IMPROVING ONLINE MUSIC COMMUNITIES OF PRACTICE THROUGH THE MASHUP
OF WEB 2.0 TECHNOLOGIES

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ABSTRACT

Dr. Terry Herman, Advisor

Working in collaboration with panels of Ableton Live professionals and scholarly experts in fields related to the study the researcher developed a model for an online music community of practice for users of the music production and performance software Ableton Live. The model for an online music community of practice that this study developed proposes the design of a virtual community that provides its members with an improved learning, communication and collaboration experience over currently available alternatives. This is achieved through an all-inclusive, simple, clean user interface that provides members with all the communication and collaboration tools necessary to successfully collaborate online. The model's design also stresses the importance of providing new members of the community with adequate scaffolding in the form of tutorials. These tutorials teach members how to successfully use all the communication and collaboration tools provided by the site. This scaffolding support system is a key component of any community of practices' success. It helps facilitate the new members' transition from new, and inexperienced user to expert. Facilitating this transition is also beneficial to the community as a whole because it helps raise the communal knowledge base. The more experts available in the community, the more knowledge can be transferred between community members.

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Chapter I: Introduction

Context of the Study

Recent communication and educational technological advancements have opened up new avenues for learning that now take place outside of the classroom.

> In the learning profession, we've never had the opportunity to broaden our impact as we do today through informal learning. People are demanding it, the technology is driving it, and the economy is requiring it. The pieces are there, and now is the time to connect those pieces (Bingham, 2009, p. 61).

With the development of the Internet, and more recently Web 2.0 technologies, communities of practice (COP) are able to develop and thrive in an online setting. No longer are communities limited and defined by factors such as location, time, and physical proximity. Until recently though there have been limitations to the effectiveness of communicating over the Internet. Web 2.0 technologies offer many applications that help facilitate communication and collaboration in online settings. The use of Web 2.0 technology, and more specifically Web 2.0 communication and collaboration technology mashups, within online communities of practice could offer improved social dynamics, communication, and collaboration for its members. This study will focus on the implementation of collaboration and social communication technology mashups in an online COP for musicians using the production and performance software Ableton Live.

The importance of collaboration is evident in the world of music when considering musical projects from garage bands to orchestras. In an orchestra people come together to create something much more complete than any one musician could have accomplished by him or herself. As a musician, this researcher is aware of the potential of collaboration. When a person works with others, this kind of collaboration forces a shift out of that person's patterns, which

have developed during a lifetime. This shift occurs whether those patterns are in problem-solving techniques, thoughts, work routines, opinions, or creative workflows. Allowing an outside influence to be a part of the process can push the results in a direction that might not have been achieved when a person works alone.

One problem that musicians can run into in their attempt to collaborate with other artists is proximity. It can be difficult to find other musicians to collaborate with if a person lives in an area without a strong music scene. Over the last few years though, technological developments in the world of music have provided ways of mitigating this problem. One particular piece of computer based music production and performance software, Ableton Live, provides musicians with a progressive and efficient collaboration process. This software allows any Ableton Live user to share a Live Set (musical project) with anyone with a computer that meets the software's requirements and an Internet connection. In theory this means that an artist in Ohio can now create music with someone anywhere in the world. But such changes can lead to other problems.

1. How do Ableton Live users find and contact other musicians around the world to work with?

2. How can these users find an artist who enjoys making similar genres of music to collaborate with?

Another form of technology has evolved that addresses this question; "Is there a better way to find and contact people all over the world?" The answer is the use of social networking websites like Facebook. These social networking sites give members the ability to keep in contact with old friends as well as the capacity to browse through a database of member profile pages to find and network with people from all over the world. Users can conduct very specific searches in a wide array of categories to find other users who share similar interests.

Significance of Problem

People often form patterns in their lives, and musicians are not immune to developing patterns in both their work and their playing techniques. Collaborating with others can help people break out of those patterns and create newer, more efficient and effective ways of doing things. Collaboration, through social interactions, can be a very powerful educational technique as stressed in the work of educational theorists Piaget and Vygotsky (Palinscar, 1998). Working with someone who has more knowledge of a subject than the learner is a great way to fast track the learning process. Individuals can learn things from others in a very short time that may have taken years of trial and error to learn.

Online communities of practice offer members opportunities for informal learning through social interactions and the collaboration process. The social aspect of COP is directly linked to the learning that such a community fosters. Social networking sites can help improve the social dynamics of an online community. Learning designers must acknowledge these new informal learning opportunities and work toward improving the ways in which these technologies are being implemented in online communities of practice. Technology mashups of existing Web 2.0 technologies, like social networking sites and wikis for example, have become easier to design and implement and should be considered a viable option for improving the social aspects of informal online learning.

The Problem Statement

The problem of this study was to improve upon the learning and collaborative experience of members of an informal online music community of practice through the mashup of Web 2.0 communication and collaboration technologies**.**

Objectives

The objectives of the study were:

1. Work with Ableton Live professionals to gain insights, design ideas, and opinions of the proposed model to develop its features and functions early in the design process.

2. Present the design to a group of scholars in relevant fields for their review and feedback.

3. Develop a model for an effective online music community of practice through the mashup of Web 2.0 communication and collaboration technologies.

Through the implementation of social networking technologies and mashups of Web 2.0 technologies in an online community of practice members would be able to find, communicate, and collaborate with other musicians in a much more effective and efficient way. This process raised the quality standards of informal music education, and provided a model for online communities of practice for future learning designers to improve upon.

Definition of Terms

The following terms were operationally defined for the purpose of the study:

- Model: A design of features and functions of the proposed online music community.

- Mashups: A combination of multiple web technologies that solves a problem that the original technologies were not designed to do.

- Ableton Live: A music production and performance software that has recently made the act of collaborating online much more efficient.

- Live Set: A music project in Ableton Live.

Summary

With the use of Web 2.0 technologies, like social networking communities and mashups, the researcher hoped to improve upon the learning experience of members of an online music

community of practice. The COP was designed specifically for users of the music production

software Ableton Live with the input of professional Ableton artists. It was hoped that that this

study would provide a new standard for the online music learning and collaboration experience.

Chapter II: Literature Review

Introduction

The development of the Internet has made it easier than ever before to form network relationships with people from all over the world. It has also lowered the barrier of publishing one's own work, ideas, opinions, and even music. Out of this new online technology communities of individuals who share common goals or hobbies have emerged. Also known as communities of practice, these online communities can facilitate rich informal avenues of learning through social collaboration and discussions. This literature review will provide a brief overview of the following related topics:

1. Communities of practice: Theoretical framework and Definitions.

2. Designing communities of practice through virtual communities.

3. Online music communities as communities of practice.

4. Social networking technologies and communities of practice.

5. Web 2.0 technologies and web mashups.

Theoretical Framework of Communities of Practice

Communities of practice draw heavily from the constructivist learning theory (Johnson, 2001). Based on the idea that learners are responsible for constructing their own knowledge (Aydede, et al, 2010), constructivism is a learning theory that came about through the work of Piaget, Vygotsky, and Dewey (Palinscar, 1998). All of these theorists proposed that learners could be active in the learning process, and they could construct new knowledge based on previous experiences (Huang, 2002). Vygotsky's theory of constructivism focused more on the social aspects of the learning process (Huang, 2002). His Social Constructivism learning theory

placed great emphasis on the importance of interaction with other people in the cognitive development of learners (Maddox, 1996).

Cognitive psychology supports Dewey and Vygotsky's ideas that learners do not learn in isolation and that people naturally learn and work in collaborative scenarios throughout their lives (Huang, 2002). Social constructivists believe that by providing an environment that fosters interaction and collaboration with more capable peers there is a potential for development (Huang, 2002). According to Johnson (2001), the constructivist learning theory deals with the following concepts:

1. Ill-structured problems (e.g., open-ended questions). In traditional learning environments, problems are simplified and abstracted to allow learners to focus on certain concepts, as well as apply generalized concepts to a variety of different situations in future realistic applications. On the other hand, ill-structured problems are authentic and complex problems that learners encounter in the real world. Constructivist learning environments seek to replicate a realistic problem situation, so learners can develop skills in complex and messy problem solving.

2. Learning in social and physical context of real-world problems, including group activities, collaboration, and teamwork. Realistic problem solving is often carried out in teams, in which the different members bring different skills, experience, and backgrounds to help solve complex and ill-structured problems. Constructivist learning attempts to recreate this social interdependence.

3. Shared goals, which are negotiated between both instructors, learners, and between learners. This negotiated process helps to establish learner ownership over process and problems; thus, increasing both interest and learning.

4. Cognitive tools, which aid in helping learners organize knowledge, such as, methods of categorization, organization, and planning. These cognitive tools can be aided by processes, procedures, and technology.

5. An instructor's role as facilitator or coach. Ill-structured problems involve skills that are beyond the mastery of any one individual, including the instructor. Therefore, the instructor's role changes to one that guides learners in attaining their goals by helping them develop cognitive and meta-cognitive learning strategies (p. 47).

According to Wenger (1998), the type of learning that occurs in a community of practice is known as "situated learning." It is described in this way because learning takes place within the context, or situation, in which the knowledge will be used. The learning is also collaborative in nature, "in which the collaborative knowledge of the community is greater than any individual knowledge." (Johnson, 2001). This communal knowledge is the foundation of the learning that takes place in a community of practice.

Definition of Communities of Practice

Communities of practice are something that most people are around, whether they are conscious of it or not. They are involved with them almost daily, be it at work, at school, at home, or at play (Wenger, 1998). Communities of practice are different from communities of interest and geographical communities; that is a COP implies the members have a shared practice in a particular activity or task (Wenger, 1998). Liedka's (1999) research led him to describe communities of practice as "individuals united in action" (p. 5). This common action is what brings the community together in the first place.

Wick (2000) describes communities of practice as entities that help solve authentic problems. Communities of practice often form out of the need for learning avenues that can help facilitate solutions to real problems (Johnson, 2001). Wenger provides the three dimensions that a forming community of practice is defined:

- What it is about—its *joint enterprise* as understood and continually renegotiated by its members

- How it functions—the relationships of *mutual engagement* that bind members together into a social entity

- What capability it has produced—the *shared repertoire* of communal resources (routines, sensibilities, artifacts, vocabulary, styles, etc.) that members have developed over time.

It is by these criteria that a community defines itself throughout its life cycle. These criteria are constantly in a state of renegotiation members of a community. The members of the community decide what it is about, and they are responsible for the skills, knowledge, and capacity it produces through the collaboration process. In this way COP are self-organizing systems. They form and develop around things that matter to people. And it is the members' own understanding of what is important that allows the community of practice to exist (Wenger, 1998). Wenger also said that although COP are self-organizing it is important to find the balance of providing members with adequate resources without overwhelming them with too much organization. "No community can fully design the learning of another; but conversely no community can fully design its own learning." (Wenger, 1998, p. 9)

Designing Communities of Practice Through Virtual Communities

Through the development of the World Wide Web a new form of community has evolved: the virtual community. Through the use of the Internet and other networked technologies virtual communities allow for collaboration and communication of individuals across geographical barriers and time zones (Johnson, 2001). Virtual communities exist in cyberspace and differ from traditional communities in a few ways (Palloff & Pratt, 2001). A traditional community is based around a specific area, whereas a virtual community is based around a specific activity or task (Squire & Johnson, 2000). In a traditional community, group norms often take away from individual control and expression, whereas a virtual community utilizes asynchronous communication that allows for more individual control (Johnson, 2001). The members of the virtual community do not communicate face-to-face which helps prevent norms from taking precedent over individual control (Palloff & Pratt, 2001).

A community of practice cannot be designed. The best that a person can do is to design a virtual community with the hope that under the right circumstances a community of practice will emerge (Johnson, 2001). Wenger (1998) stated that communities of practice do not usually require much institutional infrastructure to be successful, but members need time and space to communicate and collaborate. A virtual community provides the environment in which the COP can obtain its goals of learning and growth through interactions among the communities' members (Johnson, 2001).

Setting up a virtual community infrastructure does not guarantee that a functioning community of practice will, in time, emerge. A legitimate task-oriented activity or theme needs to exist in order for a community of practice to form within a virtual community (Johnson, 2001). It is also critical to set up a form of scaffolding to aid in the learning process of the COP.

Whether it is textual help guides or video tutorials, some form of scaffolding is an important aspect of a community of practice. A community of practice is "about" something; it is not simply a set of relationships. In order for a virtual community to become a COP, members need to engage in a shared practice that facilitates a collective learning process (Wenger, 1998).

Online Music Communities as Communities of Practice

Salavuo (2008) found notable learning processes taking place within an online music community. Some of the activities that take place within an online music community include:

• Uploading one's own music, expecting feedback;

• Listening to music contributed by peers, providing feedback;

• Discussing, asking questions, providing answers, engaging in arguments;

• Recommending music to others;

• Connecting together to engage in joint musical projects.

This author found that the members of online music communities seemed to be motivated by the need to have others listen to their music and to receive feedback, and most of all to hear what kind of music others are making. He went on to stress that they are motivated to participate in order to establish connections with others, and not for monetary purposes.

Waldron (2009) conducted a study of an online music community that is considered a community of practice to find out what kind of informal music teaching and learning practices were occurring that warranted that title. The criteria in which the community was judged on were based upon Wenger's (1998) four components of learning as social practice. The four components are as follows:

1. Meaning: A way of talking about our (changing) ability – individually and collectively – to experience our life and world as meaningful.

2. Practice: A way of talking about the shared historical and social resources, frameworks, and perspectives that can sustain mutual engagement in action.

3. Community: A way of talking about the social configurations in which enterprises are defined as worth pursuing and participation is recognizable as competence.

4. Identity: A way of talking about how learning changes who people are and creates personal histories of becoming in the context of communities.

Waldron (2009) found evidence in the discussion boards of the community that all four criteria were being met within the online music community, and that deep social learning was taking place. She states,

Clearly, rich, meaningful music learning experiences are already happening in the OT online community, as witnessed by members' own posted narratives. Participants are aware of their learning styles and how to learn: they use, adapt and manipulate technology for music learning; ask for feedback; help one another; freely share resources; ask and answer questions; and demonstrate knowledge and understanding of OT music from performance, historical and theoretical perspectives. (p. 108).

Social Networking Technologies

Over the past decade social networking technologies have become very familiar and popular things in our society. But what characteristics must a site have to be classified as a social networking site? Gunawardena and colleagues (2009) defined social networking as technological services and software that enable people to communicate with others from all over the world, at any time of day. They also stated that social networking websites allow users to create highly customizable personal profiles that are used to make connections with other people. These social networks allow for the expansion of knowledge through connections with others who share

similar interests (Gunawardena, et al, 2009). But just how popular are these social networking sites becoming?

According to a study completed in 2007, American (9 to 17 year olds) spent as much time using social networking sites as they did watching television (Salavuo, 2008). Almost all American college students have either Facebook profiles or another type of social networking platform. They use these profiles to contact friends and to develop and maintain social relationships (Ellison, 2007).

The ability to find, communicate, and keep in touch with such a wide array of people makes this technology a worthwhile addition to online communities. In Finland, Salavuo (2008) and colleagues designed an online music 'micro community' based on their research into both formal and informal web-based courses and online communities. The members of this community showed enthusiasm and a need to have their music heard by the others. They also showed a real need to get feedback on the music they posted. But according to Salavuo (2008), "The social dimension was not strong enough, and the users wanted more MySpace or Facebook like personal pages and better possibilities to interact with other users" (p. 7). This need for a social learning and collaborative environment is something that shouldn't be overlooked regarding formal and informal online music collaboration/ education.

Web 2.0 and Mashups

The development of Web 2.0 has shifted the role of the web user from content consumer to content creator. Min et al (2009) describe Web 2.0 as user-centered, social, personalized, interactive and participatory online environments. Some of the technologies that are associated with Web 2.0 are blogs, wikis, photo and video sharing sites, social networking sites, and web technology mashups (Gunawardena et al, 2009). These technologies give users control over the

type, tenor, and tone of the information and data they create and post on the Internet (Min et al, 2009). A recent trend is to combine multiple Web 2.0 applications to create a new application that solves a different problem than the original (Salavuo, 2009).

These combinations of applications are known as *mashups*. The term was borrowed from the music industry, where it referred to taking parts of different songs to create a whole new song out the pieces (Fichter, 2009). In Web 2.0 terms a mashup is an application that combines disparate data from multiple sources in order to enable web users to do new things, or accomplish tasks more efficiently (Min et al, 2009). Fichter (2009) stated,

> A key element was open sources of information and data to remix. Amazon and Google
> paved the way to an open data ecology by offering a set of protocols for accessing some
> of their data stores, which allowed web developers to retrieve, manipulate, and add data,
> such as maps, book titles, reviews, and ratings. (p. 54)

When the idea of mashups originated, it required knowledge of coding and programming, limiting the number of mashup creators. Recently, however, Mashup editing tools have made the process of developing a customized mashup application much simpler (Min et al, 2009). Equipped with visual interfaces, these editing applications allow for "drag and drop" development of custom mashups for users with no programming skills. This has allowed for many nonprogrammers to add to the growing number of mashups online today.

Conclusion

Communities of practice are rooted in the social-Constructivist learning theories of Dewey and Vygotsky. They believed that people do not learn in isolation, rather that they learn best through social interactions and collaborative endeavors. Online COP offer the social collaborative space for situational learning to take place without the limitations of time and

location. It is through these social interactions that the communal knowledge is accessed, allowing for learning to take place. The learning that takes place within the COP is situational because the learner gains knowledge within the context and environment that it is used.

In order to design an online community of practice a person must first design an online virtual community and provide adequate scaffolding in the form of tutorials. If the proper tools and scaffolding are provided for members then a COP may develop. But this would happen only if a legitimate task-oriented activity exists for the community of practice to develop around.

The implementation of Web 2.0 technologies in communities of practice may enhance social collaborative efforts of members. It is through these social interactions within a COP that learning is able to take place. Web 2.0 Mashups can help members of communities of practice to interact and communicate in a much more efficient way.

Chapter III: Methodology

Introduction

In order to produce the highest-quality learning environment possible this study will be completed using the Research and Development methodology. This methodology has been chosen because it will allow the researcher to gain insights into what users of Ableton Live are looking for in an online collaborative experience. The research will be conducted with the aim developing a set of core functions that users would like to see implemented in the development of the proposed online Community of Practice.

The literature review has been conducted to establish a general overview of the fields directly involved with the project to set the context. These fields include social networking technologies, communities of practice and their theoretical learning background, and web technology Mashups. The development of the collaborative social networking site will be based on personal experiences as a professional Ableton Live user, coursework in learning design, input from the expert panels, the knowledge gained during the review of the literature.

The Problem Statement

The problem of this study was to improve upon the learning and collaborative experience of members of an informal online music community of practice through the mashup of Web 2.0 communication and collaboration technologies**.**

Objectives

The objectives of the study were:

1. Work with Ableton Live professionals to gain insights, design ideas, and opinions of the proposed model to develop its features and functions early in the design process.

2. Present the design to a group of scholars in relevant fields for their review and feedback.

3. Develop a model for an effective online music community of practice through the mashup of Web 2.0 communication and collaboration technologies.

Through the implementation of social networking technologies and mashups of Web 2.0 technologies in an online community of practice members will be able to find, communicate, and collaborate with other musicians in an effective and efficient way. This process will help to raise the quality standards of informal music education, and it should provide a model for online communities of practice, so that future learning designers can improve upon it.

Research Design

This project was completed using an action research methodology. This research approach is rooted in the idea that educators should become involved in community problem-solving with a focus on applying learning in a social context (O'Brien, 2001). The research aspect of the project included a review of literature in the related fields plus this researchers own experiences as an Ableton Live musical artist. The design and development portions were broken down into three stages. The stage I design was developed by the researcher and presented to the expert design panel (EDP) for further input in the proposed features and functions. The EDP's feedback was analyzed and any modifications/additions to the design were implemented. The stage II design was then based on the feedback of the EDP. Once completed, the stage II design was subjected to the first part of an alpha/beta review process conducted by the expert review panel (ERP). Based on the results of the alpha review, the stage III design was completed and presented back to the ERP for the final beta review session. The results and their feedback on the final design were then analyzed and documented. A table illustrating the research process used for this study can be found below:

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┌─────────────────────┐
│   Review of the     │
│     Literature      │
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┌─────────────────────┐
│   Stage I Design    │
└─────────────────────┘
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┌─────────────────────┐
│  Expert Design Panel│
│       Survey        │
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┌─────────────────────┐
│   Stage II Design   │
└─────────────────────┘
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┌─────────────────────┐
│   Expert Review     │
│ Panel: Alpha Review │
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│  Stage III Design   │
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│   Expert Review     │
│ Panel: Beta Review  │
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│  Report Findings/   │
│     Outcomes        │
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Design Stages

The content of the stages of the design process included the following:

- Stage I: A list of features and functions to be included in the website based on the

  researchers' own musical experience as well as the knowledge gained during the review

  of the literature.

- Stage II: Stage II design included making any adjustments to the stage I design based on the feedback of the expert design panel. Mock-ups of screenshots to better demonstrate the main functions and features of the site.

- Stage III: Adjustments to stage II design were completed based on the results of the alpha review process of the model.

Expert Panels

Expert Design Panel:

The EDP was made up of a mix of six professional Ableton Live artists. The members of this panel were chosen for their expertise using Ableton Live for music recording, production, performance, and songwriting. Their roles in this project were to review and give feedback and opinions on the stage I design of the features and functions of the site.

Expert Review Panel:

The expert review panel included five qualified experts, one from each field related to this study. The members' fields of specialty included E-learning, collaborative/social networking environments, communities of practice and music education. The panel assessed the model web environment after the stage II and III design phases through an alpha/beta review process. The panel provided the researcher with their opinions on the design to establish whether it could provide users of Ableton Live with an environment in which collaboration and learning could be accomplished as proposed. The panel members were chosen with much consideration to ensure adequate expertise and knowledge of their respective fields, as well as no bias or vested interest in the success of the project.

Research Instrument

The research instruments for this study were a series of three feedback questionnaire/surveys (Appendices B, D, F). These surveys were sent out to the expert panels following each design phase via email along with a copy of each design phase. The questions on the surveys were designed to gain the professional opinions of the expert panel regarding the scaffolding support and the site's features and functions. The expert panels' responses were reviewed and incorporated each of the stages of the design process throughout the study.

Timeline

Fall 2010:

- Completed and defend proposal in front of committee.

- Defended proposal in front of committee.

- Contacted expert panel members to request their participation in project development and evaluation.

Spring 2011:

January:

- Distributed stage I design of model and follow-up survey to expert design panel.

- Completed the stage II design with responses to the survey.

- Presented expert review panel with copies of stage II design and alpha evaluation survey.

February:

- Completed revisions to stage II after reviewing expert panels alpha review responses.

- Presented stage III design to review panel with beta survey questions.

March

- Completed chapters 4 and 5.

- Defended thesis in front of comminitte.

- Submit final copy of thesis.

- Submit electronic version of thesis.

Summary

This study was completed using an action research methodology. Through the distribution of a follow-up survey the expert design panel's members provided the researcher with their professional opinions on the design of the model from an Ableton Live musician's viewpoint. The design panels' inputs, along with the researcher's experiences as an Ableton Live artist and the knowledge gained through review of the literature the researcher developed the stage I and II designs of the model. The stage II design along with a follow-up survey was then presented to the expert review panel for the alpha portion of the review process. The review panel's recommendations were then included in the stage III design of the model. The beta portion of the review process included presenting the stage III design and a final follow-up survey to the panel for their final opinions of the design.

Chapter IV: Data Analysis

Introduction

This chapter presents the responses to the follow-up surveys that were completed by expert panel members after each of the three design phases of the study. The first survey (Appendix B) was given to the expert design panel along with a copy of the stage I design (Appendix A). The second (Appendix D) and third (Appendix F) surveys were distributed during the review portion of the design process. The review process for this study was completed in two phases. The first phase, the alpha review, involved presenting the expert review panel with the stage II design (Appendix C) and a follow-up survey/questionnaire designed to gain feedback about the proposed features and functions of the model. The beta review was the second and final phase of the review process. This phase was designed to gain the review panel members' opinions of the final stage III design (Appendix E) of the model.

Design Panel Responses

The questions included in the expert design panel's follow-up survey were designed to do two main things. The first was to allow the Ableton professionals to provide their input into the design of the model early on in the design process. The second was to gain their opinions on the idea of the project as whole. Being a part of the proposed website's core audience, the panel members' opinions of the idea and the sites features and functionality were very important to take into consideration when designing and developing the model. The questions and the panel members' responses:

1. *What other information, besides that listed, would you want to know about an artist if you*
    were planning on collaborating with them?

This question was designed to ask the panel members their opinions of the list of musical information included in the stage I design of the model. Upon reviewing their responses, the researcher found that 100% of the panel members felt that the information listed in the stage I design covered all the necessary aspects of a user's musical information to be included in member profiles. One of the panel members had this to say "All the information about what to use in the user profile looks pretty good to me. I can't really think of any others." One panel member did have a suggestion on how to improve upon the existing list, they recommended "*Instruments played* is listed but preferred instrument(s) should be a subset." This would allow users to see which instrument was a member's "main" instrument if they have multiple listed in their information.

2. *Do you think that any other personal information should be included in artist profile pages? Did you find any of the listed information unnecessary to include for this type of website?*

Upon reviewing the responses for this question, the researcher found that 60% of the design panel believed that the personal information included in the stage I design was adequate for the website. This is what one member had to say, "I think this is enough info to get a feel for who you might be collaborating and none of it seems unnecessary to me." Another member agreed by saying "I don't think anything would need to be added to the personal info page." The other panel members felt that personal information, besides a username, was something that should be optional or left out of the design completely. One member indicated, "There's no need to bog down the profiles with unnecessary info, the social networks have that covered." Another reiterated the point by saying "I feel like any and all personal information besides a username should be optional."

3. Are there any other types of media that you think artists/members should be able to upload and browse through?

The design panel members provided a number of suggestions for alternatives types of media to be included in the stage I design. One of the panel members stressed the importance of being able to watch videos of past performances in the following:

It would be nice to browse videos of past live performances chosen by the artist, maybe some pictures as well. This could lead to a greater understanding of where the person you are collaborating with is coming from visually. Visual representation of music onstage is always a big part of any show for me, so I would like to see how my partner in crime represents his/herself onstage. I know you have included this in the site, just reinforcing the importance of this feature.

A list of the media features the design panel provided:

- Lyrics or set lists

- A plug-ins page

- A patch forum that users could share their sounds on

- Artwork category (separate from the photos sections)

- Flash games,

- Blog rss feeds

- Website links

4. Do you think that it would be beneficial for users to be able to perform searches on the criteria listed above in order to find other artists to collaborate with?

Every one of the panel members agreed that the ability to perform searches on the criteria outlined in the stage I design would be beneficial to Ableton users looking to collaborate in an online setting. One member had this to say:

> It would be super beneficial for people to be able to search people with these options. There are so many people that want to get projects going but don't have the right outlet to do so. This would really help people connect from around the world.

Another member agreed by saying "Yes, in fact that be what makes your website stand out." Overall the responses to this idea were very positive. One panel member indicated "Yes, it would make it easier to find a musician that plays the style you need at that time."

5. *What other forms of communication would you like to be able to use if were you were to collaborate online?*

The responses for this question were based around the need to actually speak with the person they were collaborating with. Five of the six panel members stated a desire to be able to speak with their collaboration partner. One member stated, "I like to feel comfortable with people I am making music with, so naturally I would like to hear their voice if our collaboration got to the point where we should be talking regularly." Three of the members also included suggestions on communication tools that they would like to use to speak with other members. One suggested, "Voice link similar to XBOX live. So that users could talk to each other through their computer microphones and speakers while working." Another indicated, "Skype would be the only communication tool I would need... and a fast internet connection!" The third member suggested the following, "I would include a "like" for their gmail/google account so people with google voice can communicate and collaborate as well.

6. What other topics should be covered in the tutorials for the website? Do you think the tutorials listed would provide new members adequate support and guidance?

Two of the panel members' suggested including tutorials on how to use Ableton Live in the scaffolding of the site to help orientate new users of Ableton Live with all the features and functions it provides musicians. One panel member said "I think a broad overview of Ableton in the tutorial would be very helpful." The other panel member stated, "Maybe also include how to use Ableton for new users who want to collaborate. Athough most searching this out would already know how to use it." One of the other panel members had a different outlook on providing the tutorials that Ableton Live has produced for it's own website, "I think general Ableton tutorials should be omitted for this site, just to keep people thinking about new ways to do things, not just the ways that are known by Ableton programmers etc."

The other panel members found the tutorials listed in the stage I design to be adequate scaffolding resources for members of the proposed site. They stated, "The tutorials listed seem to be quite adequate." And "As long as you have a site overview and a virtual tour the musician should be able to use the site without problems." Another member stated their preference of video screencast style tutorials.

7. What are your overall opinions of the concept?

All six design panel members stated that they really liked the concept, and that they were very excited to see it become a reality. One members testimony:

"I think the concept is great! Anything that opens avenues for musical creativity and collaboration can't be a bad thing. Ableton could really grow by leaps and bounds by doing this. Opening a social networking type site for users of the most interactive and

intuitive DAW in the world could really lead to other new and interesting forms of music and other sites like this."

Another panel member stated, "I think this is an excellent idea and hope it is created. It could really connect musicians around the world so well." Reiterating the point, one of the members indicated, "I think this is a great idea it seems user friendly and I believe it could change the way music is made forever." Another member went on to say "I think it is about time honestly. Embrace the awesome technology of today and hear lots of awesome new music. I think this will only add more push to the music/art revolution we are in."

8. *Any comments or ideas on how to make it more effective / better?*

Four of the six panel members did not have any improvement suggestions for the researcher stating "Really think you have all the bases covered here" and "looks good all the way around" The other panel members provided the following suggestions on how to improve the site's design. One stated, "I would try and make it link up with facebook, soundcloud, twitter, all social networks. This would be a great way to get the word out about the site." The other suggested, "Keep it simple. Make the interface all-inclusive and clean in the same way that Ableton Live is."

9. *Dislikes? Concerns?*

None of the panel members voiced any dislikes or concerns for the project and concept stating "No concerns, we've been waiting for this." And "looks good all the way around". One of the members did provide a solid piece of advice with the following, "So long as the interface is clean and easy, its all good." I would suggest looking into translation for the website as many live users are foreign."

Alpha Review Responses

The alpha review's primary role in this study was to improve upon the stage II design that the researcher developed in collaboration with the expert design panel. The stage II model was presented to the expert review panel along with a follow-up survey that included seven open-ended questions designed to gain suggestions for improvements to the design. The survey questions and the panel members' responses:

1. *This website is intended to improve the online collaborative experience of an Ableton Live community of practice. Do you feel that the features and functions described in the stage II design phase will facilitate and improve the collaborative experience for these users?*

   This question was designed to gauge whether the expert review panel members thought that the features and functions listed in the stage II design could facilitate and improve online music collaboration between members of the proposed site. The responses to this question from the members were resoundingly positive; with all the members stating they believed the features would be an improvement over what was currently available to Ableton Live users looking to collaborate online. One of the panel members responded "Yes. This looks like it would provide a major upgrade in ways to learn and collaborate over and above what is available through the existing official Ableton site." Another stated, "I think so, most of the personal information and collaboration tools are listed." One of the other panel members responded "I like the idea of using a secondary site to amplify an existing products attempts at creating a collaborative environment…. I'm excited to see where this model goes."

2. *What other forms of communication, besides those listed, do you think should be included in the site?*

This question was included in the survey to garner ideas for additional online communication tools to be included in the model design. Each of the members of the review panel provided solid suggestions for ways to improve the communication tools included in the design. A couple of the panel members suggested adding links to other social networking sites. One member suggested "In the "profile" or "music info" section (or both), I'd suggest having a field where users could share a link to their personal or band site as well as links to Facebook pages and MySpace pages." Another panel member stated "I would like to see something like a spotlight feature or promotions page. Also, I might add a like button for facebook or a web badge." Another trend in the responses was the need to include a common discussion board in the design of the model. One panel member provided these ideas, "Discussion Board (Discuss project ideas), Google Voice (Get a free phone number to list on your site), Google Docs (Collaborate on ideas, lyrics, etc)." Another panel member responded "I would like a discussion area and status updates."

One of the panel members provided a list of additional ideas to add the communication tools section of the model design. They provided the following:

a. User rating – pioneered by E-bay, the idea of giving users a rating based on skill level, responsiveness, cooperation, flexibility, etc – might be nice. Because we are dealing with people's personal music projects I think crowd-sourcing via rating system a way of authenticating that an individual is who they say they are, and have the skills that they are advertising, might be important.

b. Being that this site will be used by musicians looking to find talent for their projects as well as musicians who are offering a service or a skill to a project(an online

studio-musician), I think the "INTERESTED IN" section could use a bit more development. "INTERESTED IN" is different than "LOOKING FOR". The ability to quickly identify why a particular user is on the site is going to be important to keep the community user-friendly.

c. Blog – because music is personal, I think there's precedent for allowing an online journal or blog. If I'm considering working with someone I may want to know their process and understand what/how they process music and engagement. A user-blog would allow active journaling about past and current projects and will help users who don't know each other more quickly feel comfortable working together.

d. e-commerce – If the site provides its users with an opportunity to get paid for their work, it could add another level of professionalism and intrigue to the property. Not sure if you want to go this way, but I thought I'd throw it out there for you.

e. youtube/Vimeo Channels – a lot of musicians have existing projects on social video channels. It'd be nice to connect or RSS their existing channels here, so that your site becomes an aggregator for existing online portfolios.

f. iTunes – Another place a user may already have content. Also, another possible way for your users to create advertise and create revenue for themselves as a secondary benefit of being involved on the site.

g. Shared Drive Space (ftp) – Perhaps a partition that I can give select users access to. This becomes a way of handing off large files.

3. What other topics should be covered in the tutorials for the website? Do you think the tutorials listed would provide new members adequate support and guidance?

This question's aim was to make sure that adequate scaffolding would be available to new members of the proposed music community of practice. It also gave the panel members an opportunity to provide suggestions on additional topics that they felt should be covered in the tutorials for the site. The majority of the panel members thought that adequate scaffolding was provided in the stage II design. One said "It seems like you've covered the topics new users would need to get started with participating in your community." Another responded, "The suggested tutorials seem appropriate and ample." A third member stated, "The tutorial list looks good."

One of the panel members provided this excellent idea in response this question, "One possible community feature for the future could be a simple tool or template for helping members create simple tutorials for demonstrating advanced features and techniques for using Ableton itself." Providing members with a tool or template that would encourage them to create and add their own Ableton Live tutorials to the site could facilitate the expansion of the community's knowledge base. Another one of the members provided these ideas for tutorials to be added to the design, "How to add media to the site. How-to organize your media through a library. How-to integrate this site onto another site like facebook. "

Two of the expert review panel members suggested having an overview video (around 2 minutes) that explains what the site is about. One stated with the following:

Maybe include a 2 minute explanatory video depicting why this website is so useful and

include a scenario where 2 people from around the world find each other on the website

and use the communication and collaboration tools to make an awesome song.

The other member indicated:

The tutorial list looks good. I'd make sure to include a short overview (less than 2

minutes) that provides a savvy one-watch introduction to what you are doing. I couldn't

tell if this is what you were already planning with 'Welcome Tutorial' or not, but there

should be one video that a user can watch and get a high-level sense of everything that is

going on.

4. *Within your given field, are there any areas of the design for which you would recommend*

   improvement?

The researcher included this question in the survey to give the experts the opportunity to

apply their skills and knowledge in their respective field to the design with the aim of improving

the model. One panel member suggested the following:

…having "differentiated" tutorials based on level of experience with Ableton. (For

example, you might consider having a "quick start" path for people who are already fairly

familiar both with Ableton and social networking/collaboration tools, and then a more

detailed path for beginners and others who prefer a little more guidance.

Another member had this to say:

I would create a Twitter Account and then create your tutorials using Screenr.com. You

can sign into Screenr.com with your Twitter account. Screenr enables you to create, host,

tweet, and embed your videos anywhere on the web. People that follow your twitter account will get notified any time a new tutorial is added to the site.

5. *What are your overall opinions of the concept?*

This portion of the survey was designed to give the panel members the opportunity to voice their opinions of the project as a whole. One of the members had this to say:

> I think it's an excellent idea. It's easy to see how a "community of practice" could be of great benefit to users. Additionally, the discussion and social feature on the existing Ableton site seem pretty basic – not much more than an off-the-shelf PHP discussion board loosely organized by topic. A system like the one you are proposing could clearly add value.

Another member responded with the following:

> I like the concept and believe the success or failure of this idea revolves first around whether there is a real need for such a social network and second around the execution and implementation of the social network. A successful social network revolves around an active community, so it must be easy to use, and also very useful to the artists. Creating and collaborating on music has traditionally been a very complex and intense process between people that know each other. The idea of collaborating over social networks and creating quality music is a unique idea and one that could find success if it's easy to use and there are a lot of people that want to do something like this.

"I think it is a good start, but I would look more at what facebook has and try to put more community features into the site and stay away from the games. "

"Exciting. Good thinking!"

6. *Any comments or ideas on how to make it more effective / better?*

This section of the follow-up survey was included for the review panel members to have the opportunity to make suggestions for improvements to the model in areas not covered by the other questions in the survey. One of the panel members had these suggestions to offer:

I would also include a rating system where people can vote on profiles and individual music. People could then search for those with the highest rating. In addition, you could Encourage Ableton Live and other record companies to feature those with the highest ratings on their websites.

Another member stated, "I would suggest mentioning NING and BUDDYPRESS as potential social network platforms for future development of this site. I would also a link to Facebook and Twitter page in Profile." One of the other members responded with this short list of improvement ideas, "Messages button and feature. Event button and feature (maybe a calendar) How will it scale and what will it look like? Media library button. Discussion area. RSS (depends on how updated the site is)"

7. *Dislikes? Concerns?*

The majority of the panel members did not respond with any dislikes or concerns about the project. One member responded, "I like the idea. I think any time you can provide useful ways for people to connect and collaborate around a particular topic, creativity and innovation

will follow." Although one member did provide their concerns in a response that focused on building up more "community-based" features:

> I feel a community need to be social and have more interaction. You have communication tools like skype, but how do I communicate through the community? Can I leave a message on someone's page or update what I am doing or working on? I would also like to see how shared projects would look. Would they link back between all of the people who have worked on the project? Is there a collaborated with page, like friends list on facebook? What will the media library look like and how do you plan to keep everything organized once people start to add many resources. I think it would be good to see more information on how you visualize that. I think it is a good start, but right not it seems more like linking profile pages and not enough community.

Beta Review Responses

After the completion of the alpha portion of the review process, the researcher made the suggested additions and updates to the stage II design. Once completed, the stage III design was presented back to the review panel for the Beta portion of the review process. The Beta review consisted of two open-ended questions designed to obtain the panel members' final opinions of the proposed model design. The questions and panel members' responses are included below:

1. *Do you feel that the updates and additions improved upon the stage II design presented to you in the Alpha portion of the study?*

The responses that the researcher received for this question were very positive. All of the review panel members believed that the additions that were made improved upon the stage II design. One of the members stated, "Yes. The media library seems more defined and easier to

understand. It also seems like you have added more community features to the design. I feel that this project could really build a strong community." Another panel member had this to say, "Yes. I think you have a very rich feature set here that offers users many ways to use and benefit from the site. Nice work." The other members agreed by saying, "Yes – The updates have increased both the communication and collaboration of the social network." Another member went on to say "I agree that these updates and additions significantly enhance the material presented in the Alpha study. Good expansions!"

2. *Are there any other additions/changes that you would like to see included in the final design of the model?*

This question was included as a last chance for the review panel members to provide suggestions to improve upon the third and final stage of the model's development. The first panel member had this to say:

I don't have any additions or changes, but I do recommend that you keep the design simple and expandable for the final design. The community will never take off, unless everything is well thought out and easy to use. I think you did an excellent job on your beta review.

The second panel member responded with a similar statement stressing the importance of a simple and easy to use interface for the site:

I think you are on the right track. Just make sure to keep the user interface simple and that the most important features are the easiest to use and access. Many times we pack so many features into something and people lose track of what is most important and give

up because it looks too complex. This is why status updates are front and center on facebook. It is the most important feature that drives the entire community.

Another member provided these insights in response:

I think the additional tutorial material you indicate in the beta version and the additional social features will be particularly helpful for users and make the site more fun and engaging. The only additional feature that springs to mind at this point would be including something in the user profile section that would allow creating visible connections with other users with whom one has collaborated/is collaborating. ("virtual bands" instead of "groups" as on Facebook, perhaps?) I also really like the new "diggin' it" feature idea. In an actual product, my only concern would be whether the phrase "diggin' it" would bring you uncomfortably close to an intellectual property conflict with Digg and their phrase "digg it." Just something to think about for future development. It would also be great if users could express that they are diggin' user-created tutorials and tips posted by others (as well as samples of their music) as a way to reward and encourage users who help others, and if a user's diggin' activity (both diggin' and being dug) could appear in their activity streams.

These final suggestions were provided by another panel member in response the question:

As I read the enhancements, I started thinking about a "ranking" label, where people would self-rank their experience with Ableton Live. This label would be on the member's front page and should be paired with an identifying icon or avatar. Examples could include: newbie (with icon/avatar of a cartoon baby bird .. or something like that..), novice (avatar or harry potter-type character with google eyes), amateur, professional,

diety. Then, add a search option for this. Maybe I want to search for someone at my level, or someone better etc. Users self-select their ranking, as I mentioned earlier.

Chapter V: Summary, Conclusions and Recommendations for Further Research

This chapter provides conclusions drawn from the results of the study and an overview of the objectives of the study how they were completed. The researcher also provides recommendations for areas of further research relating to informal online music education, Web 2.0 technologies and online music communities of practice.

Conclusions

The problem of this study was to improve upon the learning and collaborative experience of members of an informal online music community of practice**.** Working in collaboration with panels of Ableton Live professionals and scholarly experts in fields related to the study the researcher developed a model for an online music community of practice for users of the music production and performance software Ableton Live. This model proposed the implementation of social networking community features and other Web 2.0 communication and collaboration tools into an online music community of practice in hopes of improving the learning and collaborative experience of members.

The review of the literature found that, with the development of the Internet, online music communities of practice offer musician's genuine learning and collaboration opportunities regardless of their geographical proximity to other musicians (Wenger, 1999. Waldron, 2009). The learning that takes place within these communities of practice is rooted in the social constructivism learning theories. These learning theories believe that providing an environment that fosters social interaction and collaboration with more capable peers can create the potential for development (Huang, 2002). Along with being socially based, the learning is also collaborative in nature, "in which the collaborative knowledge of the community is greater than

any individual knowledge." (Johnson, 2001). The social interactions, collaborations, and communal knowledge are the foundation of the learning that takes place within a community of practice.

The implementation of social networking technologies and other Web 2.0 communication and collaboration tools into an online music community of practice offers a means of improving the way that members of a community find, communicate, and collaborate with other members. In Finland, Salavuo (2008) and his colleagues designed an online music 'micro community' based on their research into both formal and informal web-based courses and online communities. According to their research, "The social dimension was not strong enough, and the users wanted more MySpace or Facebook like personal pages and better possibilities to interact with other users" (p. 7). By mashing up social networking and other Web 2.0 communication and collaboration tools the researcher aimed to provide users of the online music community of practice with an improved learning, communicating, and collaborating experience online.

The model for an online music community of practice that this study developed proposes the design of a virtual community that provides its members with an improved learning, communication and collaboration experience over currently available alternatives. This is achieved through an all-inclusive, simple, clean user interface that provides members with all the communication and collaboration tools necessary to successfully collaborate online. The model's design also stresses the importance of providing new members of the community with adequate scaffolding in the form of tutorials. These tutorials teach members how to successfully use all the communication and collaboration tools provided by the site. This scaffolding support system is a key component of any community of practices' success. It helps facilitate the new members' transition from new, and inexperienced user to expert. Facilitating this transition is also

beneficial to the community as a whole because it helps raise the communal knowledge base. The more experts available in the community, the more knowledge can be transferred between community members.

Meeting the Objectives of the Study

There were three objectives developed for this study. Overviews of the objectives and how they were completed are included below:

Objective #1: Work with Ableton Live professionals to gain insights, design ideas, and opinions of the proposed model to develop its features and functions early in the design process.

This objective was met during the development of the stage II design of the model. Based upon experiences as a semi-professional musician and the review of the literature in related fields, the researcher developed the stage I design that included the features and functionality of the proposed site. The stage I design was then presented to the expert design panel along with a follow-up survey that was made up of guiding questions intended to gain insights, design ideas, and opinions of the model. The expert design panel was made up of seven professional musicians that use Ableton Live for music production and performance. The design panels' responses were included in the development of the stage II design of the model.

Objective #2: Present the design to a group of scholars in relevant fields for their review and feedback.

Objective number two was completed during the alpha/beta review portion of the study. Once the suggestions made by the expert design panel were included in the stage I design the researcher presented the stage II design to the expert review panel, a group of scholarly experts in the related fields, for their review as part of the alpha portion of the study. The alpha portion

involved the researcher presenting a copy of the stage II design along with a follow-up survey to the review panel for them to complete. The survey questions were designed to allow the experts to apply their knowledge from their field to furthering the development of the model. The review panels' responses included suggestions for ways to improve the design, their opinions of the proposed features and functionality of the model as well as their opinions on the project idea as a whole. The alpha review survey responses garnered a number of quality improvements to the stage II design of the model.

Upon the review panel's completion of the alpha review survey, the researcher applied the panel's suggestions to the design and developed the third and final version of the model's design. The stage III design was then presented back to the expert review panel along with a follow-up survey made up of two open ended questions for the beta review portion of the study. The beta review was designed to obtain the review panels' final opinions of the model for online music communities of practice. The panel members' responses to these final two questions indicated that they all believed the stage III design of the model could in fact facilitate and improve the collaborative experiences of users of an online music community of practice.

Objective #3: Develop a model for an effective online music community of practice through the mashup of Web 2.0 communication and collaboration technologies.

The third and final objective was completed over the course of the three design/development stages of the study and concluded with the final model design that included many social networking and other Web 2.0 communication and collaboration tools. The three design stages allowed the model to be developed based on input from a wide range of influences and contributors and reviewed by scholarly experts to ensure the models effectiveness. The stage

I design was developed based upon the researcher's experience as an Ableton Live musician as well as the results from the review of the literature. The stage II design was created in collaboration with the group of Ableton Live professionals to gain their opinions and suggestions on the design. The stage III design was developed and reviewed by a group of scholarly experts in related fields of study.

Further Research

The researcher believes that conducing further research into the following areas and studies would be beneficial to developing more efficient and effective musical learning and collaboration experiences online:

1. Build an online music community of practice following the model that was designed during this study. Have a sample group of Ableton Live musicians test the site, its features and functionality, and provide feedback on their experiences. Compare their responses to the responses of a separate sample group that attempted to find and collaborate with other musicians not using the model community of practice.

2. Developing learning theories that address informal music education in today's technological climate.

3. Web 2.0 technologies in music education, both formal and informal.

4. Online music communities of practice.

5. Social networking technologies in education.

6. Learning theories that address informal social-based learning with Web 2.0 technologies.

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Appendix A

Expert Design Panel

Context

With the release of Live 8, the latest version of Ableton's performance and production software, users now have an efficient and effective way to collaborate with other artists anywhere in the world using the new "share live set" feature. This solved the problem for how users collaborate once they know each other, but users still lacked an efficient way to find and communicate with other artists around the world. For this project the researcher is developing a model for an online music community for the users of Ableton Live. The primary idea is to combine social networking website features (user profiles, search functions, etc.) with the latest communication tools with the aim of making the process of finding another artist to collaborate with more efficient. The website would allow users to browse for artists on a number of different criteria.

You have been asked to participate in this study as an expert on the design panel. Below you will find ideas on what will be included on the site from the first stage of development. The researcher would like you to review the following features and then complete the short feedback questionnaire. Your opinions will be included in the next development stage for the website. Thank you for your participation.

Stage I Design:

Content for User Profiles

Music Info:

- Skill level / years played/ experience level

- Current / past musical projects

- Genres played / interested in

- Music education background

- Influences / favorite music

- Instruments Played

- Software / plug-ins they use

- Collaboration History / feedback

- Interested in: learning, collaborating, sharing music, teaching, etc.

- Gear they use

- Operating system / Ableton

- Availability

Personal Info:

- Name

- Location (general)

- Age (range)

- Education

- Contact info (preferred methods)

Media Section:

- Photos

- Videos

- Songs

- Podcasts

Search Criteria Options

- Name

- Location

- Experience

- Genres played / Interested in

- Musical influences/ favorite music

- Gear used / Plug-ins

- Operating system

- Availability

- Education

- Skill level

- Interested in

Communication Tools / Options

- Video Chat

- Instant Message / Chat

- Private Message

- Wall post

- Collaboration Feedback Form

- If Mac OS users : Computer takeover through ichat

- Skype

Collaboration Tools

Collaboration will take place using Ableton Lives "share live set" feature included in Ableton Live 8. For more information on this tool/technique visit www.ableton.com/share .

Scaffolding Tools for site

New users of this site will be provided with tutorials to help familiarize them with the tools and functions that they now have access to. Multiple tutorial formats will be provided to the users to account for different learning styles. These tutorials will be available as video screencasts, audio podcasts, as well traditional written instructions.

Tutorials:

Welcome Tutorial:

- Site overview

- Purpose of site

- How it works – features/how site operates

- Virtual Tour (video only)

Social Profiles Tutorial:

- Creating a profile

- Search options

Communication Tools Tutorial:

- Overview of Communication tools available on site

- How to use the different tools

Collaboration Tools Tutorial:

- Overview of Ableton's collaboration tool

- How to use Ableton's "share live set" features

Terms of Use / User Agreement

- Hybrid of existing social networking and music forums user agreement

- Member code of conduct

- Privacy issues, copyright issues

- Moderator roles

**If you have any questions or concerns please contact the researcher prior to completing the questionnaire. Thank You.

Appendix B

Design Stage I: Follow-up Survey

1. What other information, besides that listed, would you want to know about an artist if you were planning on collaborating with them?

2. Do you think that any other personal information should be included in artist profile pages? Did you find any of the listed information unnecessary to include for this type of website?

3. Are there any other types of media that you think artists/members should be able to upload and browse through?

4. Do you think that it would be beneficial for users to be able to perform searches on the criteria listed above in order to find other artists to collaborate with?

5. What other forms of communication would you like to be able to use if were you were to collaborate online?

6. What other topics should be covered in the tutorials for the website? Do you think the tutorials listed would provide new members adequate support and guidance?

7. What are your overall opinions of the concept?

8. Any comments or ideas on how to make it more effective / better?

9. Dislikes? Concerns?

Appendix C

Expert Review Panel: Alpha Review

Context

With the release of Live 8, the latest version of Ableton's performance and production software, users now have an efficient and effective way to collaborate with other artists anywhere in the world using the new "share live set" feature (www.ableton.com/share). This solved the problem of not having an efficient means of asynchronous collaboration, but users still lacked an efficient way to find and communicate with other artists they wa around the world to collaborate with.

For this project the researcher is developing a model for an online music community of practice for the users of Ableton Live. As the researcher is a learning designer and not a web designer, the proposed website will not be built for this project. Instead, a model, or mock-up of the website and its features and functions will be designed and developed.

The primary idea is to mashup social networking website features (user profiles, search functions, etc.) with the latest online communication tools with the aim of making the process of online music collaboration a more efficient and accessible undertaking. By incorporating social networking type user profiles artists would be able to do searches for very specific information.

Let's say that you are making a reggae song but you can't play the guitar very well. At this website you could do a search for guitar players that play reggae music and then browse through the user profiles in the search results. Each profile that you browse through would have all the information that an artist would need to know about a potential collaborative partner. You

could listen to song samples, look at performance pictures, see what kind of gear they use, read feedback that other members have left about their collaborative experience with the user, watch performance videos , etc. Once you find an artist that has the sound you are looking for you will have all the communication tools right there on the site to make the collaborative experience feel less asynchronous and more efficient.

The proposed website would be an all-in-one web experience that provides users with all the tools they need to find and communicate with other artists all over the world.

The Design Process

The design process has been broken down into three stages. Stage one of the design process involved the researcher developing the design based on his own experiences as an Ableton Live artist as well as the review of the literature. The stage one design was then given to the expert design panel (EDP) along with a survey/questionnaire for their review. The EDP consists of 6 Ableton professionals that have years of experience using Ableton Live for performance, production, and songwriting. The feedback from the EDP survey was incorporated in the stage two design which is included on the following pages.

Your Role in the Study

You have been chosen to participate in this study as a member of the expert review panel. The expert review panel's role is to conduct an Alpha/Beta review of the website mock-up. On the following pages you will find the stage two design features. You are asked to review the design and provide your feedback and opinions of the site's features and functions. The feedback from the Alpha review will be incorporated in the final design stage of the site. The stage three

design will then be presented back to the review panel for the Beta review. Thank you for your participation.

Please review the stage two design below and then answer the questions on the survey/questionnaire included. Your responses can be in whatever format you prefer.

Italics indicates fields updated from stage I design*

Stage II Design

Site Overview

- *Audience: Ableton Live users, from beginners to professionals.*

- *Simple & clean user interface*

- *All-in-one design (all communication and collaboration tools in one site)*

- *User profiles include mashups of online music and media sharing technologies to provide users the ability to share past work, music, performances etc.*

- *Multiple formats of scaffolding tutorials to bring new users up to speed with the tools and features of the site.*

- *User profiles centered around information related to music.*

Content for User Profiles

Music Info:

- Skill level / years played/ experience level

- Current / past musical projects

- Genres played / interested in

- Music education background

- Influences / favorite music

- Instruments Played

- Software / plug-ins they use

- Collaboration History / feedback

- Interested in: learning, collaborating, sharing music, teaching, etc.

- Gear they use

- Operating system / Ableton

- Availability

Personal Info:

- Name

- Location (general)

- Age (range)

- Education

- Contact info (preferred methods)

Media Section:

- Photos

- Videos

- Songs

- Podcasts

- *Website Links*

- *RSS feeds*

- *Flash Media*

Search Criteria Options

- Name

- Location

- Experience

- Genres played / Interested in

- Musical influences/ favorite music

- Gear used / Plug-ins

- Operating system

- Availability

- Education

- Skill level

- Interested in

Communication Tools / Options

- Video Chat

- Instant Message / Chat

- Private Message

- Wall posting

- Collaboration Feedback Form

- If Mac OS users : Computer takeover through ichat

- Skype (video, phone, chat)

Collaboration Tools

Collaboration will take place using Ableton Lives "share live set" feature included in Ableton Live 8. For more information on this tool/technique visit www.ableton.com/share .

Scaffolding Tools for site

New users of this site will be provided with tutorials to help familiarize them with the tools and functions that they now have access to. Multiple tutorial formats will be provided to the users to account for different learning styles. These tutorials will be available as video screencasts, audio podcasts, as well traditional written instructions.

Tutorials:

Welcome Tutorial:

- Site overview
- Purpose of site
- How it works – features/how site operates
- Virtual Tour (video only)

Social Profiles Tutorial:

- Creating a profile
- Search options

Communication Tools Tutorial:

- Overview of Communication tools available on site
- How to use the different tools

Collaboration Tools Tutorial:

- Overview of Ableton's collaboration tool

- How to use Ableton's "share live set" features

Terms of Use / User Agreement

- Hybrid of existing social networking and music forums user agreement

- Member code of conduct

- Privacy issues, copyright issues

- Moderator roles

Appendix D

Design Stage II: Alpha Review Survey

1. This website is intended to improve the online collaborative experience of an Ableton Live community of practice. Do you feel that the features and functions described in the stage two design phase will facilitate and improve the collaborative experience for these users?

2. What other forms of communication, besides those listed, do you think should be included in the site?

3. What other topics should be covered in the tutorials for the website? Do you think the tutorials listed would provide new members adequate support and guidance?

4. Within your given field, are there any areas of the design for which you would recommend improvement?

5. What are your overall opinions of the concept?

6. Any comments or ideas on how to make it more effective / better?

7. Dislikes? Concerns?

Appendix E

Expert Review Panel: Beta

Your Role in the Beta Review

For this section of the study the researcher is presenting you with the stage III design of the online music community of practice model. The stage III design includes updates and additions based on the feedback you provided in the Alpha portion of the review process. You are to once again review the design and fill out the follow-up survey/questionnaire. Thank you.

*** Italics indicates update/addition ***

Stage III Design

Site Overview

- *Member-based online community of practice for users of Ableton Live*

- *Social network-type user profiles that are searchable on a number of different criteria*

- Audience: Ableton Live users, from beginners to professionals.

- Simple & clean user interface

- All-in-one design (all communication and collaboration tools in one site)

- User profiles include mashups of online music and media sharing technologies to provide users the ability to share past work, music, performances etc.

- Multiple formats of scaffolding tutorials to bring new users up to speed with the tools and features of the site.

- User profiles centered around information related to music.

Content for User Profiles

Profile page Features:

- *Updatable Status*

- *Wall posting section*

- *Expandable Media Libraries: Members can upload and manage their media in libraries on their profile pages. These libraries are expandable/collapsible in order to keep the profile simple and easy to use. Users pick which media they want featured in the standard collapsed view, and all the rest of their media is available when expanded.*

- *"Diggin' it" section (This section lets members show off links to music, other members profiles or specific songs, media and anything else music related that they are "digging" at the time.)*

- *Integrated Blog feature (Act as online journal to document projects, experiences etc.)*

- *Links to other social networking sites*

Music Info:

- Skill level / years played/ experience level

- Current / past musical projects (links to these as well)

- Genres played / interested in

- Music education background

- Influences / favorite music

- Instruments Played

- Software / plug-ins they use

- User rating: Collaboration History / feedback (collaborated with list similar to friends on facebook)

- Interested in: learning, collaborating, sharing music, teaching, etc.

- Gear they use

- Operating system / Ableton

- Availability

- *Looking for (If the member is looking for a specific instrument or style. Say, reggae guitar lead player wanted for dubstep track, for example)*

- *I-tunes link*

Personal Info:

- Name

- Location (general)

- Age (range)

- Education

- Contact info (preferred methods)

- *Links to other social networking sites*

- *Personal website links*

Media Section:

- *Blog*

- Photos (photo sharing site links)

- Videos (youtube/vimeo channels)

- Songs

- Podcasts

- Website Links

- RSS feeds

- Flash Media

Search Criteria Options

- Name

- Location

- Experience

- Genres played / Interested in

- Musical influences/ favorite music

- Gear used / Plug-ins

- Operating system

- Availability

- Education

- Skill level

- Interested in

- *Looking for (members looking for specific instrument or genre, say reggae guitar player for example)*

Communication Tools / Options

- Video Chat

- Instant Message / Chat

- Private Message

- Wall posting

- Collaboration Feedback Form

- If Mac OS users : Computer takeover through ichat

- Skype (video, phone, chat)

- *Links to other social networking sites (facebook etc.)*

- *Discussion board*

- *Google voice*

- *Google docs*

Collaboration Tools

Collaboration will take place using Ableton Lives "share live set" feature included in Ableton Live 8. For more information on this tool/technique visit www.ableton.com/share .

Scaffolding Tools for site

Promotional/Overview Video

- *This video would provide an overview of what the site is all about*

- *Located on the home page of the site to let new visitors know what the purpose and functions of the site*

- *Act as promotional video to be shared on other social networking sites, blogs, etc.*

New users of this site will be provided with tutorials to help familiarize them with the tools and functions that they now have access to. Multiple tutorial formats will be provided to the users to account for different learning styles. These tutorials will be available as video screencasts, audio podcasts, as well as traditional written instructions.

Two differentiated tutorial "paths" will be available to new members of the site based on the users level of experience with Ableton, social networking technologies and online communication tools.

One will be a "Quick Start" path for members who have more experience the tools and techniques involved with the site. This path will have condensed tutorials to fast-track the orientation to the website.

The other tutorial path will be a more in-depth option for users who would like more details and instruction in their orientation. The tutorials involved in this path will be created assuming the learner has little-to-no knowledge or experience with the tools and techniques involved in using the site.

Tutorial Topics:

Welcome Tutorial:

- *Expands on the shorter promo/overview video's content*

- Site overview

- Purpose of site

- How it works – features/how site operates

- Virtual Tour (video only)

Social Profiles Tutorial:

- Creating a profile

- Search options

- *How to share your profile/looking for advertisements onto other social networking/blog platforms*

Communication Tools Tutorial:

- Overview of Communication tools available on site
- How to use the different tools

Collaboration Tools Tutorial:

- Overview of Ableton's collaboration tool
- How to use Ableton's "share live set" features

Media Tutorial:

- *How to add media to your profile*
- *How to organize uploaded media into libraries for easy browsing and organization.*

There would also be a user generated tutorial library that would include member created tutorials that cover Ableton Live techniques.

Tutorials tutorial:

- *General overview of the idea of a member generated tutorial library.*
- *How to create tutorials online that cover techniques in Ableton Live*
- *Encourages users to contribute to the communities learning resources and knowledge base*

Terms of Use / User Agreement

- Hybrid of existing social networking and music forums user agreement

- Member code of conduct

- Privacy issues, copyright issues

- Moderator roles

Appendix F

Beta Review Survey/Questionnaire

1. Do you feel that the updates and additions improved upon the stage II design presented to

   you in the Alpha portion of the study?

2. Are there any other additions/changes that you would like to see included in the final design

   of the model?

Appendix G

Profile Mockup (Stage II)
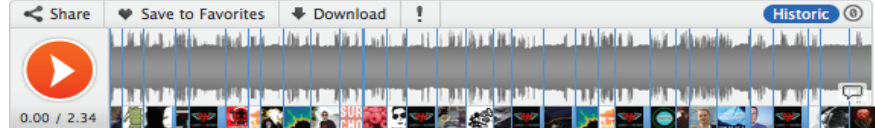
Home   Find an Artist   Help Tutorials   FAQ   Search _____

Personal Information

-Name
-Location (general)
-Age (range)
-Education
-Contact info (preferred methods)

Music Samples

Musical Information

-Skill level / years played/ experience level
-Current / past musical projects
-Genres played / interested in
-Music education background
-Influences / favorite music
-Instruments Played
-Software / plug-ins they use
-Collaboration History / feedback
-Interested in: learning, collaborating, sharing music, teaching, etc.
-Gear they use
-Operating system / Ableton
-Availability

Communication Tools

Media Section
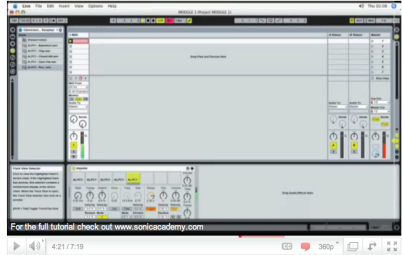
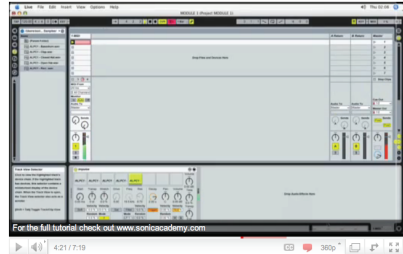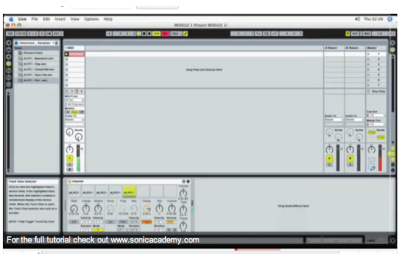4/9/10 Newport Music Hall, Columbus Ohio: Supporting Boombox
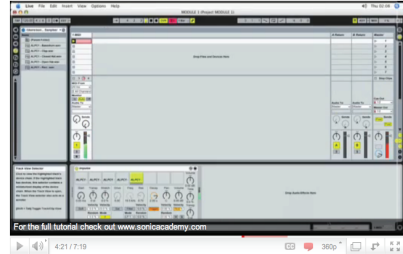
Appendix H

Tutorials Mockup (Stage II)

| Home | Find an Artist | My Profile | FAQ | Search _____ |

Getting Started

This section of the website is designed to help new members understand what this website is all about and how to use it to it's fullest potential. Tutorials below will help new members to become affluent with the tools and functions of the website. The tutorials are available in multiple formats below.

Welcome Tutorial:
-Site overview
-Purpose of site
-How it works – features/how site operates
-Virtual Tour (video only)

Social Profiles Tutorial:
-Creating a profile
-Search options

Communication Tools Tutorial:
-Overview of Communication tools available on site
-How to use the different tools

Collaboration Tools Tutorial:
-Overview of Ableton's collaboration tool
-How to use Ableton's "share live set" features