on-site exhibition and identified factors for achieving success in such collaborations. He found that by providing an online version of events and information for visitors who not able to attend the on-site exhibition triggered on-site visitors to access the virtual exhibit and encouraged online visitors to visit the physical exhibit (2000, para 18-21).

Virtual exhibits provide “free choice learning” to the online audience (Falk & Dierking, 2000). Visitors are able to bring their own interests and ideas to the process of viewing an online exhibit (Sayre, 2000). Museums that feature online exhibits are able to present current exhibits or provide free exploration of the collection which can help establish a positive virtual museum experience. In order for museums to successfully create “free choice learning” environments it is important to establish online visitors as the authorities of their learning experience. In order to provide a positive virtual museum experience, museums should consider their virtual visitors as active stakeholders when designing virtual exhibits.

Types of Internet Technologies

Social networking has significantly increased in popularity in the last four years (Lenhart, 2007). Although social networking is not a new idea since people have been able to engage in online discussion through the use of chat rooms and bulletin boards, and have been able to create homepages in the past, MacArthur (2007) argued, “The difference now is the scale at which it is happening and the cascading network effects enabled by a new generation of collaborative online applications” (p. 58). Social networking provides opportunities for online visitors to connect with content on a personal level. Being able to share their thoughts and contribute knowledge gives the online visitor power and authority to create rich learning environments. The ability of websites to allow visitors to make sense of the websites rather
than relying solely on organizing principles imposed by others makes the content more retrievable, useful, and meaningful to the audience (MacArthur, 2007). Through the use of social networks such as wikis, blogs, Facebook, and MySpace museums are able to distribute information easily to the masses and allow online users to become engaged with the content.

Blogs are Web sites that contain online personal journals with reflections, comments, and hyperlinks provided by the writer. Wikis are websites that provide a collaborative environment in which visitors are able to produce and edit content. Blogs and wikis allow users to contribute to or edit content on a website and these technologies facilitate online collaboration. Both blogs and wikis encourage the building of relationships with the public, a necessity for museums. Museums that implement the use of wikis are able to provide a social community that gives users the freedom to create content, resulting in a more highly personal customized learner experience. Wikis offers museums a chance to connect with an international audience, and by doing so are able to educate more people through the use of Internet technology than traditional onsite learning opportunities (Brown, 2007).

The use of blogs by museums may provide an efficient method of communication to museum visitors. For example, when the Smithsonian American Art Museum re-opened after a six and half year closure due to renovation, it used Internet technologies to reconnect with its constituency. Jeff Gates (2004), the media producer at the Smithsonian American Art Museum stated, “With our reopening we had the opportunity to use new tools to connect with our on-line visitors and connect our Web offerings with our about-to-be galleries. In addition, we saw an opportunity to strengthen our connection with younger audiences: twenty and thirty-somethings who were getting much of their news and cultural information on-line” (Why Publish a Museum Blog section, para. 5). In this particular case, online visitors were
able to view and learn about artifacts that were not available for public viewing during renovation.

Blogs allow users the opportunity to interact with museum staff and to receive up-to-date information about upcoming events and changes to a physical museum. Gates (2004) described the Smithsonian American Art Museums use of weblogs as “...a way to highlight our assets with high impact at low cost. The project fit well with our museum’s mission to connect Americans’ experiences with our art world. Connecting our collection and museum activities with the social network also known as the “blogosphere” would bring new audiences to our museum’s Web sites. We wanted to use viral marketing to create a “buzz” as we readied the museum for its debut” (Why Publish a Museum Blog section, para. 6). Blogging in this case helped the Smithsonian American Art Museum to connect with its audience online, highlight certain artifacts at low cost, and helped to produce a “word of mouth” marketing strategy for the museum’s blog.

In order for museums to successfully use blogs as a medium, education departments need to follow a flexible set of guidelines when developing either of them. When discussing how the Smithsonian American Art Museum established its blog, Gates (2004) stated, “Defining the parameters of our blog before we started publishing was important. What did we want to talk about, and how did we want to talk about it?” (Story Ideas: Changing as the Situation Warrants section, para. 1). By prioritizing the museum’s use of a blog and identifying what information will be shared provides the guidelines for effective and efficient weblogs.

Although there is not much use of wikis by museums, some museums have successfully incorporated the use of wikis into its online educational component. For
example, Greenmuseum.org, which describes itself as a “non-profit on-line museum of environmental art and advances creative efforts to improve our relationship with the natural world,” provides a wiki online (http://wiki.greenmuseum.org). Online visitors of this particular wiki are able to learn more about environmental-friendly artists and share their personal thoughts or ideas about the featured artists work. The Greenmuseum.org has been active since 2002, and has an increasing community of content developers.

Wikis and weblogs are successful tools that museums may use in an attempt to nurture better relationships with visitors. These Internet technologies are able to build connections between virtual visitors and objects in collections and visitors are able to receive a behind-the-scenes look at the happenings of a museum. Museums that utilize social networks are able to increase their audience, increase traffic to their organizations, and publish content online effectively and in an efficient manner (Gates, 2004). Museums that embrace the use of wikis, blogs and other Internet technologies embrace the large audience of learners and content producers and provide an outlet where the online community can come together and interact with each other on an intellectual level. There are educational benefits of participatory learning that can be addressed by social networking technology such as wikis and weblogs. The key principles of museum learning that can be addressed by the application of the Web are visitor interpretation, “minds-on” interactivity, social interaction and making connections to enhance museum learning (MacArthur, 2007).

Social Networking Sites

Social networking sites such as Facebook and MySpace are types of virtual communities that have grown tremendously popular in the last few years (Joinson, 2008; Passerini, 2007). Alexa.com, a Web information company, reported in November 2009 that
six of the top twenty visited websites are social networking sites. Joinson (2008) stated, social networking sites, “Typically provide users with a profile space, facilities for uploading content (e.g. photos, music), messaging in various forms and the ability to make connections with other people. These connections (or “friends”) are the core functionality of a social network site although most also provide opportunities for communication, the forming of groups, hosting of content and small applications” (p. 1027). Members of Facebook and MySpace are able to create profile pages, make connections with people and businesses, and meet new people through the site (Joinson, 2008; Passerini, 2007). A profile page provides information concerning your identity such as your name, photos, location, and personal interests (Passerini, 2007). Facebook and MySpace users are able to connect with other users by sending a friend request, which must be accepted by the receiving party in order to establish a link (Passerini, 2007). “Friending” another member gives them access to your profile, adds them to your social network, and vice versa (Passerini, 2007). Facebook and MySpace as well as many other social networking sites serve a number of functions that members are able to benefit from.

The root motivation for social networking sites are “communication and maintaining relationships” (Passerini, 2007, Introduction section, para. 3). By using the technology of social networking sites museums are able to build unique online communities which allow museums to make connections and participate in dialogue with visitors (MacArthur, 2007). Social networking sites are able to provide museums an opportunity to encourage social interaction and promote a group learning experience (MacArthur, 2007). Museums that embrace social networking technology will “improve learning and increase audience engagement, but also enhance knowledge and stimulate creativity across the board”
(MacArthur, 2007, p. 64). Museums that develop a presence on social networking sites such as Facebook or MySpace are able to provide “opportunities for visitors to learn about and interact with each other, as well as to feel a part of a special group” (Howes, 2007, p. 72).

Conclusion

Many museums have not yet taken the plunge in becoming digital learning institutions. In fact, Honeysett (2007) stated, “Much of the museum community seems reluctant to fully embrace the Internet, either by not having a website, or by treating it as an afterthought” (p.147). Increasingly, the world is becoming a wired village. Museums must react accordingly to stay afloat where there are thousands of other “edutainment” venues to visit. Museums that implement technology into their offerings are able to readily meet the many new ways people conduct their lives. Honeysett (2007) stated, “Like it or not, the Internet is becoming the primary way we research, do business, plan vacations and entertain ourselves and learn” (p.147).

Technology enables museums to provide engaging, entertaining and educating experiences to its visitors. The museums that harness the power of Internet technologies such as blogs, wikis and other social networks are able to reach a broader and much more diverse audience. Education departments in museums need to encompass digital technology. By not acknowledging the many benefits and advantages of using Internet technologies for educational purposes, museum education departments will not be able to produce lessons concerning the cognitive and affective educational value of activities.

Internet technologies like blogs, wikis, and Facebook are effective tools that engage, entertain and educate the public. Much of the public already views or participates in all three technologies in their everyday lives. Museums that recognize and understand the need and
the power of Internet technology will be able to advance in the future. Honeysett (2007) urged the need for museums to become digital and embrace Internet technology, and stated, “Museums are here for the good of the public and the public is online. One of the most important things to consider is our future audience and their expectations. Today’s youth only know a digital and online world. They need to be engaged now, because it will be much harder to engage them in ten or twenty years’ time. Investing in the Web is a necessary long-term investment for the museum community for sustainability” (p.153).

Based on a review of literature, it becomes clear that textiles and clothing museums and other similar nonprofit educational institutes must build and maintain websites to provide general information but also to provide educating, engaging, and entertaining experiences. A museum website is able to promote awareness of its collections and invite virtual visitors to the physical establishment (Howes, 2007). The ability to provide a customized learning experience based on the interests of virtual visitors is a unique method to promote exploration and learning.

Many museum websites fail to create an entertaining online learning environment by being filled with facts and images, yet offering few opportunities for active, creative engagement (Howes, 2007). A museum website can be used as a tool to foster social interaction, and to develop community-centered environments both of which are important components to consider when establishing a learning environment (Bransford, 2000; Howes, 2007).

In order for museum websites to keep current audiences and attract new visitors it is essential to invest time and money to the development of a digital online presence, and to the maintenance of this website. Museums need to adopt Internet technology to effectively
inform and entertain virtual visitors. Benefits of having an online presence are that it provides customized learning experiences in a virtual world that encourages play, interactivity and social engagement among its web audience.

Although most museums acknowledge the Internet as a method to promote its mission, reach new audiences and improve public education, little is known how to effectively and efficiently do it (Howes, 2007). In order for museums to make a connection with its online audience it must have an established website that effectively provides needed and desired information of its users. Howes (2007) shares “Museums must broaden their institutional focus beyond an organization rooted in an exclusive place in real time to a ubiquitous source of around-the-clock educational experiences” (p. 77).
CHAPTER THREE: METHODS AND PROCEDURES

In order to understand the best practices for museum website development, I interviewed eleven museum professionals, and examined the websites of their museums. Only a small sample of textile and clothing museum professionals related to website development were interviewed due to limitations in access, language, and the limited number of textiles and clothing focused institutions. In order to increase the possibility of reaching at least eleven museum professionals, I used a snowball sampling technique by asking each interviewee to recommend other potential research participants. Conducting interviews was essential in understanding the methods and procedures for creating an online presence, digitizing collections, and hosting virtual exhibits. Qualitative interviews were an effective manner in which to create meaning about a particular topic (Esterberg, 2002).

Individuals initially contacted to be interviewed were listed on textiles and clothing museums websites as: curator, collections manager, museum director, museum manager, or exhibition manager. Although there were many professionals to discuss website design with, the people that I interviewed had special insight relating to textile and clothing museums and were integral to developing content for the Web and/or making their collections available online. The interviews were conducted using the technology of email or traditional telephone calls.

To gain as much information and knowledge as possible from the interviewees, semi-structured questionnaires were utilized to allow me to focus more on the interviewees perspective than my own. According to Esterberg (2002), “In semistructured interviews, the goal is to explore a topic more openly and to allow interviewees to express their opinions and ideas in their own words” (p. 87). Esterberg (2002) stated that in-depth interviews are
particularly useful for exploring a topic in detail. Conducting in-depth interviews with each interviewee gave me an understanding of what textile and clothing museum professionals were actually doing in regards to establishing and maintaining an online presence. It was appropriate to interview textile and clothing museum professionals in order to understand the process of developing and maintaining a museum website. Strength of qualitative data is “that they focus on naturally occurring, ordinary events in natural setting, so that we have a strong handle on what “real life” is like” (Miles & Huberman, 1994 p. 10).

Hosting semistructured interviews also produced a unique set of data that was nonbiased and representative of the sample because in-depth interviews give the persons being interviewed the “opportunity to tell their own stories” (Esterberg 2002). Esterberg (2002) stated “We interview people to understand what life is like from perspectives other than our own. We try to move beyond our own experiences and ideas and to really understand the other person’s point of view” (p. 87). It is important to collect data from the interviewees’ perspective in order to understand a topic in terms of what each interviewee has to share. Conducting interviews was essential in understanding the methods and procedures for creating an online presence, digitizing collections, and hosting virtual exhibits.

The interviews were analyzed using the process of grounded theory. The researcher’s aim was to develop a theory grounded from the data (Strauss, 1990). This was established by systematically conducting interviews first, and interpreting the data by noting recurring patterns and themes, and counting how many times these patterns and themes appeared in the data (Miles & Huberman, 1994).
In addition to the interviews, a content analysis of the museum sites at which the interviewees were employed was conducted in order to examine the different components of a textiles and clothing museum website. I reviewed the websites based on the categories of online interaction (for example Facebook and blogs), online collection (for example searchable database and browsable images), display technique (for example mannequins and dress-forms), image features (for example zoom and 3D), and text accompanying images (for example designer/creators name and accession number). The instrument developed to evaluate each site was based on the content analysis conducted by Saiki (2008) and Williams (1997), personal knowledge, and suggestions from my thesis committee.

The content on each site was recorded using the instrument according to what content categories it contained. Conducting a content analysis was appropriate because in previous research it has been used to examine interactivity within websites (Ghose and Dou, 1998). Conducting a content analysis was also appropriate because in the past it has been used in historical costume research, social science, and mass communication research (Paoletti, 1982). It was important to evaluate the content on these websites because as Fico, Lacy, and Riffe (2005) stated, “The content of communication represents a rich data source whether one focuses on describing images and portrayals because of their assumed effects or examines content as an unobtrusive indicator of antecedent conditions or behaviors” (p. 17).

Sampling Procedures

To establish a list of potential interviewees I created criteria to select museums/collections that would serve as a potential sample. The criteria used to select museums/collections included: size (ranging between 3,000 and 50,000 artifacts), region (Northern, Southern, Eastern, Western, and Midwest), international location (Canada and
London), and included both university and non-university affiliated collections. I also used the book, *Clothing and Textile Collections in the United States: A CSA guide* (Queen and Berger, 2006) as a resource to find the sample. Preference was given to museums and collections listed with a website address in the book. Museum and collection websites were then visited. When visiting the websites I conducted a preliminary evaluation based on information provided and the appearance. All of the respective museums and collections maintained active websites (Appendix B).

Data Collection

Upon gaining institutional review board approval (Appendix C), I contacted thirty-eight textile and clothing museums by email and telephone to invite them to participate in this study. Out of the thirty-eight museums contacted only thirteen responded giving a response rate of 34.21%. Ten of the thirteen museums contacted for participation were used for the sample because of mutual scheduling compliance (Table 2). Eight interviews were conducted using a traditional telephone call, the remaining two responded to the questionnaire by email due to their personal preference.

The interview schedule contained forty-seven questions to address demographics of participants (i.e., What is your position? How long have you been in this position?), the mission of the organization (i.e., Can you talk about the mission of your institution? How does the museums website fit into your mission?), the collection/exhibit website (i.e., Do you ideally want to have every object of the collection online or just selected pieces?), and the planning and development of textile and clothing museum websites (i.e., On average how much time does the creation and development of website content take?) (Appendix D).
Before talking to each participant the interview schedule, was refined to match the interviewees’ experience of being part of the website development process because some questions were not applicable based on whether it was a museum or university-housed collection, if the organization had an online collection or had virtual exhibits. Also before each interview, participants were provided with the interview schedule and informed consent form. Although a trial interview was not performed because of lack of time and not being able to recruit a participant that was representative of the target audience, the interview schedule was edited and reordered after the third interview because some questions had the same response given by interviewees, some questions were more appropriate to ask earlier during the interview, and some questions would be addressed in the content analysis.

With informants’ consent, all interviews were digitally recorded and transcribed to ensure accuracy in data analysis. To further increase data validity, informants were sent a typewritten copy of the transcript and asked to confirm its precision. Telephone interviews ranged from twenty-five minutes to one and a half hours in length.

The instrument developed to conduct the content analysis included twenty-eight variables (Appendix E). When conducting the evaluations I used a combination of checking off when the museum had a specific variable and writing down alternatives for the variable of “other.” Evaluation of the each website required from five minutes to thirty minutes.

The Participants

The individuals I interviewed provided great insight into the present state of the textile and clothing museum field. A total of eleven textile and clothing museum professionals were interviewed (Table 1). I ensured representation of interviewees from small, medium, and large size museums as well as a mix of diverse job titles and
responsibilities including museum curators (4), collections managers (2), associate professors (2), multimedia developers (1), marketing and publications assistants (1), and museum media managers (1). Nine of the ten professionals either had a graduate degree(s) or were in pursuit of a graduate degree. The majority of the professionals (8) had similar academic backgrounds in fashion design, historical costume, arts management, museum studies, textile conservation, or art history. Two of the ten participants had academic backgrounds in information systems or graphic design. Four of the ten professionals were alumni of the institutions at which they currently worked. Participants’ work experience ranged from one to twenty-two years. The majority of the participants were female, while two professionals were males (18.18 percent). One interview involved two museum professionals who worked together at the same institution. To ensure confidentiality, each informant was assigned a pseudonym in the data analysis process.
<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Years of Experience</th>
<th>Job Title</th>
<th>Museum or University Collection</th>
<th>Region</th>
<th>Type of Organization/Mission</th>
<th>Size</th>
<th>Mission</th>
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<tbody>
<tr>
<td>Hollis</td>
<td>Female</td>
<td>22</td>
<td>Senior Museum Curator</td>
<td>A</td>
<td>Northeast</td>
<td>A not-for-profit corporate art museum that has a costume and textiles collection.</td>
<td>n&gt;30,000</td>
<td>Seeks to preserve, enhance, interpret, and extend the reach of its collections and the visual arts to a diverse audience as a source of learning.</td>
</tr>
<tr>
<td>Angela</td>
<td>Female</td>
<td>14</td>
<td>Museum Curator</td>
<td>B</td>
<td>Midwest</td>
<td>A museum at a public university that has a fashion collection, ethnic costume collection, and a textiles collection.</td>
<td>n&gt;30,000</td>
<td>A teaching collection that is dedicated to collecting, exhibiting, interpreting and preserving fashion and decorative arts.</td>
</tr>
<tr>
<td>Gabrielle</td>
<td>Female</td>
<td>13.5</td>
<td>Museum Curator</td>
<td>C</td>
<td>Midwest</td>
<td>A collection at a state university.</td>
<td>n&gt;11,500</td>
<td>To collect, preserve, and interpret textile and apparel material culture and to make the collection available to researchers.</td>
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<td>Name</td>
<td>Gender</td>
<td>Years of Experience</td>
<td>Job Title</td>
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<tr>
<td>Karen</td>
<td>Female</td>
<td>10</td>
<td>Associate Professor</td>
<td>D</td>
<td>Northeast</td>
<td>Collection at a not-for-profit private institution</td>
<td>n&gt;7,000</td>
<td>A teaching collection that is dedicated to education, research, scholarship, preservation, conservation, exhibitions, and making the collection accessible.</td>
</tr>
<tr>
<td>Kyle</td>
<td>Male</td>
<td>10</td>
<td>Museum Curator</td>
<td>E</td>
<td>West</td>
<td>A not-for-profit corporate fashion museum that has a permanent and study collection at a proprietary college</td>
<td>n&gt;50,000</td>
<td>A fashion museum that provides a costume and textile resource to students, educators, scholars and industry professionals, focusing on the development of education, exhibition, outreach and volunteer programs.</td>
</tr>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Years of Experience</td>
<td>Job Title</td>
<td>Museum or University Collection</td>
<td>Region</td>
<td>Type of Organization/Mission</td>
<td>Size</td>
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<tr>
<td>Tammy</td>
<td>Female</td>
<td>8</td>
<td>Museum Media Manager</td>
<td>F</td>
<td>East</td>
<td>A non-profit fashion museum that is a division of a college, which is part of a state university.</td>
<td>n&gt;50,000</td>
<td>A fashion museum dedicated to education, research, scholarship, collecting, conserving, documenting, exhibiting, and interpreting fashion.</td>
</tr>
<tr>
<td>Danielle</td>
<td>Female</td>
<td>7</td>
<td>Associate Professor</td>
<td>G</td>
<td>Midwest</td>
<td>A costume collection at a state-run public university.</td>
<td>n&gt;3,000</td>
<td>A collection that strives to collect, exhibit, and interpret textiles, clothing, and accessories that support the institutions education, research, and community programs.</td>
</tr>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Years of Experience</td>
<td>Job Title</td>
<td>Museum or University Collection</td>
<td>Region</td>
<td>Type of Organization/Mission</td>
<td>Size</td>
<td>Mission</td>
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</tr>
<tr>
<td>Henry</td>
<td>Male</td>
<td>6</td>
<td>Multimedia Developer Collections Manager</td>
<td>H</td>
<td>Midwest</td>
<td>Privately endowed and independent institution that has a costume and textiles collection</td>
<td>n&gt;50,000</td>
<td>A history museum devoted to collecting, interpreting, and presenting the history of its city, state and county to the public through exhibition, programs, research and publications.</td>
</tr>
<tr>
<td>Teagan</td>
<td>Female</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>Non-profit organization. An art museum that has a fashion design collection</td>
<td>n&gt;4,500</td>
<td>An art museum that is dedicated to educating and exposing the general public to the history and aesthetic attributes of the visual arts. It strives to collect, conserve, exhibit, and interpret a wide range of visual art.</td>
</tr>
<tr>
<td>Rachel</td>
<td>Female</td>
<td>3</td>
<td>Marketing and Publications Assistant</td>
<td>I</td>
<td>Southwest</td>
<td></td>
<td>n&gt;18,000 total number of artifacts in the museums collection.</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Gender</td>
<td>Years of Experience</td>
<td>Job Title</td>
<td>Museum or University Collection</td>
<td>Region</td>
<td>Type of Organization/Mission</td>
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</tr>
<tr>
<td>Amy</td>
<td>Female</td>
<td>1</td>
<td>Collections Manager</td>
<td>J</td>
<td>Midwest</td>
<td>A collection that is a division of a college, which is a private arts and media college.</td>
<td>&gt;6,000</td>
<td>A fashion collection serving as a teaching tool for fashion design students by providing access, on-going research, and educational and aesthetic exhibitions.</td>
</tr>
</tbody>
</table>
Conducting in-depth interviews with each interviewee provided me an understanding of what textile and clothing museum professionals were actually doing in regards to establishing and maintaining an online presence. It was important to interview textile and clothing museum professionals in order to understand the process of developing and maintaining a museum website. It is important to collect data from the interviewees’ perspective in order to understand a topic in terms of what each interviewee has to share.
CHAPTER FOUR: RESULTS AND FINDINGS

The following section details themes derived from the data about best practices of textile and clothing collections/museums. The textiles and clothing museum professionals’ words and ideas added richness to the analysis and representative excerpts are included below. The themes found by the researcher included: how the textiles and clothing museum professionals made their collections and museums accessible online; the preferences for displaying garments; and the types of Internet technologies used to inform museum goers, promote awareness, create dialogue, and enable interactivity. Challenges expressed by the textiles and clothing museum professionals included lack of time and staff resources; lower priority of establishing and maintaining a website; and lack of ability and resources to continuously update, inform, provide access, and market the organization through the web and Internet technologies.

The purpose of this study was to gather qualitative data to assist textiles and clothing collections and museums in the creation and development of an online digital presence. I also analyzed the current status of textile and clothing museum websites in terms of their display practices and content. The resulting data produced a clearer view of the current state of these websites and also revealed directions for development of future sites.

Description of the Museums

A total of eleven textile and clothing museum professionals in five different regions of the United States were interviewed. Ten websites were evaluated during a period of five and a half months. The resulting data was analyzed using grounded theory to determine emergent themes. Demographic information such as each museum’s regional location, type,
size of the textile and clothing collection were recorded. The following tables and figures present the analysis of these demographic variables.

Figure 1 presents the distribution of the museums by region of the United States. Of the ten museums included in the sample five were located within the Midwest. This was followed by two museums in the Northeast, and one museum each in the East, West, and Southwest United States.

Figure 1: Distribution of Museum/Collection by Region (N=10)

Four categories of organizations were identified. Four (40.0 percent) of the ten organizations were university collections. Three (30.0 percent) were university museums, two (20.0 percent) were art museums, and one (10.0 percent) was a history museum (Figure 2).
Two categories of collections were identified (Table 2). Eight (80.0 percent) of the ten organizations collected both textiles and clothing, and two (20.0 percent) of the ten organization collected only clothing.

Table 2: Textiles and/or Clothing Sites (N=10)

<table>
<thead>
<tr>
<th>Artifacts</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing Only</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>Textiles and Clothing</td>
<td>8</td>
<td>80.0</td>
</tr>
</tbody>
</table>

Research Questions and Findings

The six research questions are restated in this section with major findings pertaining to each one.

Q1) How are textiles and clothing museum professionals making their collections and museums accessible online?
A variety of features were available at the websites. Figure 3 presents the summary of the types of features found at the museum/collection sites which related specifically to the collections. The following features were most commonly found: browsable images (5 sites featured this resource), searchable database (4 of the websites), recent acquisitions (2 of the websites), and database software (2 of the websites). Four of the websites provided combinations of the features, such as browsable images with searchable databases. Five (50.0 percent) of the sites did not provide any features of their collections on their websites.

Figure 3: Site Features of Collections (N=10)

All (100.00 percent) of the textile and clothing museum/collections used a collections management system with an online component but only half (50.0 percent) of the sites were providing garments from their collections online. Although results from the content analysis showed that only two collection management systems were identified, further investigation through interviews found that the most (40.0 percent) common collection management system utilized by textile and clothing museums was Past Perfect software (figure 4). The
other museums utilized The Museum System, Star Museums, customized software, or were unaware of what collection management system the museum used to maintain their collections.

Figure 4: Collections Management Software Used by Museums/Collections

Q2) What are the preferences of the textile and clothing museum professionals on how to display objects online?

- Are there methods and best practices used across the field?
- What are the processes for making collections accessible online?

Showcase the Collection

The informants stated that their collections were used to teach, educate, and communicate to the general public. Many of the informants talked about selecting garments that best portrayed the collections when deciding which pieces to feature online. According to Tammy, a media manager at a fashion museum,
We’ve cherry picked what we think are some of the most iconic pieces of fashion highlighting the best pieces that are simultaneously the most iconic pieces of fashion and what items in terms have moved fashion forward historically.

The power of showcasing the collection to express the best aspects of the collection was also reflected by Rachel, marketing and publications assistant, and Danielle, an associate textiles and clothing professor:

We find it important to display the noteworthy or important pieces from our collection because these images are primarily used to reveal to the public and other professionals and students the scope of the collection that we have. (Rachel)

I like to highlight a few key pieces to show the depth of the collection. To show something special (Danielle).

Although the quotes of the informants consistently stated that noteworthy pieces were used to showcase their collections, no criterion was provided as to how to select objects to be displayed online.

Best Display Practices

In addition to showcasing the best aspects of the collection, informants also believed that the best way to display garments depended on how to show off the shape of the garment whether by use of a mannequin or a dress-form. Kyle, a museum curator stated, “They (garments) need to be on a form that shows how they are meant to look on a body.” For Rachel, the fit of the garment was the determining factor when deciding how best to display garments. She stated,
We use both mannequins and dress-forms for garments depending on the fit of the garment. It’s either put on a dress-form or a mannequin. It just shows off the shape so much better.

Figure 5 presents the summary of the types of display techniques found at museum sites relating specifically to clothing. Six (60.0 percent) of the sites used mannequins to display garments and three (30.0 percent) used dress-forms. One (10.0 percent) museum used both mannequins and dress-form techniques. Zero (0.0 percent) museums used the laid flat technique to display garments online.

Figure 5: Display Techniques at Sites (N=10)

It appears that results from the interviews of textile and clothing museum/collection professionals are inconsistent with the results of the content analysis. Results from the content analysis indicated that the most common technique used to display garments online were the use of mannequins.
Highlighting details of garments by providing multiples views, close ups, and showing a garment three dimensionally were other practices shared by most informants. Teagen, a collections manager of a costume and textiles collection at a history museum stated, “You notice the different kinds of satin, the brocade of the dress itself and the lace on the sleeves and you know just kind of detailing what makes these dresses special.” Tammy stated, “Fashion is a three dimensional medium and having multiple views really gives you the best idea of what the garment looks like.” Angela, a museum curator stated at a university textile and clothing museum also agreed,

The way I’ve done it was to do pictures of a piece to show its three dimensionality. So front, side, back and different side views. I always take details (close ups) so people can get closer to the textiles and things that are of interest in terms of the design.

Figure 6 presents the summary of the types of image features found at the museums sites. Nine (90.0 percent) of the sites provided still images, five (50.0 percent) of the sites zooming options, and four (40.0 percent) of the sites provided enlargement options. Four (40.0 percent) of the sites provided a combination of at least three different options for viewing objects, and two (20.0 percent) provided a combination of at least two options for viewing objects online. One (10.0 percent) provided only one single viewing option which was a still image. Three of the combinations that appeared included enlargement, zoom, and still viewing options. One combination that appeared included enlargement, zoom, and 3D viewing options. Another combination that appeared included zoom and still viewing options.
Figure 7 presents the summary of the types of documentation of the artifact images shown on the sites. For five (50.0 percent) of the sites basic accession information (i.e., the name of artifact and date) and contextual information (i.e., historical information about the period of the object, or information about the culture from which it originated) was given. Four (40.0 percent) of the sites provided accession, contextual, and other information (i.e., fabric the object was made of). One (10.0 percent) of the sites provided no information at all.
Thus, most textile and clothing museum websites offered more than just basic accession information to accompany images at the websites and make the collections more accessible to online audiences.

Limit Copyright Infringement

In order to protect content such as photographs of objects that are published on museums websites, the informants spoke of methods used to limit and restrict online users from “copying and pasting” or stealing images. The majority of informants mentioned copyrighting webpages, and providing low resolution jpegs that discourage copying. Many of the informants also mentioned the inevitability of images being copied without permission. Rachel, a marketing and publications assistant at an art museum suggested,

We try to protect them (photos of objects) from being copied and pasted and used on other peoples’ websites. What we do when we put images online is put them up with
a low resolution that’s an onscreen resolution. It’ll look great on your screen but if you try to take it…it wouldn’t look good at all.

Henry, a multimedia developer at a history museum stated,

When we use images online we decrease the resolution significantly and we use jpegs. We slap our logo on them (images). We do not provide high resolution version of images online.

Tammy suggested,

We don’t put them (images) up in that high of a resolution so it makes it very hard to use, to steal, and to use that image in another context. But if people want your stuff they’ll scan it at high resolution and they’ll use it. Really the culture is to try and be more open about the material your putting out there and so I think what we’ve done is that you just select and say…alright we’re gonna take these 500 pictures and they’re just gonna be out there in the world…you know…and just sort of be okay with that.

Figure 8 presents the summary of how many textile and clothing collections and museums displayed copyright notices on their websites. Seven (70.0 percent) websites had copyright notices on their homepages. Three (30.0 percent) of the websites did not have any form of copyright notice on their homepages.
It appears that textile and clothing museum professionals have identified the problem of ease of copyright infringement online and are proactive about limiting copyright infringement. Although the researcher did not investigate whether or not images provided on websites were low resolution jpegs, their perception of best practice appears to be consistent with what they are currently doing.

Making Collections Accessible Online.

The majority of informants agreed that making collections accessible online was a collaborative process that involved the professional expertise of numerous employees in different departments at their organizations. The majority of informants identified that the method of making collections accessible online was as follows: objects were selected, they were then placed on forms, photographed, and then the photos were edited and uploaded to the Internet. The process and people involved for completing the digitization varied at the different institutions. Tammy shared,
The exhibitions department, Conservation when it comes to dressing and mounting a garment, Curatorial for obviously writing content the Director’s Office for approval also for editing, then there is the Office of College Relations which sort of oversees what we do and they also kind of give a stamp of approval.

Rachel stated,

The photographer and the curator will stand there and they’ll take some photos, they put them on the computer, they’ll be like okay I think we need to rotate it a little bit to catch the characteristics of the line of the dress or the cut perhaps or a particular detail, the way the fabric falls or is draped. For our online galleries we actually use Flickr. So we put all the images on there and upload them to our website.

Amy stated,

We have a graduate student who is a photographer and basically she comes in twice a week and one of our student workers puts an outfit on a dress-form, she photographs it and while she photographs it someone is undressing the dress-form and they switch it out. It’s just that process and at the end of the day she kind of Photoshop’s it and gets it to look nice and then we upload it to Past Perfect and then from what I understand it’s (content) pulled straight from Past Perfect. It is the Creative and Print Services that do all our web design and major printing for the college.

Due to a lack of technical terminology knowledge and because the process of digitization often involved multiple departments and staff members, many of the textile and clothing museum professionals were not able to enumerate how they made their collections accessible online. However, what become clear from the interview data was 1) the need for
collaboration with other professionals and departments and 2) putting garments on forms, 3) photographing them, 4) editing them, and 5) uploading them to the web.

Q3) What Internet technologies are used to educate virtual museum visitors?

Q4) What Internet technologies are used to entertain virtual museum visitors?

While many of the informants agreed that there were benefits to using Internet technologies such as Facebook and MySpace, whether they were used to educate or entertain virtual museum visitors was unclear. The themes that emerged when discussing the uses of Internet technologies were that they were tools to inform, promote awareness, create dialogue, and enable interactivity. Tammy stated,

It’s less about us pushing information out and more about pulling from our visitors and our users…to get more interaction and the sharing of knowledge. It’s about eliciting interaction so that people are engaged with the material. To have sound, roll-overs, pop-ups, multiple videos, Flickr uploads, links to other sites, and podcasts are just great resources to have.

Amy shared, “It’s a great way of networking and getting your name out there. They’re valuable tools for marketing and promotion.”

Although most of the informants identified having a Facebook page, the majority of those with a Facebook page stated that after establishing a page they never went back to update it or had forgotten about it. Themes that were identified as factors why the Facebook pages were abandoned included lack of time and staff, low priority, and not having the ability to continuously update. Amy said,

Because there’s only one staff person and the rest are all student workers we really just don’t have the man power to tackle all those (Internet technologies) sorts of extra
little things. We have a ton of other things that are much larger focuses at the time and not whether or not we have a page on Facebook.

Rachel added, “I believe the museum has a Facebook page but that no one is really currently updating that or using that for getting information out to the public.”

Figure 9 presents the summary of the types of online interactions found at museum sites. Six (20.6 percent) were virtual exhibits, and another six (20.6 percent) were interactive links such as links to an online dictionary of fashion and live links to sponsor websites. Four (13.8 percent) were other interactions such as links to their organization Twitter page, YouTube channel, an RSS feed, and Social-tagging. Three (10.3 percent) were featured links to organization Facebook pages. Three (10.3 percent) were online tours that were available. Two (6.8 percent) were featured links to organization Flickr pages. Two (6.8 percent) were featured links to organization blogs. Two (6.8 percent) were podcasts and one (3.4 percent) was a featured a link to its MySpace page. Zero (0.0 percent) were featured links to organization Wiki pages.
It appears that although most textile and clothing museum professionals identified Internet technologies such as Facebook as being useful tools for promotion and increasing public awareness, online interactions that were commonly used were virtual exhibits and links to other webpages. Although most of the informants stated they had Facebook pages, only two links were found on websites that lead visitors to a museum’s Facebook page.

Q5) What is the mission of a textile and clothing museum website?

- Do the goals/objectives of a textile and clothing museum website differ from the goals/objectives of the physical establishment?
- Does technology assist textile and clothing museums in achieving their mission? If yes, how?
- How do textile and clothing museum professionals see the use of technology benefiting the museum?
When discussing the missions of the website and the physical establishment, several themes emerged that were simultaneously present in both missions: to inform, provide access, and market the organization to the public. There was a consensus among informants that the mission of the textile and clothing museum website was a combination of informing, marketing, increasing public awareness, and making its holdings more accessible. Rachel stated, “It’s very important to get our collection out there so researchers and students around the world can access what it is we have to offer.” Tammy stated,

I look at it as being three components to inform people about the museum, what’s going on, where or what programs are available, how to get here. It’s a marketing tool to present ourselves (the museum) to a wider audience.

The majority of the interviewees also agreed that the textile and clothing museum and collection website also helped to achieve the mission of the physical establishment by presenting the collection online, informing the audience, and providing access to the collection.

Hollis stated, “It’s (the website) a way of presenting the collection to the public. It educates and increases public access.” Danielle added, “The website helps to achieve the general mission of the university because it reaches out beyond our students here at the university.”

When discussing how technology benefited the museum/collection, informants generally agreed that technology in terms of the website, online collections, and use of Internet technologies were inexpensive and easy ways to promote the museum/collection and its offerings. Henry stated, “It’s been great for us, I mean, these are free resources that we’ve taken full advantage of and will continue to take more advantage of in the future. Kyle added,
“We want to use whatever is popular technology at the time that is going to be cheap and that is easily adaptable with what we’ve already got.”

The majority of informants also agreed that the availability of Internet technologies made them particularly beneficial. Informants revealed that digitizing the objects and publishing the images online helped with the preservation and conservation of the physical garments. Karen stated, “By allowing many viewers to experience the object without the stress of a physical exhibition are beneficial in terms of achieving the mission of the collection.” Tammy added, “Historical costume and textiles are extremely fragile and sometimes rare so photographing them and putting them online definitely preserves that object. It can live longer.”

6. What are the challenges textile and clothing museum professionals’ face when creating and maintaining a website?

Challenges of Creating and Maintaining a Website

When discussing the challenges and difficulties of creating and maintaining a textile and clothing museum website, several major themes emerged as problematic. These themes included: not being able to continuously provide up-to-date information, the website potentially decreasing physical visits, and losing authority/control of content once its’ published online. Henry stated, “A major challenge is not knowing whether or not providing content online competes with people physically coming in to the museum to see the physical collection.”

Rachel stated,

I don’t know if you will have control over it (content) because once it gets out you kind of lose control over it. They can show up in places that we would not consider
appropriate. The nature of putting an image online and in a year it could be on a
hundred different websites or linked to places. I mean once it gets out there, and
becomes available through Google search and information spreads it kind of becomes
out of our reach.

Danielle stated,

By putting images and all sorts of information up on the Web, I think sometimes the
purpose and reason for physically visiting the collection is lost. I mean you don’t
want the Website to compete with the physical collection.

Informants seemed to recognize that by making their collections and museums
accessible online, control over what happened to the content decreased significantly.
CHAPTER FIVE: SUMMARY AND DISCUSSION

From the data one can conclude that among the informants interviewed and sites reviewed, there was some variety of how textile and clothing museums were making their collections and museums accessible online. Most of them had successfully established a basic online presence by providing features of collections online, multiple viewing options of objects in collections, and information about objects copyrighting homepages and enabling online interaction. From this data, a guideline for textile and clothing museum professionals can be developed, including suggestions for further improvements.

The following section addresses some of the types of content that appeared at sites, along with suggestions for further development. The types of content are presented in order of the findings presented with the research questions.

Although all textile and clothing museum/collections used a collections management system that provided an online component to assist with making collections available and accessible online, only half of the sites provided features of browsable images, and a combination of searchable databases and recent acquisitions online. Museums are not fully utilizing their collection management systems to complement their collections by making them more accessible online.

All websites featured visuals of clothing and textile objects. The results show that there has not been an increase in the amount of textile and clothing museums’ websites featuring searchable databases of their collections online since 2008. Saiki (2008) found that 49.1 percent of the websites had searchable databases, and still today half (50.0 percent) of the websites have features of searchable databases. The number of virtual exhibitions increased from 49.1 percent in 2008 to 60.0 percent in 2009.
Currently textile and clothing museums/collections are selecting objects that showcase their collections. By selecting pieces that showcase collections to feature online, museums are able to express the best aspects of their collections. The results show that the current practice used by museum professionals to select objects to display online is supported by previous research. Saiki (2008) found that 77.2 percent of digital images of objects were found as featured pieces. However, no criterion has been developed as to what constitutes an object as showcasing collections.

Although textile and clothing museum professionals believed the best method to display garments depended on how to show off the shape of the garment 60.0 percent of the total websites displayed garments on mannequins. Previous research has shown that textile and clothing museums have tended to omit displaying clothing on mannequins and dress forms because of limited resources and because mannequins were more expensive than dress forms (Harris, 1997). Although having limited resources are still a major concern for museums, mannequins were used more commonly than dress forms to display garments online. Saiki (2008) suggested that mannequins may help to explain garments to virtual visitors because of the limitations of databases in interpreting the objects in a historical context.

As suggested in Goodrum and Martin (1999) providing enlarged views of textiles and clothing objects are helpful for virtual visitors. The number of websites with enlargement functions has increased from 24.5 percent (Saiki, 2008) to 40.0 percent currently. Textile and clothing museum websites that provided a variety of viewing options are changing the traditional use of textile and clothing collections. Traditionally the use of textile and clothing collections has been described as “hands on” (Saiki, 2008; Sauro, 2009). Considering the
need to provide multiple views to show an objects three dimensionality to museum virtual
visitors, the results were not surprising.

Textile and clothing museums are providing more than basic information about
objects featured on websites. The most common information accompanying images on
websites were accession and contextual information. The fabric of which a garment was
made from was also frequently included. The common features addressed the name of the
object, date of creation, historical information, and information about the culture from which
it originated. The number of websites providing accession and contextual information
accompanying images has increased from 45.0 percent in 1997 (Williams, 1997) to 90.0
percent. The descriptions provided on textile and clothing museum websites assessed basic
and important aspects of objects (Saiki, 2008). Other texts that were found on textile and
clothing museum websites were copyright notices. The number of websites displaying
copyright notices has increased from 68.3 percent in 1997 (Williams, 1997) to 70.0 percent.
Williams (1997) suggested that more museums needed to post notices on their websites
because of the ease of “copying and pasting,” altering images, and sharing of content.
Williams (1997) stated, “Museums need to be responsible for protecting their right to the
images of their artifacts, catalogs, and other content accessible at their sites” (p. 69).

Although textile and clothing museum professionals are aware that publishing content
on the Internet is problematic, the need to provide images and content about their collections
to virtual visitors in an effort to make them more accessible has greater importance.
Considering many museum missions are to educate and disseminate pertinent information to
the general public, the results were not surprising and indicate that museum websites are
helping to achieve the mission of the physical establishment. In the past the use of a
hyperstamp, a stamp on documents that are posted on the Internet indicating fair use of the material, was suggested as a possible solution (Stern, 1996; Williams, 1997). Currently textile and clothing museum professionals are using the technology of low resolution jpegs in an attempt to decrease copyright infringement.

Textile and clothing museum professionals are not following a definitive procedure for making collections accessible and available online. The process of selecting objects, putting garments on forms, photographing the objects, editing the photos, and then uploading them to the Internet is the common practice among professionals. The researcher has suggested a more systematic sequence of steps for textile and clothing museum professionals to follow when developing content for museum websites based on the results (Appendix F). More research is needed to identify an effective process for making collections available online.

Virtual exhibits and links to other webpages are the most common interactions available online. Internet technologies such as blogs and Facebook are being used by textile and clothing museum professionals with the intent to promote and create dialogue between organizations and their virtual visitors. Previous research suggested that links to manuscripts and other information are needed in online databases if the additional information is important to the textile and clothing audience (Saiki, 2008). The findings of this research identified that 55.0 percent of all online interactions documented were of interactive links, virtual exhibits, and other interactions such as links to their online organization YouTube channel.

Textile and clothing museums are communicating with their online audience with a strong use of Internet technologies. As stated previously in the literature review, the Internet
offers museums an opportunity to create an environment in which virtual visitors are able to explore, research, and sometimes play. Museums are using different types of Internet technologies as tools to connect with their online audience, and for online visitors to connect with content on a personal level.

The textile and clothing museum website is a tool used to achieve the mission of the physical organization. Textile and clothing museum professionals believe that their websites help to achieve the mission of the physical organization by increasing public awareness and informing the general public. Previous research found that 86.7 percent of historic costume and textile museums and archive collections websites provided an events calendar, and 75.0 percent provided educational programs information (Williams, 1997). Although the instrument used to document variables found at textile and clothing museum websites did not include variables to identify public awareness, 55.0 percent of all online interactions documented were of interactive links, virtual exhibits, and other interactions. Based on the results of the content analysis and informants beliefs about the capabilities of Internet technologies to inform, educate, and increase public awareness it can be concluded that museum websites assist the physical establishments mission.

Textile and clothing museum professionals believe that a major benefit of technology is the ability it has to increase objects longevity, thereby also helping to achieve the mission of the physical organizations. Previous research suggested that although technology resolves conservation issues by decreasing the handling of objects and increasing objects’ longevity significantly, digitizing historic costume collections is time consuming and costly (Sauro, 2009). Based on the results of the content analysis and interviews that all the textile and clothing museums used a collections management system with an online component but only
40.0 percent of the sites provided searchable databases. It can be concluded that the factors of time and cost are indicators of why more museum websites do not provide searchable databases.

**Recommendations**

Currently, textile and clothing museum professionals are not following a consistent procedure for making collections accessible and available online. The recommendations that follow present factors for textile and clothing museum professionals to consider when exploring ways to make their collections accessible online.

1. Textile and clothing museum professionals should conduct research about current collection management systems being used by similar organizations. When considering purchasing a collection management system, textile and clothing museum professionals should select a system that works best for objects in the collection, and that is compatible with other software and programs already being used by the museum.

2. Textile and clothing museum professionals should execute the suggested procedure in the exact order it is presented to ensure effectiveness and efficiency (Appendix F).

3. Developing content for the museum website is a collaborative effort that enlists the help of many museum personnel. The expertise of the curatorial department is needed to help with the selection of objects to be photographed and featured online because they help acquire and organize valuable historical items in the collection. The conservation department and collections manager should be consulted as well when selecting objects to be photographed because they help preserve the life of objects and oversee the handling of objects as well. The expertise of the education department is also needed to
help develop explanatory text that accompanies images online. The curatorial and education departments should consult one another when developing website content because both accession and contextual information are needed to support images online. A photographer, familiar with Adobe Photoshop, digital photography, and photographing textile and clothing objects preferably, is needed to photograph objects and edit photographs. The curatorial and exhibition department may want to work with the photographer to help prepare and style the object in an effort to capture the object at its best photographically.

4. Before publishing content on the Web, textile and clothing museum professionals should seek the approval of the museum director or another authority to ensure that content reflects the museum’s mission.

Implications for Future Research

The purpose of this study was to gain an understanding of what were the best practices used at textile and clothing collections and museums in the creation and development of an online presence. The results of the study suggest several areas for continued research.

To improve the effectiveness of developing website content, on-site observations should be conducted at different stages during the process of making collections available online to gather firsthand data on processes being studied (Frechtling, Frierson, Hood, & Hughes, 2002). Frechtling, Frierson, Hood, and Hughes (2002) stated, “By directly observing operations and activities, the evaluator can develop a holistic perspective, i.e., an understanding of the context within which the project operates. This may be especially important where it is not the event that is of interest, but rather how that event may fit into, or
be affected by, a sequence of events” (p. 59). On-site observations would also allow researchers to learn about issues the museum staff may be unaware of or unwilling to discuss in an interview (Frechtling et al., 2002).

A longitudinal study could be conducted by repeating this study over a longer time period and comparing the data sets to determine how textile and clothing museum professionals have chosen to develop, refine, change, and adapt to new emerging Internet technologies. Williams (1997) similarly suggested that a longitudinal study of costume and textiles museum websites be conducted as well.

Website user and evaluation studies are other areas that should be explored further. The results of this study could be compared to a survey of what the motivations and preferences are of current and potential visitors of these sites (Williams, 1997), and what the online audience is doing at these sites. This would indicate how textile and clothing museum professionals could create and develop a web presence that is more user-centric based on the needs and wants of its online audience.

Lastly, the results of this study indicated that the area of copyright and its application to the Internet (Williams, 1997), and Internet technologies such as Facebook are areas of concern for many textile and clothing museum professionals and in need of further investigation. What are the issues of copyright that textiles and clothing museums and collections have faced when publishing content on the Web (Williams, 1997), and on social networks? How is it handled?

Limitations

The main limitations of the research were: limited number of interviews conducted, and limited technical knowledge of website design. Another limitation of the study was that...
only textile and clothing museum/collections in the United States were included in the study. More interviews of textile and clothing museum professionals and evaluation of websites would yield more representative results. Additionally, replication of the results would be difficult as technology innovations will be applied to sites as they are updated (Williams, 1997). Another limitation of the research was related to self-reported data which is prone to misrepresentations or inaccurate recall of situations. This study can be used to study the differences and changes between what is taking place at physical and virtual textile and clothing museum/collections establishments.
APPENDIX A

Iowa State University’s Textiles and Clothing Museum

Iowa State University’s Textiles and Clothing Museum is maintained with financial and faculty support housed within the Department of Apparel, Educational Studies, and Hospitality Management at Iowa State University. The objects constituting the historic collection began in the early 1920’s as a teaching resource for professors in the Textiles and Clothing Program (TCM Manual, 2009). The collection is in a transitional stage of moving objects stored in two rooms in LeBaron Hall into a new storage facility in Morrill Hall. Within LeBaron Hall, the rooms are used primarily for artifact accession and storage. The small spaces and lack of adequate storage and conservation practices for the objects in LeBaron Hall are not ideal for long-term preservations of these artifacts. In 2006 the Mary Alice Gallery, the Donna Rae Danielson Textiles and Clothing Conservation Lab, and the Edward and Bertha Waldee Storage Facility were constructed within the newly renovated Morrill Hall to: display garments and textiles of the collection, perform textile fiber analyses, wet cleaning and other conservation activities, store the majority of the items located in LeBaron Hall, and to be used as a visual resource for students enrolled in textiles and clothing (TC) courses and independent study. The mission of this new facility is to create a teaching and learning environment that provides resources for scholarly work, enhances visual and active learning among students, and encourages and promotes the study, research, and appreciation of historic clothing and textiles. As a teaching centered facility, the Textiles and Clothing Museum (TCM) serves as an important vehicle for student discovery and development (Torntore, nd).
The TCM supports and demonstrates the university’s mission to “create, share, and apply knowledge to make Iowa and the world a better place” (ISU Strategic Plan, 2009), and the mission of the TC Program which is to “provide integrated yet customized education and scholarship to optimize apparel and related products, services, and experiences” (TC Program, 2009).

The TCM provides students and faculty access to “cultural and historical, and material culture which inspires them to become their best, thereby fulfilling the mission of Iowa State University” (Torntore, nd). The amount of artifacts donated, collected, exhibited, preserved and documented has grown from the 1920’s. The collection consists of an estimated 8,500 (this figure does not reflect paper and archival portions of the collection) objects ranging from Roman-era (ca. 600 CE) Egyptian and Coptic textiles, 17th Century Persian textiles, to 20th century haute couture and designer ready-to-wear pieces. The oldest objects include 6th century Egyptian mummy wrappings and other funerary textiles (Torntore, nd). The collection focuses primarily on textiles and clothing that represent: geographic regions, different cultures of the world, European couture, and designer ready-to-wear, the American apparel industry in terms of innovation and manufacturing, everyday dress of Iowans, Iowa culture, and prominent Iowans and Iowa State University faculty and staff (TCM Manual, 2009). Since its inception, every item in the collection has been donated from: the campus, faculty, and the local and regional community.

Courses such as: Museum Studies (TC257), History of European and North American Dress (TC354), History of Twentieth Century Fashion (TC356/556), Cultural Perspectives in Dress (TC 362), Textile Conservation and Collection Management (TC 557), Dress and Culture (TC 562), Advanced History of Dress and Textiles (TC 650), and several pattern-
making and design courses regularly utilized collection holdings and exhibits in the Mary Alice Gallery to provide visual examples of textiles and clothing, and for students to gain a broad knowledge of period construction methods, dress and textiles. Apparel design students are also encouraged to use the collection as a resource for inspiration.

Artifacts in the collection are currently being reorganized in the new storage facility and are in the early stages of being entered into a digitized collection database using the museum software “PastPerfect.” The “creation of a computerized collections database is a critical step in providing access to the collection and alleviating problems associated with tracking, finding, and accessing both objects and information about them. Further maintaining systematic records and documentation will aid in the realization of the collection objects as resources and primary sources for historical, cultural, and humanities scholarship” (Torntore, nd). The digitization of objects that are part of the TCM will broaden the awareness of the collection, grow its audience, and disseminate information about textiles and clothing, and material culture regionally and globally.

Approximately five exhibits are on display per year in the Mary Alice Gallery. These exhibits are designed to be illustrative and interpretive of items in the collection. Recent exhibits at the Mary Alice Gallery include: “Ethnic Textile Traditions of Iowa Immigrant and Native Populations” (Fall 2009, faculty curated), “For Homemaking and a Trade: The Role of Sewing in Women’s Lives, 1870-1920” (Spring 2009, faculty curated), “Around the World in 257 Days” (student exhibit from TC 257, fall 2008), “Inspired By…” (graduate student thesis exhibit, Fall 2008), “Destination: Guatemala, Guatemalan textiles and garments” (Fall 2008, faculty and graduate student curated), and winners from the annual TC fashion show, “The Fashion Show 2008” (Spring 2008, graduate student curated). Exhibits
include an opening event with a brief welcome and lecture by the curator(s). Between twenty and one hundred and fifty people attend each opening and based on a visitor signatures in a ledger book, an average of one hundred to five hundred people visit each exhibit. The Mary Alice Gallery is open to the public and local elementary and secondary school groups interested in studying apparel merchandising, design and production regularly tour the gallery and collection facilities.
## APPENDIX B

### Museum and Collection Sample

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Url Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beeman Historic Costume Collection</td>
<td>Muncie, IN</td>
<td><a href="http://www.bsu.edu/fcs/beeman/">http://www.bsu.edu/fcs/beeman/</a></td>
</tr>
<tr>
<td>Chicago History Museum</td>
<td>Chicago, IL</td>
<td><a href="http://www.chicagohs.org/">http://www.chicagohs.org/</a></td>
</tr>
<tr>
<td>Fashion Columbia Study Collection</td>
<td>Chicago, IL</td>
<td><a href="http://www.colum.edu/fashion_collection/">http://www.colum.edu/fashion_collection/</a></td>
</tr>
<tr>
<td>Fashion Institute of Design and Merchandising (FIDM) Museum and Galleries</td>
<td>Los Angeles, CA</td>
<td><a href="http://fidm.edu/resources/museum+galleries/">http://fidm.edu/resources/museum+galleries/</a></td>
</tr>
<tr>
<td>Kent State University Museum</td>
<td>Kent, OH</td>
<td><a href="http://dept.kent.edu/museum/">http://dept.kent.edu/museum/</a></td>
</tr>
<tr>
<td>Phoenix Art Museum</td>
<td>Phoenix, AZ</td>
<td><a href="http://www.phxart.org/">http://www.phxart.org/</a></td>
</tr>
<tr>
<td>The Historic Costume and Textiles Collection at Ohio State University</td>
<td>Columbus, OH</td>
<td><a href="http://costume.osu.edu/">http://costume.osu.edu/</a></td>
</tr>
</tbody>
</table>
APPENDIX C

Institutional Review Board Approval
ISU NEW HUMAN SUBJECTS REVIEW FORM  IRB

SECTION I: GENERAL INFORMATION

Principal Investigator (PI): Tekara Stewart  
Phone: 515-771-6802  
Fax:  
Degrees: Bachelor of Science  
Correspondence Address: 31 MacKay Hall, Ames, IA 50011-1121  
Department: AESHM  
Email Address: karashay@iastate.edu  
Center/Institute:  
College: Human Sciences  
PI Level: Faculty  
Staff  
Postdoctoral  
Graduate Student  
Undergraduate Student  
Alternate Contact Person:  
Email Address:  
Correspondence Address:  
Phone:  
Title of Project: The Digitization of Iowa State University's Historic Costume Collection  
Project Period (Include Start and End Date): [mm/dd/yy][01/12/2009] to [mm/dd/yy][01/15/2010]

FOR STUDENT PROJECTS

Name of Major Professor/Supervising Faculty: Sara B. Marchetti  
Signature of Major Professor/Supervising Faculty: 
Phone: 515-294-7393  
Campus Address: 1060 LeBaron  
Department: AESHM  
Email Address: sbb@iastate.edu

Type of Project: (check all that apply)  
☐ Research  
☒ Thesis  
☐ Dissertation  
☐ Class project  
☐ Independent Study (490, 590, Honors project)  
☐ Other. Please specify: 

KEY PERSONNEL

List all members and relevant experience of the project personnel. This information is intended to inform the committee of the training and background related to the specific procedures that each person will perform on the project.

<table>
<thead>
<tr>
<th>NAME &amp; DEGREE(S)</th>
<th>SPECIFIC DUTIES ON PROJECT</th>
<th>TRAINING &amp; EXPERIENCE RELATED TO PROCEDURES PERFORMED, DATE OF TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tekara Stewart, Bachelor of Science</td>
<td>Collect and analyze data, create research report for thesis</td>
<td>IRB Training, 12/05/2007</td>
</tr>
</tbody>
</table>

To list additional personnel please attach separate sheet.

Research Assurances 4/18/08
ISU NEW HUMAN SUBJECTS REVIEW FORM

Although the assurance committees are not intended to conduct peer review of research proposals, the federal regulations include language such as “consistent with sound research design,” “rationale for involving animals or humans” and “scientifically valuable research,” which requires that the committees consider in their review the general scientific relevance of a research study. Proposals that do not meet these basic tests are not justifiable and cannot be approved. If an assurance review committee(s) has concerns about the scientific merit of a project and the project was not competitively funded by peer review or was funded by corporate sponsors, the project may be referred to a scientific review committee. The scientific review committee will be ad hoc and will consist of your ISU peers and outside experts as needed. If this situation arises, the PI will be contacted and given the option of agreeing that a consultant may be contacted or withdrawing the proposal from consideration.

☐ Yes ☐ No Has or will this project receive peer review?

If the answer is “yes,” please indicate who did or will conduct the review: The project will be submitted to Grad Committee.

If a review was conducted, please indicate the outcome of the review:

NOTE: RESPONSE CELLS WILL EXPAND AS YOU TYPE AND PROVIDE SUFFICIENT SPACE FOR YOUR RESPONSE.

COLLECTION OR RECEIPT OF SAMPLES

Will you be: (Please check all that apply.)

☐ Yes ☒ No Receiving samples from outside of ISU? See examples below.

☐ Yes ☒ No Sending samples outside of ISU? See examples below.

Examples include: genetically modified organisms, body fluids, tissue samples, blood samples, pathogens.

If you will be receiving samples from or sending samples outside of ISU, please identify the name of the outside organization(s) and the identity of the samples you will be sending or receiving outside of ISU:

N/A

Please note that some samples may require a USDA Animal Plant Health Inspection Service (APHIS) permit, a USPHS Centers for Disease Control and Prevention (CDC) Import Permit for Etiologic Agents, a Registration for Select Agents, High Consequence Livestock Pathogens and Toxins or Listed Plant Pathogens, or a Material Transfer Agreement (MTA) EHS Website.

☐ Yes ☐ No Does this project involve human research participants?

Research Assurances 4/18/08
☐ Yes ☒ No Does this project involve laboratory chemicals, human cell lines or tissue culture (primary OR immortalized), or human blood components, body fluid or tissues?

ASSURANCE

- I certify that the information provided in this application is complete and accurate and consistent with any proposal(s) submitted to external funding agencies.
- I agree to provide proper surveillance of this project to ensure that the rights and welfare of the human subject or welfare of animal subjects are protected. I will report any problems to the appropriate assurance review committee(s).
- I agree that I will not begin this project until receipt of official approval from all appropriate committee(s).
- I agree that modifications to the originally approved project will not take place without prior review and approval by the appropriate committee(s), and that all activities will be performed in accordance with all applicable federal, state, local and Iowa State University policies.

CONFLICT OF INTEREST

A conflict of interest can be defined as a set of conditions in which an investigator’s or key personnel’s judgment regarding a project (including human or animal subject welfare, integrity of the research) may be influenced by a secondary interest (e.g., the proposed project and/or a relationship with the sponsor). ISU’s Conflict of Interest Policy requires that investigators and key personnel disclose any significant financial interests or relationships that may present an actual or potential conflict of interest. By signing this form below, you are certifying that all members of the research team, including yourself, have read and understand ISU’s Conflict of Interest policy as addressed by the ISU Faculty Handbook (http://www.provost.iastate.edu/faculty/) and have made all required disclosures.

☐ Yes ☒ No Do you or any member of your research team have an actual or potential conflict of interest?
☐ Yes ☐ No If yes, have the appropriate disclosure form(s) been completed?

SIGNATURES

Signature of Principal Investigator

12/11/08

Date

Signature of Department Chair

12/11/08

Date

Major Professor/Supervising Faculty: Please sign cover page.

PLEASE NOTE: Any changes to an approved protocol must be submitted to the appropriate committee(s) before the changes may be implemented.

Please proceed to SECTION II.
SECTION II: IRB SECTION - STUDY SPECIFIC INFORMATION

STUDY OBJECTIVES

Briefly explain in language understandable to a layperson the specific aim(s) of the study.

The aim of this study is to better understand the methods, procedures, and factors of effective website design specifically for a Textiles and Clothing Historic Costume Collection. I am interested in better understanding display preferences, how Textile and Clothing Museums decide which artifacts to display on it's websites, the mission of a Textile and Clothing Museum website, and maintenance of the Textile and Clothing Museum website. I will use a qualitative approach by asking museum professionals from various Textile and Clothing museums my interview questions.

BENEFITS TO SOCIETY AND PARTICIPANTS

Explain in language understandable to a layperson how the information gained in this study will advance knowledge, and/or serve the good of society. Please also describe the direct benefits to research participants; if there are no direct benefits to participants, indicate that. Note: monetary compensation cannot be considered a benefit to participants. This research provides possible information for Textiles and Clothing museums that aspire to create an online digital presence. This study will also aid in the creation and development of an online digital presence for Iowa State University's Textiles and Clothing Historic Costume Collection.

PART A: PROJECT INVOLVEMENT

1) ☐ Yes ☒ No Is this project part of a Training, Center, Program Project Grant?
   Director Name: Overall IRB ID:

2) ☐ Yes ☒ No Is the purpose of this project to develop survey instruments?

3) ☐ Yes ☒ No Does this project involve an investigational new drug (IND)? Number:

4) ☐ Yes ☒ No Does this project involve an investigational device exemption (IDE)? Number:

5) ☐ Yes ☒ No Does this project involve existing data or records?

6) ☐ Yes ☒ No Does this project involve secondary analysis?

7) ☐ Yes ☒ No Does this project involve pathology or diagnostic specimens?

8) ☐ Yes ☒ No Does this project require approval from another institution? Please attach letters of approval.

9) ☐ Yes ☒ No Does this project involve DEXA/CT scans or X-rays?

PART B: MEDICAL HEALTH INFORMATION OR RECORDS

1) ☐ Yes ☒ No Does your project require the use of a health care provider's records concerning past, present, or future physical, dental, or mental health information about a subject? The Health Insurance Portability and Accountability Act established the conditions under which protected health information may be used or disclosed for research purposes. If your project will involve the use of any past or present clinical information about someone, or if you will add clinical information to someone's treatment record (electronic or paper) during the study, you must complete and submit the Application for Use of Protected Health Information.

PART C: ANTICIPATED ENROLLMENT

Research Assurances 4/18/08
Estimated number of participants contacted to reach required enrollment: 20

<table>
<thead>
<tr>
<th>Number of participants to be enrolled in the study Total: 10</th>
<th>Males: 2</th>
<th>Females: 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check if any enrolled participants are:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Minors (Under 18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Pregnant Women/Fetuses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Cognitively Impaired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Prisoners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check below if this project involves either:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☑ Adults, non-students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Minor ISU students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ ISU students 18 and older</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Other (explain)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List estimated percent of the anticipated enrollment that will be minorities if known:

<table>
<thead>
<tr>
<th>American Indian:</th>
<th>Alaskan Native:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian or Pacific Islander:</td>
<td>Black or African American:</td>
</tr>
<tr>
<td>Latino or Hispanic:</td>
<td></td>
</tr>
</tbody>
</table>

PART D: PARTICIPANT SELECTION

Please use additional space as necessary to adequately answer each question.

11. Explain the procedures for selecting participants including the inclusion/exclusion criteria and how participants will be contacted or recruited (i.e., Where will the names come from? Will a sample be purchased, will ads, flyers, word of mouth, email list, etc., be used?).

I will utilize a snowball method for contacting participants. The first few participants on the list are people that are well-known in the textiles and clothing museums world. From their interviews, I will ask them if they know other people I should contact. I will select participants that have been involved with the creation, development, implementation, design and ongoing support of the Textile and Clothing museum website. I will contact potential participants by telephone.

12. Attach a copy of any recruitment telephone scripts or materials such as ad, fliers, e-mail messages, etc. Recruitment material must include a statement of the voluntary and confidential nature of the research. Do not include the amount of compensation, (e.g., compensation available).

Note: Please answer each question. If the question does not pertain to this study, please type not applicable (N/A).

PART E: RESEARCH PLAN

Include sufficient detail for IRB review of this project independent of the grant, protocol, or other documents.

13. The information needed here is similar to that in the “methods” or “procedures” sections of a research proposal—it should describe the flow of events that will occur during your interactions with subjects. Please describe in detail your plans for collecting data from participants, including all procedures, tasks, or interventions participants will be asked to complete during the research (e.g., random assignment, any conditions or treatment groups into which participants will be divided, mail survey or interview procedures, sensors to be worn, amount of blood drawn, etc.). This information is intended to inform the committee of the procedures used in the study and their potential risk. Please do not respond with “see attached” or “not applicable.”

I plan to conduct ten telephone interviews with Textile and Clothing museum professionals using technology such as Skype, Adobe Connect, or video chat. These technologies will enhance communication, collaboration, and the sharing of necessary documents. I plan to conduct the interviews within a three to four month period, starting in January of 2009. Upon agreement of participation in the study interviewees will be sent an informed consent document by email or through fax depending on which works best for the participant.

Research Assurances 4/18/08
14. For studies involving pathology/diagnostic specimens, indicate whether specimens will be collected prospectively and/or already exist "on the shelf" at the time of submission of this review form. If prospective, describe specimen procurement procedures; indicate whether any additional medical information about the subject is being gathered, and whether specimens are linked at any time by code number to the participant's identity. If this question is not applicable, please type N/A in the response cell.

N/A

15. For studies involving deception, please justify the deception and indicate the debriefing procedure, including the timing and information to be presented to participants. If this question is not applicable, please type N/A in the response cell.

N/A

PART F: CONSENT PROCESS

16. Describe the consent process for adult participants (those who are age 18 and older). *If the consent process does not include documented consent, a waiver of documentation of consent must be requested.*

Participants of the interview will be first sent the informed consent document to read through email or fax whichever is preferred by the participant. If the respondent does not agree to the informed consent document, they will not be considered for interviewing.

17. If your study involves minors, please explain how parental consent will be obtained prior to enrollment of the minor(s).

N/A

18. Please explain how assent will be obtained from minors (younger than 18 years of age), prior to their enrollment. Also, please explain if the assent process will be documented (e.g., *a simplified version of the consent form, combined with the parental informed consent document*). According to the federal regulations, *assent* "...means a child's affirmative agreement to participate in research. Mere failure to object should not, absent affirmative agreement, be construed as assent."

N/A

PART G: DATA ANALYSIS

19. Describe how the data will be analyzed (e.g., *statistical methodology, statistical evaluation, statistical measures used to evaluate results*).

Data will be analyzed using qualitative analysis which will include looking for patterns and themes in the data, comparing cases, and building typologies.

20. If applicable, please indicate the anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

1/12/2009  Month/Day/Year

PART H: RISKS

Research Assurances 4/18/08
The concept of risk goes beyond physical risk and includes risks to participants’ dignity and self-respect as well as psychological, emotional, legal, social or financial risk.

21. ☐ Yes ☒ No Is the probability of the harm or discomfort anticipated in the proposed research greater than that encountered ordinarily in daily life or during the performance of routine physical or psychological examinations or tests?

22. ☐ Yes ☒ No Is the magnitude of the harm or discomfort greater than that encountered ordinarily in daily life, or during the performance of routine physical or psychological examinations or tests?

23. Describe any risks or discomforts to the participants and how they will be minimized and precautions taken. Do not respond with N/A. If you believe that there will not be risk or discomfort to participants, you must explain why.

There are no foreseeable or anticipated risks at this time from participating in this study because it is a telephone interview that asks participants about their museum experiences related to their professions.

24. If this study involves vulnerable populations, including minors, pregnant women, prisoners, the cognitively impaired, or those educationally or economically disadvantaged, what additional protections will be provided to minimize risks?

The study will seek to limit minors from participating in the study by asking for respondents over the age of 18.

PART 1: COMPENSATION

25. ☐ Yes ☒ No Will participants receive compensation for their participation? If yes, please explain.

Do not make the payment an inducement, only a compensation for expenses and inconvenience. If a person is to receive money or another token of appreciation for their participation, explain when it will be given and any conditions of full or partial payment. (E.g., volunteers will receive $5.00 for each of the five visits in the study or a total of $25.00 if he/she completes the study. If a participant withdraws from participation, they will receive $5.00 for each of the visits completed.) It is considered undue influence to make completion of the study the basis for compensation.

PART J: CONFIDENTIALITY

26. Describe below the methods that will be used to ensure the confidentiality of data obtained. (For example, who has access to the data, where the data will be stored, security measures for web-based surveys and computer storage, how long data or specimens will be retained, etc.)

The data will be stored on Tekara Stewart’s personal computer which requires a password to access and will be locked in an office. The PI will have access to the data. Persons may be directly quoted and identified in publication - they are informed of this.

PART K: REGISTRY PROJECTS

To be considered a registry: (1) the individuals must have a common condition or demonstrate common responses to questions; (2) the individuals in the registry might be contacted in the future; and (3) the names/data of the individuals in the registry might be used by investigators other than the one maintaining the registry.

☐ Yes ☒ No Does this project establish a registry?

Research Assurances 4/18/08
If “yes,” please provide the registry name below.

Checklist for Attachments

Listed below are the types of documents that should be submitted for IRB review. Please check and attach the documents that are applicable for your study:

- A copy of the informed consent document OR □ Letter of introduction containing the elements of consent
- □ A copy of the assent form if minors will be enrolled
- □ Letter of approval from cooperating organizations or institutions allowing you to conduct research at their facility
- □ Data-gathering instruments (including surveys)
- □ Recruitment fliers, phone scripts, or any other documents or materials participants will see or hear

The original signed copy of the application form and one set of accompanying materials should be submitted for review. Federal regulations require that one copy of the grant application or proposal be submitted for comparison with the application for approval.

FOR IRB USE ONLY:

Initial action by the Institutional Review Board (IRB):

☐ Project approved. Date: 01/21/08
☐ Pending further review. Date:
☐ Project not approved. Date:

Follow-up action by the IRB:

Kerry A. Agnello

IRB Approval Signature

February 11, 2008

Date

SECTION III: ENVIRONMENTAL HEALTH AND SAFETY INFORMATION

☐ Yes ☑ No Does this project involve human cell or tissue cultures (primary OR immortalized), or human blood components, body fluids or tissues?

PART A: HUMAN CELL LINES

☐ Yes ☑ No Does this project involve human cell or tissue cultures (primary OR immortalized cell lines/strains) that have been documented to be free of bloodborne pathogens? If the answer is “yes,” please answer question 1 below and attach copies of the documentation.

1) Please list the specific cell lines/strains to be used, their source and description of use.

<table>
<thead>
<tr>
<th>CELL LINE</th>
<th>SOURCE</th>
<th>DESCRIPTION OF USE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Assurances 4/18/08
Add New Row

2) Please refer to the ISU “Bloodborne Pathogens Manual,” which contains the requirements of the OSHA Bloodborne Pathogens Standard. Please list the specific precautions to be followed for this project below (e.g., retractable needles used for blood draws):

Add New Row

Anyone working with human cell lines/strains that have not been documented to be free of bloodborne pathogens is required to have Bloodborne Pathogen Training annually. Current Bloodborne Pathogen Training dates must be listed in Section I for all Key Personnel. Please contact Environmental Health and Safety (294-5359) if you need to sign up for training and/or to get a copy of the Bloodborne Pathogens Manual (http://www.els.iastate.edu/cms/default.asp).

PART B: HUMAN BLOOD COMPONENTS, BODY FLUIDS OR TISSUES

☐ Yes ☒ No Does this project involve human blood components, body fluids or tissues? If “yes,” please answer all of the questions in the “Human Blood Components, Body Fluids or Tissues” section.

1) Please list the specific human substances used, their source, amount and description of use.

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>SOURCE</th>
<th>AMOUNT</th>
<th>DESCRIPTION OF USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.g., Blood</td>
<td>Normal healthy volunteers</td>
<td>2 ml</td>
<td>Approximate quantity, assays to be done.</td>
</tr>
</tbody>
</table>

Add New Row

2) Please refer to the ISU “Bloodborne Pathogens Manual,” which contains the requirements of the OSHA Bloodborne Pathogens Standard. Specific sections to be followed for this project are:

Anyone working with human blood components, body fluids or tissues is required to have Bloodborne Pathogen Training annually. Current Bloodborne Pathogen Training dates must be listed in Section I for all Key Personnel. Please contact Environmental Health and Safety (294-5359) if you need to sign up for training and/or to get a copy of the Bloodborne Pathogens Manual (http://www.els.iastate.edu/bbp.htm).
Phone Script

Introduction
Hello. My name is Tekara Stewart and I'm a second year graduate student at Iowa State University. I am conducting research on the best digital practices that Textiles and Clothing museums use to establish an online presence. This study has been approved by the Human Subjects Board. I would like to schedule an interview and ask a few questions about methods, procedures, factors of affective website design, display preferences, how Textile and Clothing Museums decide which artifacts to display on its websites, the mission of a Textile and Clothing Museum website, and maintenance of the Textile and Clothing Museum website. Are you the person who handles content development for the museum's website? (If not, who should I talk to?)

Yes (Schedule the interview)  No (Thank you for your time)
CONSENT FORM FOR: THE DIGITIZATION OF IOWA STATE UNIVERSITY'S HISTORIC COSTUME COLLECTION

This form describes a research project. It has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part—your participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

Who is conducting this study?

This study is being conducted by Tekara Stewart

Why am I invited to participate in this study?

You are being asked to take part in this study because you are experienced with the creation, development, implementation, design and ongoing support of a Textile and Clothing museum website. You should not participate if you are under the age of 18.

What is the purpose of this study?

The purpose of this study is to better understand the methods, procedures, and factors of effective website design specifically for a Textiles and Clothing Historic Costume Collection. The research aims to better understand display preferences, how Textile and Clothing Museums decide which artifacts to display on its websites, the mission of a Textile and Clothing Museum website, and the maintenance of the Textile and Clothing Museum website.

What will I be asked to do?

If you agree to participate, you will be asked to complete a 30 minute to an hour interview about your personal perspective towards Textile and Clothing museum website practices, the mission, creation, development, and implementation of a Textile and Clothing museum. You will also be asked if you know other people that should be contacted and feel that their knowledge would further enhance the research. Topics to be discussed during the interview include: subject of expertise, the mission and objective of your institution, the costume collection and exhibit website, and the planning and development of Textile and Clothing Museum websites. Interviews will be recorded using the technology of Skype, Adobe Connect, or video chat. Your participation will last for 30 minutes to an hour and is intended to be completed during January 2009 through April 2009

What are the possible risks and benefits of my participation?

There are no known risks at this time for participating in this study. If you decide not to participate in this study there may be no direct benefit to you. It is hoped that the information gained in this study will benefit society by allowing textile and clothing museum professionals to critically reflect and share their leadership behaviors and beliefs. It is hoped that the research gained will also serve as a guide for museums wanting to establish an online presence. Another
benefit of the study will also aid in the creation and development of an online digital presence for Iowa State University’s Textiles and Clothing Costume Collection.

**How will the information I provide be used?**

The information you provide will be used for the following purposes: to provide information for Textile and Clothing museums that aspire to create an online digital presence. Information may be shared through direct quotes and participants names may be revealed.

**What measures will be taken to ensure the confidentiality of the data or to protect my privacy?**

Records identifying participants will be kept confidential to the extent allowed by applicable laws and regulations. Records will not be made publicly available. However, federal government regulatory agencies, auditing departments of Iowa State University, and the ISU Institutional Review Board (a committee that reviews and approves research studies with human subjects) may inspect and/or copy your records for quality assurance and analysis. These records may contain private information.

To ensure confidentiality to the extent allowed by law, the following measures will be taken. Subjects will be assigned a unique code and letter that will be used on forms instead of their name. Investigator Tekara Stewart will be the only person with access to the data. The data will be stored on the researcher’s computer which is password protected in locked offices. After completion of the interview, each participant will be provided with a unique identifier code. Data will be retained until the researchers analyze the data or until January 15, 2010. If the results are published, your identity may not remain confidential. Although the information you provide will be stored in a confidential manner, you may be named and directly quoted in publication.

**Will I incur any costs from participating or will I be compensated?**

You will not have any costs from participating in this study. You will not be compensated for participating in this study.

**What are my rights as a human research participant?**

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.

**Whom can I call if I have questions or problems?**

You are encouraged to ask questions at any time during this study.

- For further information about the study contact Tekara Stewart, karashav@iastate.edu, 515-771-6802, 31 MacKay Hall, Ames, IA, 50011-1121.
If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office of Research Assurances, 1138 Pearson Hall, Iowa State University, Ames, Iowa 50011.
Demographics
1. What is your role/position?
2. How long have you been in this position?
3. Where/when did you receive your education?

Mission/Organization
1. Can you talk about the mission of your institution?
2. How long has your institution had a website?
3. How does the collections website fit into your mission?
4. What are the primary goals and objectives of the museum website?
5. What information do you share on your website?
   - Hours
   - Location
   - Contact Info
   - Garments from collection
   - Exhibits

The Costume Collection/Exhibit Website
1. What are your goals for online exhibits?
2. How have your exhibits online changed from the first virtual exhibit to your most current online exhibit?
3. How and where are artifacts featured on the website?
4. How do you distinguish the use of digital images of textiles and clothing on your museum website? (research education marketing)
5. Can you share how you select and decide what artifacts are available online? (Exhibit related, collection related, donor related?)
6. What features of the artifact are highlighted online? (prompts, donor name, acquisition #, research about garment, what else?)
7. In the past, which virtual exhibits would you say have been the best?
8. Can you talk about what features were exceptional? (why)

The Planning and Development of Textiles and Clothing Museum Websites
1. From your perspective, what would you say is the most successful way to display garments online? (Mannequins or flat? Jpeg or Tiff)
2. What text supports the online image? (acquisition number donor information)
3. Can you explain how virtual exhibits are different from exhibiting at the museum? (mission/purpose cost themes content audiences)
4. What departments and/or people are involved with the development/implementation of content for your website?
5. When planning an exhibit do budgets have web development money allocated to it?
6. On average, how much does the creation and development of a website content and online exhibits take?
7. Do you work with outside vendors?
8. When planning a virtual exhibit, what is the plan or procedure followed?
9. Can you share what maintenance of your online exhibit is required?
10. How often do you evaluate your website?

11. What are the reasons for featuring a virtual exhibit? (broaden audience online participation)
12. Can you share any feedback about how your website is being used? (by other professional students schools)
13. On your website, are people given the opportunity to publish comments on the website? Generally what have the comments been?
14. How is the museum experience extended or enhanced through the museum website? Are there any "perks" to the museum website?
APPENDIX D

Interview Schedule

Demographics
1. What is your role/position?
2. How long have you been in this position?
3. Where/when did you receive your education?

Mission/Organization
1. Can you talk about the mission of your institution?
2. How long has your institution had a website?
3. How does the collections website fit into your mission?
4. How does the museum’s website fit into your mission?
5. How does the exhibit website fit into your mission?
6. What are the primary goals and objectives of the museum website?

The Collection/Museum or Exhibit Website
1. Can you talk about goals for the online collection?
2. What about your goals for online exhibits?
3. Do you ideally want to have every object of the collection online or just selected items?
4. Can you share any feedback about how your website is being used? (by other professionals, students or schools)
5. How do you distinguish the use of digital images of textiles and clothing on your museum website? (research/education /marketing)
6. How do you make your collection accessible online? (TMS, PastPerfect)
7. How and where are artifacts featured on the website?
8. Can you share how you select and decide what artifacts are available online? (Exhibit related, collection related, donor related?)
9. Can you explain how virtual exhibits are different from exhibits at the museum? (mission/purpose cost /themes/content/ audiences)
10. What features of the artifact are highlighted online for exhibits? (do you select certain pieces, if yes why) What about the collection?
11. What are the reasons for featuring a virtual exhibit? (to broaden audience online participation/marketing or educational purposes)
12. What are the reasons for an online collection?
13. How have your exhibits online changed from the first virtual exhibit to your most current online exhibit? What was learned? How were they improved?
14. In the past, which virtual exhibits would you say have been the best?
15. Can you talk about what features were exceptional? (why)
16. What do you think about Internet technologies such as: Facebook, Podcasts, Flickr, Myspace and YouTube? What benefit, if any can they serve your museum?
17. Can you talk about any copyright issues that may arise as a result of publishing content on the Internet? How does the museum handle such issues?
18. What are the advantages and disadvantages of having an online collection? What about virtual exhibits?

The Planning and Development of Textiles and Clothing Museum Websites
1. From your perspective, what would you say is the most successful way to display garments online? (Mannequins, dress forms, or flat? Jpeg or Tiff)
2. What departments and/or people are involved with the development/implementation of content for your website?
3. Do you seek to include an educational component?
4. There’s this theory about four realms of experience which are: entertainment, education, escape, and estheticism, could you rank in order what you feel your website provides to visitors?
5. In your opinion what is the ideal order?
6. When planning an exhibit do budgets have web development money allocated to it?
7. Do you typically pay for it yourself or us sponsors?
8. On average, how much time does the creation and development of website content take?
9. What about virtual exhibits?
10. What database software do you use? (TMS, Past Perfect)
11. Do you work with outside vendors for web development? (If yes, how did that relationship begin)
12. When planning a virtual exhibit, what is the plan or procedure followed?
13. What is the process for digitizing the collection?
14. Can you share what maintenance is required for the online collection?
15. What about virtual exhibits?
16. How often do you evaluate your website? (usability, navigation, aesthetics)
17. On your website, are people given the opportunity to publish comments on the website? Generally what have the comments been?
18. How has the public responded to the museum website? Have students found it helpful?
19. How is the museum experience extended or enhanced through the museum website?
20. Are there any "perks" to the museum website? Is there something on the website that visitors won’t experience at the physical museum?
APPENDIX E

Museum Website Evaluation Instrument

<table>
<thead>
<tr>
<th>Museum/Collection Name:</th>
<th>Date:</th>
<th>Url:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country:</td>
<td>Site Content:</td>
<td>Site Sponsors:</td>
</tr>
<tr>
<td></td>
<td>Textiles/Clothing/Both</td>
<td></td>
</tr>
<tr>
<td>Public or Private: Yes/No</td>
<td>Size of Physical Facility:</td>
<td>Collection Info:</td>
</tr>
<tr>
<td>History:</td>
<td>Mission:</td>
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APPENDIX F

Suggested Process for Making Collections Accessible Online

1) Define online target audience
2) Define mission of websites
3) Select Objects
4) Check that catalogue files and record documentation provide accurate information.
   Develop textual content to support objects online.
5) Dress the Form
   A. Device that is used should fit the garment well and show how garment will be worn
6) Photograph
7) Edit
   A. Lower resolution
   B. Save as jpeg
   C. Copyright the photograph
8) Upload/Publish
   A. To Collections Management System
   B. To Internet
9) Display copyright notice on website
10) Evaluate website every year/eighteen months
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