

RESOURCES FOR TEACHING THREE-DIMENSIONAL ART

By

MATTHEW D ROGERS

SUPERVISORY COMMITTEE:

CRAIG ROLAND, CHAIR
MICHELLE TILLANDER, MEMBER
ROBIN POYNOR, MEMBER

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To my Mom, the best teacher I ever had.

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Abstract Of Project In Lieu Of Thesis Presented To The Graduate School of The
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RESOURCES FOR TEACHING THREE-DIMENSIONAL ART

By

Matthew D Rogers

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The purpose of this project in lieu of thesis is to create a sculpture curriculum resource for art teachers. Sculpture offers a spatial engagement with depth and form to students that other artistic practices cannot. After reviewing art education literature for a pilot study conducted in 2009, it I recognized that sculpture resources were not as available to 6 grade to 12 grade art educators as to drawing, painting, or other 2-D resources were. Since then, my research has focused on addressing the limited availability of sculpture resources for 6-12 art educators by developing an online curriculum resource with project outlines, project examples, and links regarding bringing sculpture into their classroom.

The methods I used in this study include reviewing previous research and art education literature on sculpture and curricula. I also developed and conducted a survey for practicing 6-12 art educators concerning their sculpture curriculum resources. In addition, I was able to observe local art teachers to examine practical strategies for introducing lessons. While in the school, I field tested sculpture project outlines developed through the research.

The aim of this project is to provide a convenient resource to encourage sculpture practice in the classrooms. As a result of my research, I have developed an online sculpture curriculum resource that provides art teachers with practical project outlines, finished project examples, material demonstrations, and links.

CHAPTER 1 INTRODUCTION

I first worked with three-dimensional (3-D) objects when I was a young boy, making models and creating train dioramas. I took art classes through middle and high school but only made sculpture once or twice. It did not matter at the time, because I was still trying to find my artistic outlet. At Glenville State College, in Glenville, WV, I enrolled in the art education program, which allowed me to sample all media. This is where I really discovered sculpture for the first time. My sculpture class mainly focused on ceramic sculpture, but wire and wood were used as well. The professor of the class told me at the end of the semester that I had found my medium, sculpture. I didn't really think much of it until I went to Tom Savini's special effects school in Pennsylvania, where my love for sculpture surfaced from within. It felt natural to use my hands to manipulate clay, plaster, and other media. This feeling of creating 3-D works was important to me and I feel that younger students should have the opportunity for experiencing this feeling as well. According to Smith (2001), sculpture production provides students with experiences to develop and refine fine motor skills, 3-D planning strategies, and tactile processes. Sculpture gives students the opportunities for "deciphering complex sensory and intellectual experiences"(Ash, 2000. P 211) and experiencing "relationships of real forms in real space" (Garchik, 1988, p 111).

Statement of the Problem

Based on my experiences observing and teaching in art classrooms over the last four years, I had the impression that sculpture is taught less frequently in middle and high school classes in comparison to drawing and painting. Why is sculpture taught less in art classrooms? Wanting to find out why this seems to be a fact, I conducted a pilot

study (Rogers, 2009b) to see how sculpture was represented in the popular art education magazines, *SchoolArts* and *Arts and Activities*. Results showed that sculpture projects were represented significantly less than drawing and painting projects. How can art educators teach sculpture effectively with seeming dearth of sculpture resources (Wachowiak & Clements, 2001)? After experiencing how I was not offered sculptural opportunities in middle and high school and only experienced sculpture in college and work, I believe that sculpture should be an equal part of the curriculum. I asked myself what I could do to encourage teachers to teach more sculpture in the classroom. This led me to the question: *How can I provide an accessible resource to encourage sculpture practice in middle through high school art classrooms?*

In my teacher curriculum survey (see appendix), I found that art educators are indeed teaching sculpture. However, in many cases they relate the projects to mainly Modernist work instead of including more contemporary sculpture. A lack of current contemporary artist resources seems to be a large part of the problem for teachers in regard to creating a meaningful sculpture experience. I attempted to create a solution to the limitation of online sculpture resources by forming an easily accessible online sculpture resource. The resource consists of simple lessons, or project outlines, with problem-solving opportunities; project examples connecting to current contemporary artists.

Overview of the Project

This project in lieu of thesis concentrated on developing an online resource for teaching middle and high school sculpture through the data gathered from my survey, review of art educational literature, and my observations and testing of sculpture

projects at Oak Hall School in Gainesville, FL. Based on my observations, sculpture survey, and previous research (Rogers (2009b), I believe there are not enough sculpture resources available to art teachers considering current contemporary artists and inexpensive material-related projects. I created eight projects using inexpensive materials in easy-to-use “project outlines” to aid in the development of middle and high school sculpture curricula.

Significance of the Project

This project aids middle and high school art teachers by providing a sculpture-focused curriculum resource that contains project outlines, material demonstrations, and project examples. My hope is that this online resource will make it easier for teachers to bring more sculpture into their classrooms considering its online availability, inexpensive materials or found objects, and diverse themes relating to current contemporary artists.

Definition of Terms

Sculpture: In this study, sculpture is defined as three-dimensional (3-D) forms consisting of various materials (wood, paper, metal, and clay) and installation.

Project outline: Project plan or overview, which includes concepts and production.

Maquette: Small model of a larger object

Project Limitations

Based on my research from this project, I created a sculpture resource and made it available to art teachers online. Findings from my initial research indicated that there was a lack of answers to questions regarding why sculpture would be taught less often than two-dimensional (2-D) media in the middle to high school art curriculum. Therefore, I created a survey. The teacher curriculum survey was posted to two art education-

based websites, Art Education 2.0 and The Getty Teacher Art Exchange, and left open for response for two weeks. There were a few limitations to the survey such as time and the posting availability to only two online groups.

While the survey could have been made available for a longer period, the data collected was none the less significant. In addition, the survey was only made available to members of the two art education websites. Classroom observations were limited to one school and my time there was split between two teachers, one more than the other. The *Yahoo SiteBuilder* program worked very well, but would experience data loss on occasion if there were too many hyperlinks. Even with these limitations, I acquired adequate data through other research avenues for the online sculpture resource.

CHAPTER 2 LITERATURE REVIEW

I reviewed several types of literature regarding sculpture curricula, materials, and methods in current art education for this project, including art education books, journal articles, and web sites. The art education articles and texts in the *Supporting Sculpture* section below gives examples of important sculptural properties and skills students cannot learn through experiencing only 2-D media. Initially, it was necessary to find out why sculpture was important and what it offers to students. The next part of the review, in the *Education Methods* section, explores sculpture teaching methods and projects over the last twenty years, such as Frank Wachowiak's experience in over 50 years of curriculum development in art education (Wachowiak & Clements, 2001). The last section, *Online Resources*, provides samples of what sculpture education related information is currently available to art educators on the World Wide Web. This review was helpful in discovering what types of projects are currently being taught in art classrooms, as well as finding out what popular methods and materials are being used. Understanding why sculpture is important to teach and important for students to experience was the driving force behind this project. Also finding out what *was* taught and *is* currently being taught was vital to guiding my effort to build connections among current materials, sculptors, and curricula.

Supporting Sculpture

What makes sculpture worth teaching? Sculpture offers many experiences, materials, and skill-building opportunities that 2-D media do not. The following literature review investigates the work of art educators who recognize the special skills and media experiences that support sculpture as an important medium. Golomb (2004) suggests

there are differences in sculpture and drawing development in children in relation to their experiences. She found that students were able to represent the human figure more effectively in regard to anatomy and proportion during some developmental stages through the use of clay than through the use of 2-D drawing. It can be said that students understand and represent forms in clay better than they do in attempting to translate their environment onto a flat surface. Hume (2000) suggests in her book, that sculpture encourages abstract thinking and visualization, and allows students not adept at drawing the opportunity to do well in art. This statement relates to Golomb's (2004) suggestion that some students may do better when working in real space with 3-D materials than trying to translate 3-D form into 2-D terms.

“After all appreciation of sculpture depends upon the difficulty of responding to form in three-dimensions” (Ash, 2000, pg. 212). Ash's statement treats sculpture as a problem-solving tool. Hume (1990) suggests that students, who typically work two-dimensionally, may have problems analyzing how something looks in reality or “in the round” (Hume, 1990, p. 125). Drawing an object and transforming it into a 3-D version takes careful planning and observation. This is an important method and skill that students could use in sculpture and other studio areas to improve their work through observation. Sculptors make use of the same visual elements of art that painters do, such as space, form, color, texture, line, and value, but sculpture is unique. Garchik (1988) states that sculpture engages “relationships of real forms in real space” (1988, p. 111). Garchik's book supports the unique spatial-relationship qualities of sculpture, such as the students' opportunities to perceive and experience “actual” depth and volume in an artwork (Garchik, 1988; Klaustermeier, 1997). *Depth* and *volume* are the special

qualities sculpture has in contrast to the 2-D arts. When one is able to hold or walk around a sculpture, there is a greater sense of reality than when experiencing 2-D works.

Anecdotal evidence also shows that sculpture improves skills. In a conversation with Smith (2001), special needs educator Frank Capello explained the benefits of teaching sculpture to his students. Capello states that the students' sculpture projects address many important developmental areas such as improving fine motor skills and problem-solving skills: sequencing steps necessary to complete a project and project planning. Techniques and materials vary with sculpture, but Edward Mayer ("Sculpture," 2009) explains that sculpture incorporates many techniques, materials, and concepts that integrate together, unlike 2-D arts that consist of only flat media. Sculpture students can use any media or material available to create form with depth and volume.

Media

Constructive experiences with materials vary, such as using clay and paper mâché, but elements of building and gravity play a role in all sculpture. What makes sculpture media different from 2-D media, and what are the benefits of experiencing sculpture? Smith (2001) explains the importance of sculpture in developing fine-motor skills and the importance of sequential steps when working in a 3-D medium that needs structural support. A good sculptural foundation and comprehension of gravity need to be established when experimenting with media.

Golomb (2004) focused on the development of children's sculpture in clay and play dough from preschool to late middle school. Golomb's research shows that

students' sculptural developments are different from their 2-D development when representing the human figure because of the stability of the 3-D medium.

Other authors (Ash, 2000; Klaustermeier, 1997) support this idea that sculpture offers a different learning opportunity to students. As students grow older, they begin to understand the way objects need to be structured sequentially to support their own weight. Three-dimensional media such as clay or toothpicks each have their own consistent sequences of creation that need to be followed in particular order to assure student success in sculpture projects.

What type of materials can art teachers use to create sculpture? According to Klaustermeier (1997), sculpture can be made out of any material to "acquire form" (p.181). This concept supports teachers creating projects from inexpensive or free materials such as paper, natural or manufactured found objects in order to help with budgeting (Wachowiak & Clements, 2001). Hume (2000) and Johnson (1983) also suggest substituting found materials for typically more-expensive media such as clay and wood. According to a round-table discussion among post-secondary art educators from the United States, Canada, and Germany, the concept of using found materials is global ("Key Issues," 2009). Most of the educators agreed that budgets are a large factor in how they teach and organize their programs. Using found materials is one way to lower media expenses. Wachowiak and Clements (2001), Cikanova (1995), and Johnson, (1983) also mention the use of simple material, such as cardboard.

Pilot Study

To determine how sculpture projects and resources were represented in art education magazines, I conducted a pilot study (Rogers, 2009b) to discover the ratio of suggested sculpture project articles to 2-D projects from 1999 through 2009 in *Arts and Activities* and *SchoolArts*. I found that sculpture project articles (Tables 1.1 and 1.2) were significantly fewer in number and thus seemingly underrepresented in these two popular magazines. Over of the ten years reviewed, *Arts and Activities* had a total of 831 project ideas. Of those, only 149 were sculpture-based. The findings for *SchoolArts* were similar. With 862 total projects, only 158 were sculpture-related. The 2-D project ideas make up approximately 82% of the projects in these two popular art education magazines.

I established four variables for categorizing the curriculum ideas I collected: 2-D, 3-D, 4-D, and 3/4-D hybrid. The 2-D category contained all flat surfaced, or work “viewed from one side,” and low-relief work, such as tiles. Sculpture was defined as three-dimensional forms consisting of various materials (wood, paper, metal, and clay) (Feinstein & Thomas, 2002). The 3-D category did not include sculpture projects involving low-relief work, pottery, or jewelry (Hume, 2000). For the purpose of this study 4-D consisted of digital, performance, and time-based work. I used 3/4-D to categorize three-dimensional work used along with 4-D criteria (Table 1-1).

Table 1-1. *Arts and Activities* 1999-2008

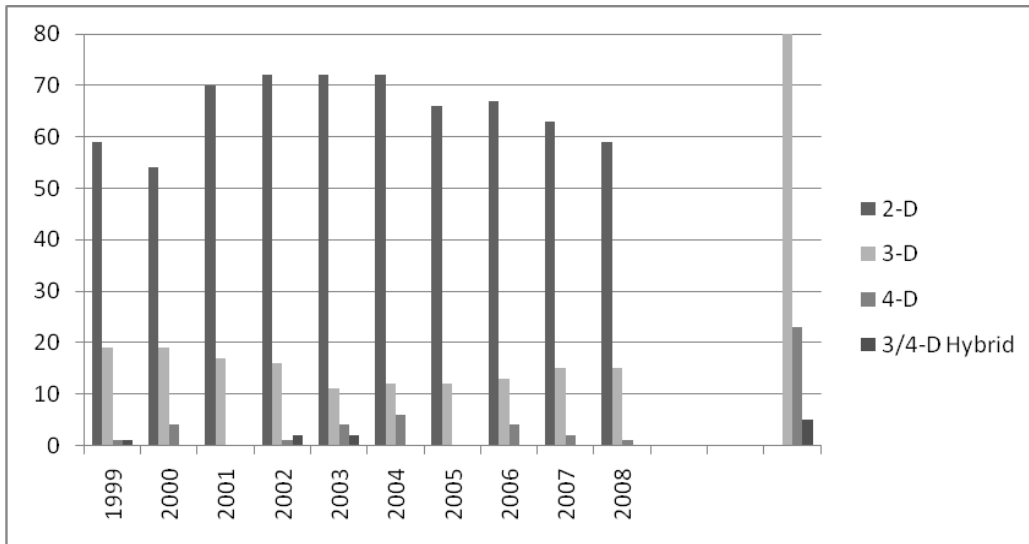
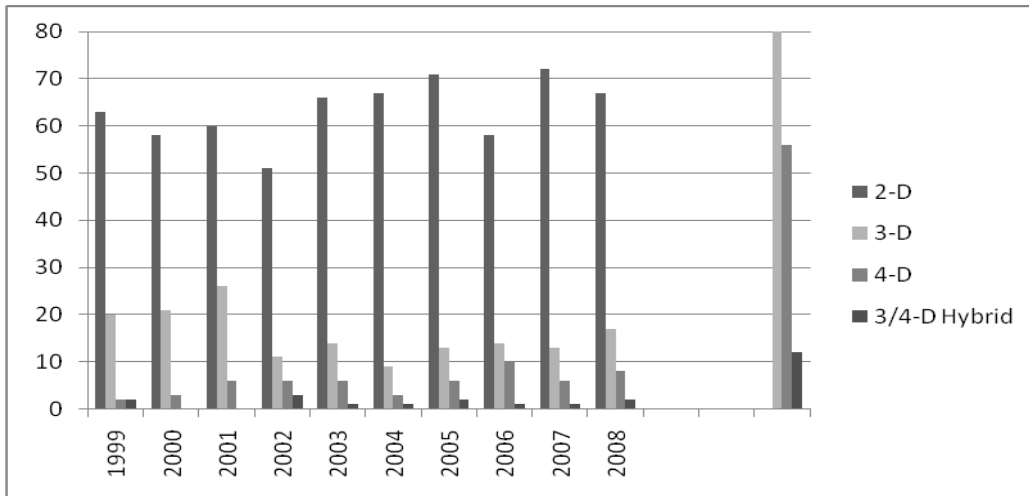


Table 1-2. *SchoolArts* 1999 – 2008



I found in this pilot study that sculpture projects are underrepresented in *Arts and Activities* and *SchoolArts* magazines considering that only 18% of the projects were sculpture-related based on my definitions. From the results of this literature review, I concluded there were significantly fewer sculpture articles than 2-D articles. This information led me to conduct a survey to find out where teachers get their project information (Appendix).

Educational Methods

The sculpture section of Garchik's (1988) book briefly lists different materials and techniques (e.g. sculpting the human head and mold making) used in making sculpture, as well as an art history example focusing on master sculptor Donatello (Forbes, 2009). Garchik mentions four compositional aspects of sculpture: symmetrical, asymmetrical, repetitive, and radial (Garchik, 1988). These concepts could be evaluated by students in a class critique or evaluation.

What instructional methods or examples of sculpture education create a learning environment with challenges and personal connections? To create a project resource with project plans, it was necessary to review different methods of lesson introduction, sculptor or concept themes, and media demonstration. Addison & Burgess (2000) explored methods such as student questioning and discussion criteria for teaching art and design that are also used in the classroom observations discussed in Chapter 3 of this project. The methods of Addison and Burgess (2000) structure how sculpture instruction and project content for overall student learning effectiveness should be evaluated.

To have a successful project, the teacher must have a clear plan showing "evidence of the students' growth in sculptural design" (Wachowiak & Clements, 2001, p. 324). What criteria can teachers use to evaluate student sculpture? Ash (2000) provides a framework for strengthening sculpture curricula in a classroom based on 12 simple elements: form, volume, space, gravity, material, rhythm (composition), process, scale, color, environment, surface, and weight (balance), (Ash, 2000). Garchik (1988) adds to Ash's elements. He provides a list of "ways to create three-dimensional art"

(pg.181). These consist of subtraction, manipulation, addition, and substitution. These are all foundational sculpture techniques (Wachowiak & Clements, 2001).

While some of Ash's (2000) listed elements are general, environment and gravity are very different from the typical elements of art such as space and form (Garchik, 1988). Questions sculptors have to consider: Where does the sculpture go or does the environment change the work? What about gravity? Gravity works against the sculptor, so sculptors must make decisions on foundation and structure in order for the form not to collapse (Smith, 2000; Golomb, 2004).

What teaching problems arise when working with new materials in a collegiate sculpture setting? The author (unknown) of *Educating Sculptors: Past, Present, and Future* (2009) suggests that art educators should look to the past to find answers for the future of art education. Past pedagogical methods considered were form analysis, technical drawing, nature study, and life drawing, which some may still consider foundations of college art education ("Educating Sculptors," 2009). Form analysis is a typical foundational skill for student questioning and critique (Addison & Burgess, 2000). In critiques, students should identify what they see visually and allow themselves to make assumptions and comments about the artist's material usage and intentions. Life drawing is important as well for considering aspects of sculpture design.

When planning a project, what do teachers take into account for planning sculpture? Wachowiak & Clements (2001) list some sculpture project issues teachers face when project media and skill instruction are encountered by large classes. This means the teacher must plan ahead regarding class size and space available for certain sizes of sculptural media (Wachowiak & Clements, 2009).

Where are they supposed to put all of that work? Little (1990) addressed classroom space issues facing art educators. Space is an important factor when considering sculpture in the classroom, especially when an art teacher has 600 or more students. The idea of budgeting space in the classroom is a recurring issue addressed throughout the literature (Ash, 2000; Wachowiak & Clements, 2001), but no clear answers were determined. Exama (2007) conducted an exercise by making models of ideal classrooms by experimenting with different configurations. Teachers could experiment using this method. Only general possibilities, such as smaller work or rotation of class schedules were offered.

How should an art teacher integrate cultural ideas into a sculpture project? Briggs (2009) shared a sculpture project based on the *Star Wars* film and its scientific, historical and cultural influences. Students had to understand what the underlying questions and moral codes the movie suggested to viewers such as “God” and “good vs. evil.” The students created their own characters to be used later in a student-produced movie. *Star Wars* is a film most students have seen, but they may not understand the underlying messages of religious oppression. Students would watch the film in a different way if this was learned, and might make more personal connections when relating to conflicts in their own culture or current news, such as issues surrounding the Gaza Strip. This article is a good example of a contemporary 3-D lesson that encompasses sculpture, and also cultivates students’ connections to their interest in the movie and calls their attention to current global conflicts.

Online Resources

Many online sites address sculpture curricula. Some are tightly structured while others are simple and loosely organized. The first three websites are what a teacher would get on the first page on Google when searching “sculpture lesson plans.” These first few sites contain much information and many curriculum resources for art teachers. The website *Art 21 (Art:21, 2001-2009)* focuses on current contemporary artists, such as Mark Dion, and is organized into themes, such as “time.” The site is formatted to be user-friendly and complete with artist backgrounds, videos, and project plans. The project plans list artist/work-related questions as well as activities for students of all ages.

The *Incredible Art Department* website (www.incredibleart.org) is another art teacher resource that provides lesson plans developed by the art teacher site members. The “Incredible Art Department” is organized into sections for different age groups. 2-D media is represented more than sculpture.

Many museums also provide lesson resources for teachers. For example, the St. Louis Art Museum (SLAM) provides a teacher resource section with curriculum relating to their art collections. Also, SLAM provides an online gallery of collections the museum holds. The Harn Museum of Art in Gainesville, FL provides lesson plans and art teacher workshops. Like the above museums, the Harn’s online lesson plans also focus on their collection such as African figures and Deborah Butterfield’s *Rory* sculpture. The lessons provide art history about the particular work, discussion questions, and project goals. The teacher workshops include a curriculum unit packet based on a theme, such as “sculpture”, based on their collections. Along with the curriculum packet, a material

demonstration and project activity are provided. The Museum of Modern Art (MoMA) and Ace Gallery provide many high-resolution photographs of their current and past exhibitions and also PDFs of exhibition press releases. Teachers can use these images to teach about a particular artist or work.

In addition to the above web sites, there are many sites with specific sculpture concepts or projects. Some address cultural identification and others emphasize collaboration and teamwork. The Chicana and Chicano Space (“Hispanic Research,” 2001), for example, supplies “significant themes, gender balance, geographic breadth, and historical” (resource page) regarding reflecting and identifying with one’s culture in a sculpture unit. The Chicano resource provides project introductions and questions for student connection building. Artnet.com (Artnet, 2010) is a website dedicated to the buying, selling, and research of fine art. The site lists 39,000 global artists and their works. The Flong (Levin, 2010) website displays videos and photographs on interactive collaborative art by Golan Levin and his partners. Levins’ (2010) site is great when considering interactive collaborative sculptures. These examples are just a sample of the many websites that can provide projects or resources for project development.

Lynne Forbes’ (2009) “sculpture school website” concentrates on the formal classical qualities of figure sculpture (Garchik, 1988). The school teaches people, from children as young as three, to professional sculptors. In a discussion with Forbes, she described an interesting quality of sculpture to be the artists’ performance when engaging in clay sculpture. She said the students move around the work as if dancing, but also looking at the different planes created in the space. This method “helps the

ability to visualize and strengthens abstract reasoning” (Hume, 1990, p. 125), by allowing the student to experience the manipulation of sculpture in the round.

Since the teacher curriculum survey, the materials have focused on inexpensive found objects, but I wanted to include two companies that supply a wide variety of materials. Sculpture House (www.sculpturehouse.com) is another resource for teachers that offers a variety of literature, materials, and tools for ceramics, stone carving, clay sculpture, wood carving, and mold-making. It is comparable to The Compleat Sculptor (www.sculpt.com), but offers some alternate types of clay and casting materials. The Compleat Sculptor is a sculpture supply resource providing a variety of materials and tools such as clays and casting products. There is also technical support available for help if there is a question regarding the use of materials. The company offers demonstrations in the New York City area where it is based, but also demonstrates around the country at art trade shows.

CHAPTER 3 METHODS OF RESEARCH

Overview

My initial question asked if sculpture and 2-D art were taught proportionally in grade 6-12 art classes. My pilot study (Rogers, 2009b) demonstrated that two popular art education magazines did not publish as many sculpture projects as 2-D projects. The pilot study led to the review of art education literature and online sculpture curriculum resources to discover art educators' outlooks and methods regarding sculpture curricula; an examination of the benefits of teaching sculpture; and identification of online resources available to art teachers.

In addition to my reviewing art education literature and online resources, I posted a teacher curriculum survey to a forum on the *Art Education 2.0* website, a global social network for art educators, and on Getty's *Teacher Art Exchange*, an art educator email list serve (Appendix). I relied on this survey to select and write the online sculpture resource content and materials. Among the things I ascertained from this survey was the need for current contemporary artists-related themes and the use of found materials in the teachers' projects. Among of the online resources I discovered, they involved personal websites, for example that of sculptor Michael Rackowitz (2010). Others such as the Imagillaboration (Cottrell, 2010), a collective sculpture program page, informed projects I then developed for my sculpture resource projects. In addition to resources for project outlines, I found *YouTube* sculpture demonstrations and formulas for inexpensive materials such as cornstarch clay. I observed and implemented several projects at Oak Hall School to understand more positive project introduction methods, practical materials, and understandable themes for middle school students. This

information was used to guide the project introductions and material demonstrations (Wachowiak & Clements, 2001). Examples of the projects created used inexpensive or free materials, which were the criteria teachers seemed to implement, according to the survey. (Table 4-4)

Teacher Curriculum Survey

The purpose of the curriculum survey was to determine how frequently sculptural projects are taught in the 6-12 art curriculum and what resources art teachers use or would use to teach sculpture. The survey consisted of five questions: how many sculpture projects are typically taught by art teachers in a school year, the resources used or considered beneficial for project development, the media used, which artists have been covered, and how they were addresses in the curriculum. The use of an online survey with only five brief questions made it easy for educators to participate considering their time and schedule (Punch, 2005). The survey was posted on *Art Education 2.0* and on the Getty's *Teacher Art Exchange* list serve for two weeks. Seventy-eight anonymous middle to high school art educators were posted from around the world. I rounded all percentages to the nearest whole number to report results. The most important finding from the survey was that most of art teachers want online project outlines containing themes, inexpensive materials, and artwork examples. (Table 4-2)

Oak Hall Observations

At a local middle/high school in Gainesville, Florida, I observed current art education practice and was also given an opportunity to test teaching strategies and projects I developed. The Oak Hall School has an exceptional art program. Two art teachers share responsibilities in the 6-12 Upper School. One teacher focuses on 3-D

arts, while the other focuses on 2-D art. I observed for seven months and noted their teaching methods. I recorded my weekly observation on Blogger (Rogers, 2009a; Rogers, 2010) from September 2009 to April 2010. My schedule for providing project plans depended on the 3-D teacher's schedule. I observed both of the teachers, for the most part, used inexpensive or everyday materials, such as cardboard and acrylic paint, on a regular basis (Wachowiak & Clements, 2001; Cikanova, 1995; Klaustermeier, 1997). My observations used a framework of objectives given by Addison & Burgess (2000). This simple framework (below) helped organize my thoughts, visual observations, and data synthesis.

- Understand the function and potential of pedagogic methods and their effect on learning;
- Use conceptual frameworks to focus your classroom observation and inform your lesson planning;
- Consider how conceptual and sensuous responses to the world effect the way students learn (p. 21).

I viewed how each teacher introduced projects via brief art history and media demonstrations or project explanations (Addison & Burgess, 2001). I noted how differently the two teachers approached project introduction. One provided an in-depth explanation of the forthcoming project, including cultural backgrounds and media demonstrations. The other gave very brief cultural backgrounds or art origins, and demonstrated the project media briefly, or showed student examples. These two methods associate with data from the survey: *media driven and media associated*. (See page 49).

I chose to observe the teacher who taught 3-D art and sculpture. For my first trial, the cooperating teacher and I decided to experiment with a new medium for a seventh grade sculpture project. The teacher wanted to carry out a project he had not done in a while that introduces the Mexican festival, and had students create their own versions of the *Day of the Dead* skeletons. This seemed like a good project, given the fact that *Halloween* and *All Saints Day* were soon. Instead of using paper mâché, which he had used in the past, the supervising teacher wanted to test a new medium in the class. The material we decided to use was DAS brand self-drying paper-based clay.

This was a wonderful opportunity to observe how students interacted with the material, as well as the properties of the medium, such as malleability. This is an example of a *media driven* project similar to that listed in the teacher curriculum survey (See page 48). Before the students used the DAS clay, they had to create a wire armature, which they had not done before.

The *Day of the Dead* project was preconceived by the cooperating teacher. While I assisted with some information, I primarily focused on the medium demonstrations: building wire armatures and adding the medium to the armature.

We introduced this co-taught project by providing students with background information on the Mexican Day of the Dead festival. The purpose behind the festival and the sculptures used in it were briefly explained. The students asked a couple of questions about the aesthetic qualities of the sculpture. The teacher then explained that they would create a character based on their own interest. A few examples for possible characters were mentioned by the teacher as he showed examples from past classes. The students began to think about what characters they wanted to create. Some of the

ideas offered by the students were original. Others were taken from the suggestions or examples provided.

After the introduction, I started the production by giving a demonstration on building wire armatures. Building a sturdy armature is an important step for sculpture support and is a part of sequences that must be addressed in such a lesson, according to Frank Capello, (Smith, 2001). I showed the students how to cut lengths of garden wire, and where to bend with pliers. I showed students to begin with the head, then the neck, the arms, and down the rest of the body. I showed how to twist the wire for torsos and legs for stronger support, since the legs, and torso would position the armature, according to character. The feet were looped and stapled to a piece of scrap wood, to be used as a base.

The students then began applying the DAS clay to the armatures. I instructed them to start at the bottom and move upward, to provide stability.

The clay dried relatively quickly as the students worked with it, but it could be moistened with water to keep it pliable for longer periods. After the sculptures finished drying, the students personalized their characters by using paint, found objects, and fabrics to clothe the skeletons. There was not a critiques held, but the students were very interested in explaining who the figures were and why they made their material choices. After the *Day of the Dead* project, I developed a trial project outline for the teacher to use to instruct students. The teacher wanted a project that used paper mâché and Oaxacan animal sculptures, so I developed one considering the components.



Figure 3-1. *Day of the Dead* project at Oak Hall School (2009)

My Designed Project Outline for Oak Hall

Based on a project concept by the cooperating teacher, I conducted a trial curriculum similar to those I developed for the online resource. From the *Day of the Dead* observation, I learned to consider the way one introduces the project to and allow the media to drive the project.

Paper mâché was a material the teacher had not used in some time, so he wanted a project based on this material. The new project was to be media based followed by lessons on the subject of Oaxacan sculpture of Mexico. I made the decision to include background information on Oaxacan people who carve animal sculptures; and their methods and craft. In an attempt to create a student connection, I thought questions should be asked about the students' "cultural myths," and I thought we should discuss iconography such as animals, and discuss other interesting objects or people in the students' environment or culture.

It was somewhat difficult to create student connections because of the mythical purposes behind the original Oaxacan sculpture and also the ways the Mexican groups use found materials. The Oaxacan carvers select pieces of wood that suggest to them a particular animal. The basis for this folk art tradition is thus a “found object,” not an object; like a paper mâché piece, which is a construction. This difference furthers the student disconnection and understanding of the Oaxacan medium choices and methods.

Instead of showing a variety of Oaxacan sculptures, in this project outline, I preferred the students make three sketches based on their ideas of a character using cultural myths or animals. Once the students came up with a few ideas, the teacher would show them examples of original carvings.

The introduction to the project outline included four pictures of carvings: two creatures and two human-based works. These objects seemed to generalize the sculptural designs of Oaxacan sculpture instead of showing the typical animals. In addition to the information provided in the project outline, I included the current contemporary artist Sergio Hernandez, whose work was influenced by Oaxacan folk art details, such as color.

The Oaxacan Project Outline Trial

I provided the Oaxacan project outline to the art teacher a week before the project started. The art teacher introduced the project by explaining that the students would create a paper mâché project relating to the Oaxacan carvings. The teacher briefly explained where the Oaxacan people live and how they chose the wood for the carvings. The teacher did not mention the contemporary artist whose works related to

the Oaxacan sculptures. He asked the students to brainstorm, to think of different animals or creatures they could create, based on their interests.

The teacher then demonstrated how to construct different forms with newspaper and tape. In addition to forms, the teacher showed students how to roll tubes for legs and make cardboard wings (Fig. 3-2).



Figure 3-2. Oaxacan project introduction/demonstration Oak Hall School (2010)

The teacher decided to use art paste for the paper mâché gluing agent. Art paste is very inexpensive, and a small box makes one gallon of glue. The teacher mixed it in a Tupperware bin about 20 inches long, 12 inches wide, and seven inches deep. The large size of the bin made it possible for multiple students to use the glue at once. The teacher demonstrated how to dip the newspaper and slide the excess off with their straight index and middle fingers. He mentioned three layers of lightly glued newspaper were required for proper rigidity. While most of the students continued to build, a few started gluing and seemed to do well applying the glue-dipped newspaper. When time ran out, the students put their projects onto lunch trays to store until the next class

meeting. The students finished the projects with three layers and painted them using chosen colors.

Once the students finished brainstorming (Fig. 3-3), they created dragons, a sheep, a flying pig, a shark, and a few insects. Some of the students chose the animals based on their interests or just because they thought it would “look cool.” After the demonstration, the students began constructing their own creature forms from the newspaper and tape. The students seemed to translate the creature designs very well with the media, which is a *Sculpture Concept* in my online resource. The only problems seem to be leg stability and proportions, which were solved with teacher intervention.



Figure 3-3. Oaxacan project student construction Oak Hall School (2010)

Designing the Sculpture Curriculum Resource

The initial idea for this project was to create a sculpture resource in a form similar to a museum travel kit. Such kits could be used by teachers wanting to learn a new sculpture medium or wanting to use one of the provided project outlines. The problem with the intended design was the production of this “travel kit” and its distribution. Some teachers may not be able to afford them or have the space to store them. Considering

that teachers use the Internet for project planning, I decided to create an online resource that would always be available and at no cost to teachers.

What would I include in this online sculpture resource? The teacher curriculum survey I conducted provided me with ideas of what resources current teachers were using in their curricula (Appendix).

What resources would I use to create such an online resource? *Yahoo SiteBuilder* seemed the most convenient program to use. I had used it to create my personal website. I decided to link the sculpture resources site through my sculpture portfolio site address (www.rogersfx.com), but the appearance and layout of the two are very different. To maintain a separation of sites, I created no direct link back to my sculpture portfolio site.

Yahoo SiteBuilder is a user-friendly program, even if one does not understand html coding. The program resembles PowerPoint with respect to its applications, tools, and options. The tools are set up with the help menu on the left, tools on the top bar, and the web page files on the right (Fig. 3-4). The interface orientation is very similar to most graphics programs and even *Microsoft Word*. The page components are contained in a size-adjustable box that can be made larger or smaller, and dragged around with the mouse. On the right side, each file is assigned the title of the project outline or page concept and can be opened with a click. *Yahoo SiteBuilder* offers many choices of templates, fonts, and navigation bars for quick use. Users can also create their own components, since each is in a separate box and easily interchangeable or moved.

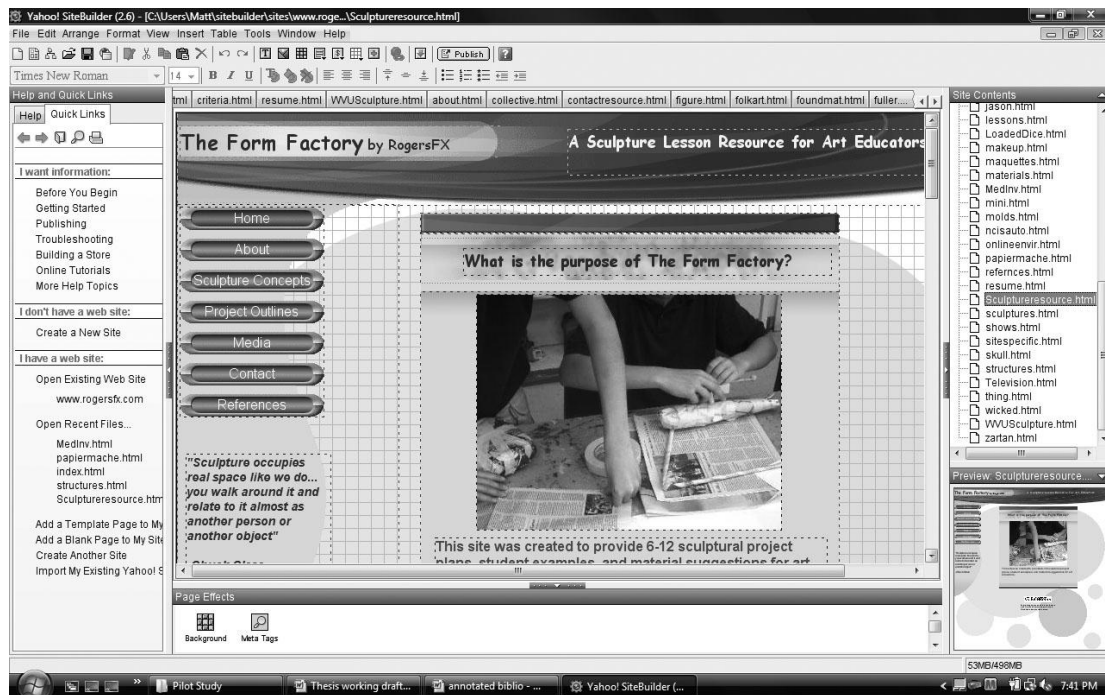


Figure 3-4. Yahoo SiteBuilder with sculpture resource main page

Yahoo SiteBuilder provides a variety of web page templates available to use when initially building the pages. The template I used throughout the site *circles-bluegold*, seemed a good choice because of the simple, mildly colorful background and airy appearance. The top left area contains the title of the site, *The Form Factory*, followed by an identifying phrase “*sculpture project outline resource for art educators*” to the right. The left side of the page contains the navigation bar or menu that directs the viewer to various pages: the *About* page, *Sculpture Concepts* page, *Project Outlines* page, *Materials/References* page, *Contact* page, and a link back to the *Home* page (Fig. 3-5). Under the navigation bar on each page are quotes that range from those of artists to scientists, such as Bruce Nauman. In the central area of the page is the main content, ranging from key ideas to project outline menus.

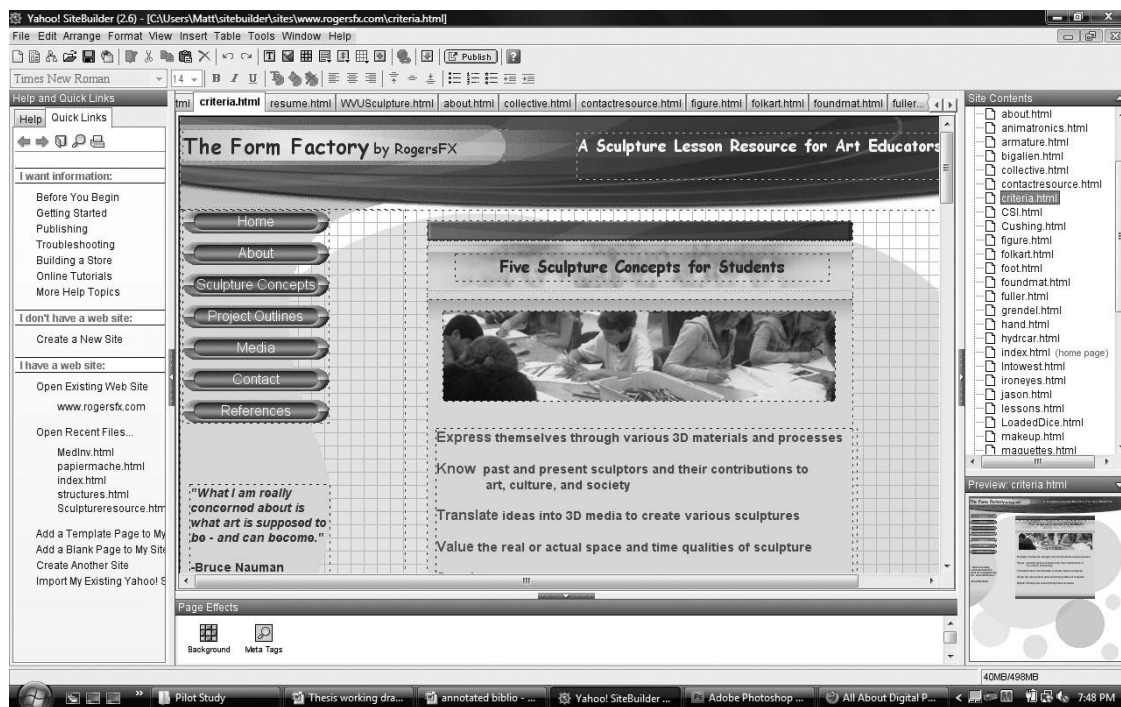


Figure 3-5. Yahoo Sitebuilder with sculpture resource *About* page

The home page introduces the viewer with a brief statement describing the website. The *About* page consists of a brief statement about the resource and its background. A brief biographical statement explains my background as a sculptor and art educator. The resource statement explains how sculpture project resources could not be found in one place, and that I decided to create that one place. This section needed to be brief, but explain my background and intention.

The *Sculpture Concepts* page central section lists five important sculpture concepts I chose to incorporate throughout the project outlines. Students should:

- Express themselves through various 3-D materials and processes
- Know past and present sculptors and their contributions to art, culture, and society
- Translate ideas into 3-D media to create various sculptures
- Value the real or actual space and time qualities of sculpture

- Speak critically and constructively about sculpture.

In addition to the sculpture concepts, I provided Ash's (2000) twelve elements of sculpture that I listed in my literature review. These elements, similar to the elements and principles of art, mainly focus on the qualities of sculpture.

The *Media/References* page contains links to step-by-step media demonstrations I conducted, such as building a wire armature; or a link to *YouTube* demonstration videos, such as figure sculpture. Below the media section are links to the references I used to create the project outlines. Some of these include artist websites, photographs used, and journal articles.

The *Contact* page allows the viewer to contact me with any comments, questions, or project ideas they would like to share. The message is sent to a hotmail account created for this purpose.

Project Outline Development

The project outlines page lists the projects I created: *Collaborative Exchange*, *Collective Conceptions*, *Formally Functional*, *Structural Community*, *Site Specific*, *Online Environments*, *Folk Art*, and *Figure it Out*. The projects needed to be simple, to the point, and easily modifiable for any middle or high school level. The structure of the project outlines was based on a traditional art-teaching format: studio production, art history, and critical analysis. I considered this format, but the rigid structures of production and art history were discarded. I attempted to use an open-ended structure based on student problem-solving, creativity, art history, and production. The format needed to be kept flexible and the project outlines needed to make it easy to peruse the

main points highlighted. Also, I intentionally placed the background information close to the supporting artist examples.

Decisions on what projects to use and their components were based partly on information gathered from the sculpture survey, classroom observation, and literature review. All of these research methods provided clues on materials, such as everyday objects, the need for current artists or project background, and project introduction methods or student motivational tactics.

I created each of the project outlines by referencing the *backward curriculum design* by Grant Wiggins and Jay McTighe (1998). The first aspect to consider for Wiggins and McTighe's method is to identify the learning goal. What will the students understand as a result of this project? Each project outline has an "objective." The objective is project specific, but is accompanied with "sculpture concept(s)," which may be included in other projects.

I wanted to create problems for the students to solve. For "student preparation," I might suggest they brainstorm ideas, make personal connections, or experiment with materials unfamiliar to them (Johnson, 1983). With this in mind, the students would have more control over the project and be able to make personal decisions pertaining to its execution.

Online Project Outlines

The *Project Outlines* page is set up as a navigation page with project links in the center section in columns and range from collaborative sculpture to figurative sculpture. The viewer goes directly to the project outline page upon clicking the link on the navigation bar. The project outline pages in (Fig. 3-6), are all formatted the same, but

the content varies. On each project outline page, there are *Sculpture Concept* and *Objective* sections explaining what will be learned from this particular project (Fig. 3-6). The *Student Preparation* section (Fig. 3-6), below the objective gives quick suggestions to prompt student or classroom discussion about the project (Addison & Burgess, 2000; Wachowiak & Clements, 2001). These prompts may be in the form of questions or project-related ideas for the students to comment on or brainstorm (Hume, 1990). This is an important section, giving the students the opportunity to think creatively about the concepts and make connections to their environment or lives.

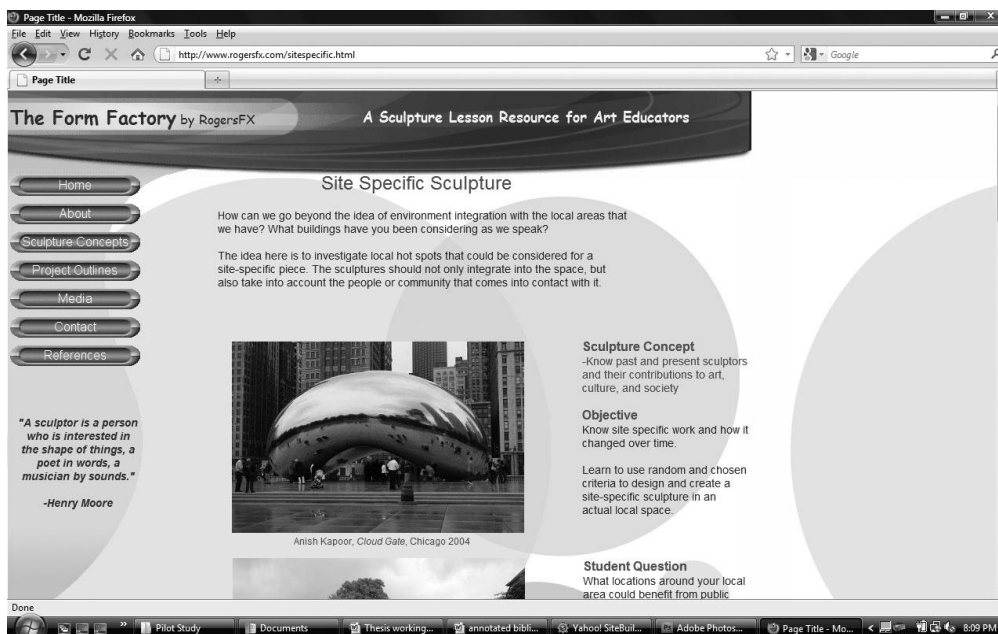


Figure 3-6. Sculpture resource *site specific* project page, top section

As the viewer scrolls down the page, he/she comes to the background section (Fig. 3-7), which contains historical information related to the topic or artists covered. The amount of information in the background varies, depending on the type of project. For instance, the site-specific project outline has a background on artists such as Richard Serra and his work. Project backgrounds may vary in containing additional questions or bulleted data. In addition to backgrounds on artists, there are links to other

websites regarding more information on the topic, such as the Richard Serra's work *Tilted Arc*, and the controversy around it.

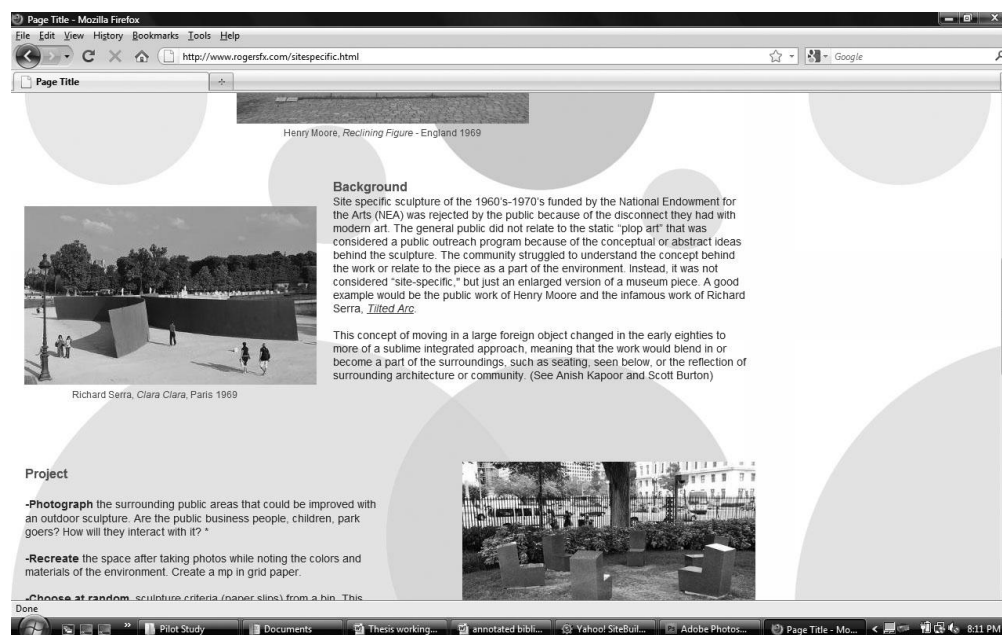


Figure 3-7. Sculpture resource *site specific* project page, background section

The last portions of the page are the *Project* and *Project Materials* sections (Fig. 3-8), which contains step-by-step instructions for the actual studio production and suggested media for the project. The *Project* section highlights in the text the key actions or activities the students will “do,” such as *write*, *design*, and *demonstrate*, to complete the work. Under the *Project* is the *Assessment* section that lists possibilities for analyzing the student’s work for each project, such as identification of sculpture qualities and discussion. Finally, to the right side of the *Project* section is the list of possible materials, such as “found objects.” Beneath *Assessment* is a link to a printable PDF version for the teacher.

I chose to keep the pages simple and free from clutter, to keep it easily readable. Throughout each project outline page there are visuals that consist of related artist work, provided by *Flickr Creative Commons* or other public domain sources, and

finished examples of the project that I provided. Below the project is a photograph of the project example.

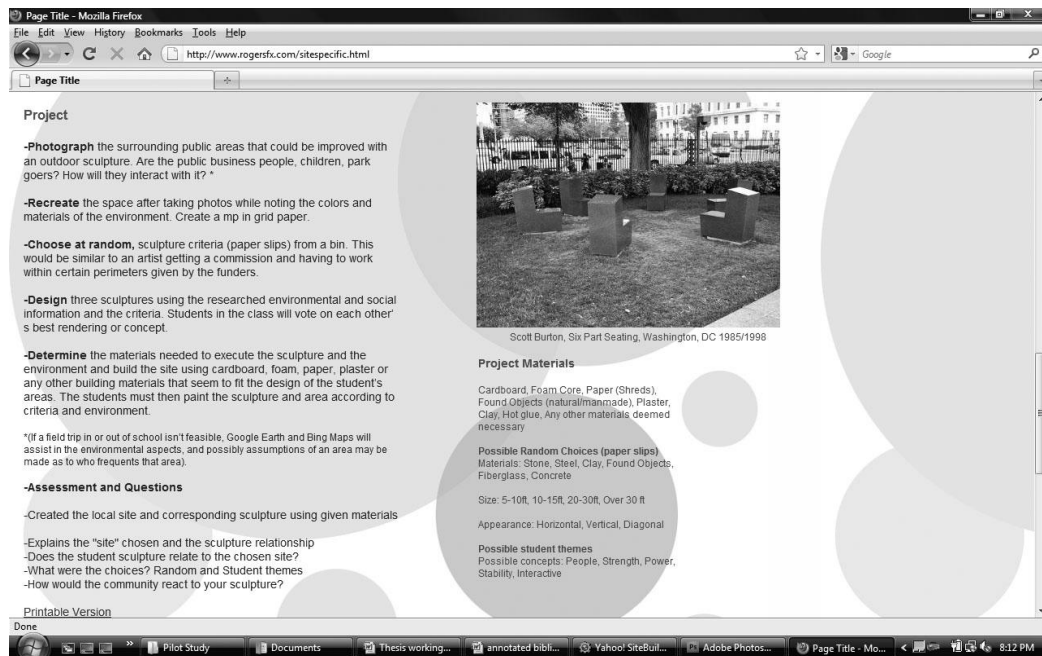


Figure 3-8. Sculpture resource *site specific* project page, project and material section

CHAPTER 4

RESULTS AND DISCUSSION

This project was guided by the question: *How can I provide an accessible resource to encourage sculpture practice in middle through high school classrooms?*

The literature review and survey were the main focuses of this project in order to support the need for sculpture to design projects relating to current contemporary artists and make the use of inexpensive materials. The sculpture resource website needed to be simple, easily adaptable, and contain relevant content that creates challenging projects with student-connections to contemporary art. The teacher curriculum survey showed what current art teachers are using for project content and materials, e.g. Modernist sculpture. Their responses indicated how projects were structured, such as basing a project on an artist's work or focusing a project on the use of media.

After reviewing the literature that supports my project, I was able to answer the question: what makes sculpture worth teaching? Sculpture offers the opportunity for the strengthening of motor skills and for following sequences of instruction to maintain sculptural form because of gravitational effects. I have addressed the "sequencing of steps" on my *Media/Reference* page in my sculpture resource. In addition to the sequential steps, I created opportunities in my projects to allow students to experience sculpture's spatial engagement qualities. These qualities allow students to work-with and understand actual depth and volume (Klaustermeier, 1997; Forbes, 2009). In my resource, I also addressed the use of everyday materials to alleviate budgeting constraints, which was mentioned throughout my review (Smith, 2001; Klaustermeier, 1997; Wachowiak & Clements, 2001).

Ash (2000) provided valuable insights for my research, addressing the concern around the lack of sculpture in art education. Within the sculpture curriculum resource developed, all twelve of Ash's prescribed elements were listed under the sculpture concepts. Seven of the twelve elements were included in the project outlines, such as environment, in the site-specific project. I wanted to include these elements to assist teachers in the identification of sculptural properties. The format and step-by-step demonstrations in Garchik's (1988) book provided an example of demonstration staging for the project outlines, all of which helped to give insight on teaching methods. Lynn Forbes' classes in Greek classical figure sculpture do not provide current contemporary artist examples, but the classes allow students to experience the manipulative engagement and dance-like qualities sculpture provides to students (Forbes, 2009). Creating a sculpture in our "real space" or environment provides students with an engaging experience with form as opposed to that provided by 2-D surface artworks.

The Sculpture journal article ("Key Issues," 2009) was written to suggest what students face in college when studying sculpture, so I provided a resource that encourages sculpture in their pre-secondary curriculum ("Educating Sculptors," 2009). It gave me the opportunity to think about what is being said regarding sculpture education in the college setting and what to consider if high school students are going to study fine arts in college. Including formal analysis during a critique prepares them for this.

One type of planning strategy suggested keeping sculptures relatively small to medium size or to create the project out of the classroom (Little, 1990; Wachowiak & Clements, 2001). One of my projects focuses on large, site-specific sculptures, but

students cannot create these in class. I thus created the opportunity for them to think large, but to create a maquette for a larger piece in an open environment.

My pilot study (Rogers, 2009b) provided me with the information to further research sculpture resources available to art teachers. I found a lack of representation considering that 82% of *Arts and Activities* and *SchoolArts* consisted of 2-D related projects.

The online resources I reviewed provided many different types of information regarding sculpture and art education. Some of the websites such as the *Incredible Art Department* (Rohrer, 2010) and *Art: 21* (*Art: 21*, 2009) provided full lesson plans. These websites are both useful to my research, but the *Art: 21* site structures the projects within themes and allows the teacher to teach sculpture and also other media under a common topic. In addition, the *Art: 21* site's projects focus on current contemporary artists. Museum websites such as MoMA provide project ideas, but allow educators to view and use photographs of artwork in their collections, for research and curriculum development. In addition to these museums, the Harn Museum of Art provides teacher workshops and curricula based on their collections, and over-arching themes, such as African art or sculpture. The Harn-type resources that museums provide work well if used abroad, but work even better if the students are able to visit the facilities.

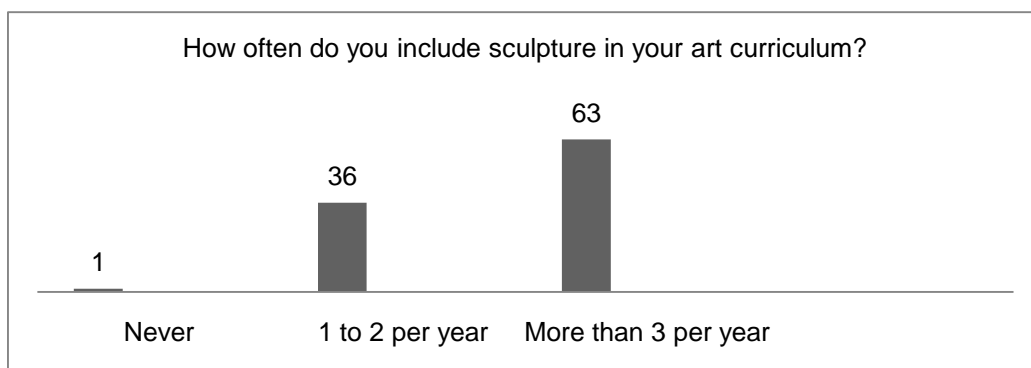
I addressed the idea of current contemporary artists in my sculpture resource because of the current cultural themes in these artists' works. The Chicana and Chicano Space website provides questions for creating student discourse on personal connections to the project or topic ("Hispanic Research", 2001). Museum web sites and online galleries, such as the Ace Gallery and the Museum of Modern Art, provide

sculptor information and work from their past and current exhibitions (Ace Gallery, 2010; “Museum of,” 2009). These online exhibitions are beneficial to an art teacher when observing a variety of sculptors and their artworks for projects. The exhibitions provide the opportunity for teachers to preview artists’ works quickly in order to find an artist to research later.

Curriculum Survey Results and Discussion

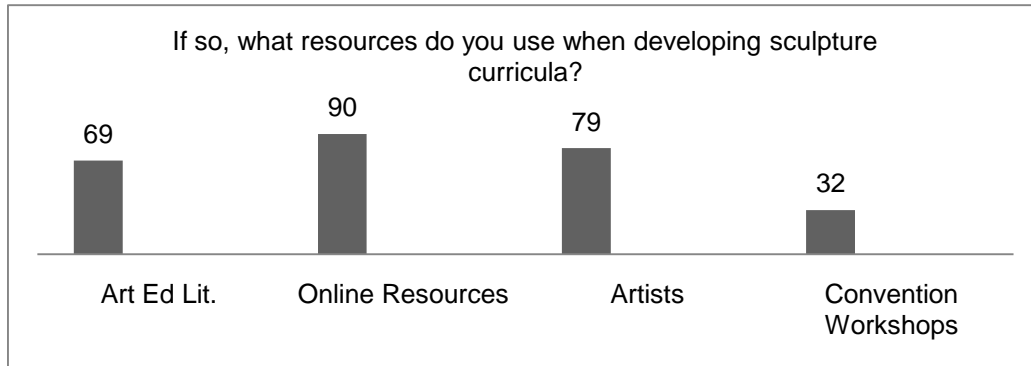
Results for question one of the survey showed that 63% of the 78 participants teach more than three sculpture lessons throughout the year, whereas 36% said they do one to two per year (Table 4-1).

Table 4-1. Question 1 Data



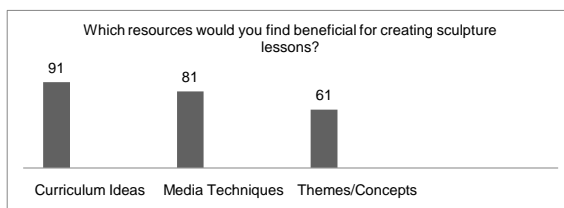
Of the 77 participants for question two, 90% answered that they mainly use online resources for creating sculpture curricula, while artist information came in at 79%. The third highest answer was art education literature (e.g. *SchoolArts*) with 69% (Table 4-2).

Table 4-2. Question 2 Data



In question three, the *project/curriculum ideas/lessons* item encompassed the sub concepts of media, techniques, and related artists, *Techniques for media usage* considered step-by-step demos for materials, and *Themes/concepts/meanings* included topics and ideas for project development. Participants were also given the opportunity to elaborate on the choices they made. As seen in (Table 4-3), 91% considered *project/curriculum ideas/lessons* to be the most beneficial in creating a sculpture curriculum, while 81% considered *techniques for media usage* important. And finally, 61% were interested in *themes/concepts/meanings*.

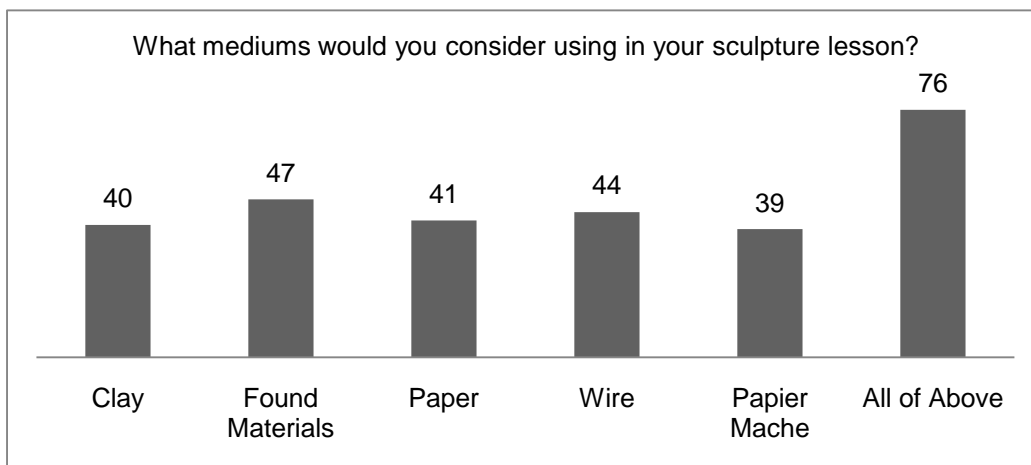
Table 4-3. Question 3 Data



For question four about media (Table 4-4), all 78 respondents answered the question, but only 22 wrote additional comments. 76% said they use all of the materials

listed above, whereas 24% chose materials individually. Found materials ranked the highest, being 47%, while wire came in second at 43%, then paper at 41%.

Table 4-4. Question 4 Data



In question five the respondents were asked to gauge how they include art history in their lessons and what artists are being included in the curricula.

It was surprising to see that nearly two-thirds of the participating art teachers are teaching a fair number of sculpture projects in comparison to the one-third who are not. Data from question two showed that 90% of the participants use online resources for designing lesson plans. More than half of the art teachers, 69%, used journals such as *SchoolArts* to shape their lessons. In question three, 91% of participants wanted complete lesson plans or projects that included artists, media, and techniques. Closely, 81% of participants regarded information on media techniques as important to curriculum development. The lowest choice was 61% of the teachers chose themes or concepts as in important resource. For question four, I was pleased to observe that 75% of the participants considered using all of the basic materials listed. The most interesting aspect of this data was the high number of teachers considering found materials for use in their curriculum. Inexpensive, yet diverse materials such as wire and paper came in

second. More surprising was the low use of clay and paper mâché, coming in last. Found objects and inexpensive materials were the most popular selection.

In addition to the available choices for question four, there was an optional writing area where the participants could write comments. Twenty-two teachers left responses and I grouped them under four average terms: everyday/found objects, plaster, wood, and wire. The written responses from teachers are summarized in (Table 4-4), with the most common answer being *Everyday/Found Objects*: cardboard, tape, foil, recycled, fabrics, and plaster.

I was specifically looking for two concepts in the answers of question five: *what* art movement or artists were addressed and *how* was art history included in the curriculum. Almost 75% of the participants mentioned including an artist within their projects. What artists are being covered? 21% of art teacher participants said they used current contemporary artists, while nearly 54% said they covered Modernist artists. The use of past artists to elucidate projects recalls Ash's statement: "Contemporary sculpture bears little reference to dictionary definitions and school sculpture" (Ash, 2000, pg. 216). This may be why current contemporary sculpture isn't covered and Modernism is so easy because of its classification.

It was even more surprising when 12 of the 53 teachers listed both Modern and Contemporary artists. How are these practicing teachers using artists, or what is the artist's role in their 6-12 curricula? Common derived themes: *Artist Driven*, *Artist Associated*, and *Material Associated*. *Artist Driven* focuses totally on the artist. *Artist Associated* "touches base" on the artist. *Material Associated* referred to projects focused on media. Thirty-eight of the 71 said they centered a lesson on a particular

artist or art movement, while 25 of them said their projects link to an artist. Thirteen stated that artist media was important when creating a lesson and six explained it had did little or no art history.

The number of responses collected was satisfactory within the two week time frame. I was surprised to see the number of sculpture projects the teachers said that they taught. This information changed my questioning on the “low amount of sculpture taught,” to “what are they teaching.” I was also pleased to receive many written responses, which contained detailed information of the artists and materials they use with their instruction. Overall it seems that most of the teachers base their lessons on artists or movements, while the rest relate an artist or material to their projects. As a result of the survey, I decided my sculpture resource projects should balance an artist or movement with a theme or idea; not just students copying the artist’s work or concept.

The data indicated that current art teachers mainly use online resources for their sculpture curriculum, they want lesson plans or project outlines, they use a variety of materials (most commonly found objects), and they base their curricula on artist-based themes (most of which are Modernist). The idea of an all-inclusive project outline is desirable when considering the helpful aspects of self-education or step-by-step projects, fresh concepts, and less time for lesson research and development. Data directed my resource to contain current contemporary sculptors, to incorporate inexpensive or found objects, and to make connections to the students’ lives and surroundings.

Oak Hall Trial I Discussion

Background information given by the teacher on the *Day of the Dead* skeletons was very brief. I thought the teacher should have explained more of the *Day of the Dead* information regarding the purposes of the skeleton sculptures, such as festival imagery and how they are celebrated visually in our culture in events such as Halloween.

As for character development and keeping work original, it would have been best to have students create a list of original ideas or characters they could transfer to the piece. I also would not show them personalized finished examples, but provide one example showing the basic unadorned possibility. This allows the students to create a personalized sculpture freely, while knowing basically what the product could look like, but not specifically. Measuring their own proportions would have made the figures a little more personal, which was a part of the figure project in my sculpture resource. I have gained knowledge on how to keep students' projects personally original, and learned that students are not afraid to use new materials, but take to them very well. This information helped me create a project outline for the cooperating teacher to test theories learned here and from the survey.

Oak Hall Trial II Discussion

The historical background of the Oaxacan sculpture was explained briefly by the teacher. The only personal connections mentioned were the options for students to choose a representational spirit animal or an animal from the local environment. There could have been more background mentioned, but the teacher suggested it wasn't a good idea to deliver all the information at once, but supplement it throughout. This seems like the best route for explaining the art backgrounds, but would be more difficult

once the students are engaged. A teacher could supplement a little information at the beginning of class. The current contemporary artist wasn't mentioned when I observed.

Students were really excited about the project and started brainstorming ideas for their projects. Students came up with their own ideas for the animals, for the most part: some mythical creatures, their interests, and others they considered imaginative. The connections made were mostly based on what they conceived as "cool" or fun to make, but I felt it was successful because they expressed their interests through the animal choice and decoration.

The inexpensive materials used, such as newspaper, tape, and art paste were easy materials for the students to use and manipulate for the most part. Using inexpensive and easy-to-use materials was important for my sculpture resource. The teacher did a great job demonstrating the building of body structures, legs, wings, etc. and the students were able to translate these techniques for their own designs. This modeling worked well and could be related to my online resource demonstrations or YouTube sculpture videos. The students only had problems rolling the newspaper tightly for legs and antennae. I thus created a demonstration for my resource showing how to tightly roll newspaper. The construction and designs of the creatures were done well, but some aesthetic or construction questions were asked and dealt with by teacher facilitation. The only material other than those above was wire for one student's praying mantis legs. Paper legs were too thin, so wire was taped to support the weight and gravitational effects (Smith, 2001; Golomb, 2004).

Overall, the students enjoyed the experience and used the everyday materials well. As for the introduction methods, I felt they could have been explained a little more,

but I was there to observe and view how the students responded to the information provided. This project was a test in itself, because of the difficulty of making personal connections and choice of subject matter, e.g. animals. The project overall was a success because of the energy of the students and their enduring interest and creativity in their final artworks. The teacher excelled in the art of demonstration and modeling a medium, considering the students' final products. I learned that offering too much introductory background information at once creates a loss of interest, so I would deduce that the information given throughout would be more received.

CHAPTER 5 CONCLUSION

Throughout the research, numerous factors led to the creation of a sculpture resource for art educators to use in the classroom. The initial research for this project emphasized sculpture as an important area of art study. Sculpture provides opportunities to grow as an artist by experiencing the spatial engagement, sequences of construction, and unique elements, such as gravity. The most important findings in the survey showed that teachers want all-in-one online project outlines containing themes, inexpensive materials, and examples of artists' work. The survey data provided ideas regarding what resources are available to teachers, as well as what resources would be appreciated and used to encourage sculpture curriculum. The Oak Hall observations and literature review supported the teacher comments in the survey; such as how to approach students with a sculpture project, such as artists or concept-related introductions, media demonstrations, and the use of inexpensive materials. The literature review, survey data, and observations of project trials at Oak Hall led to the development of an online sculpture curriculum resource that provides practical project outlines, finished project examples, and inexpensive, everyday material demonstrations.

My online resource is just the beginning. I plan to make the website a source composed of my projects and results, and also those of teachers who use the website. I would like to think of it as a cooperative of teachers to post project outlines, photographs of the students work, and hyperlinks relating to sculpture education.

This project gave me the opportunity to research what is currently available to teachers and how they teach sculpture. I feel that the sculpture curriculum resource will

contribute to sculpture education by making it easier obtain complete project outlines and other sculpture information, in order to teach sculpture effectively.

The project was successful because I was able to establish solid purposes for teaching sculpture, and observed the current state of sculpture education through my teacher curriculum survey. I was able to address the issues that arose from the teachers' responses, such as creating complete projects that include current artists and the use of inexpensive materials.

APPENDIX
Teacher Curriculum Survey

Teacher Curriculum Survey

1. How often do you include sculpture within your art curriculum?

- Never
- One to two per year
- Three or more per year

2. If so, what resources do you use when developing sculpture curricula? Check all that apply.

- Online resources
- Artists
- Art education literature
- Convention workshops

3. Which resources would you find beneficial for creating sculpture lessons?" Check all that apply.

- Project/curriculum ideas/lessons
- Techniques for media usage
- Themes/concepts/meanings

4. What mediums would you consider using in your sculpture lessons?

- Clay
- Found materials
- Paper
- Wire
- Paper mâché
- All of the above

5. How do you include art history in your sculpture curriculum and what artists are covered? Please write your answer.

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BIOGRAPHICAL SKETCH

Matt Rogers was born in Clarksburg, West Virginia, in 1981, to Dave and Judy Rogers. Growing up on a farm outside of the small town of Lumberport, WV, he explored the land his family has been working for over two hundred years. Matt's mother was a first grade school teacher and his father was a dairy farmer. Matt had and still has many hobbies including car restoration, model building, and sculpture.

After graduating high school in 1999, Matt enrolled at Glenville State College to pursue an art education degree, but after three years, the college cut the program and Matt was unable to finish before their deadline. That summer, Matt moved in with his brother in Memphis, Tennessee, to find a job as a funeral director. Matt's sister-in-law, however, thought Matt shouldn't give up his art so quickly and urged him to go to special effects school. In special effects school, Matt found his love for sculpture and three-dimensional form.

After graduating, he moved to Los Angeles and worked as a special effects artist for television and film. Although he enjoyed working on shows such as CSI, NCIS, and Sky High, Los Angeles wasn't his cup of tea. His realization that he enjoyed showing people "how to do things" led him to reenter college to finish his Bachelor of Fine Arts with K-12 certification, which he received from West Virginia University, in May 2008. He decided to go to graduate school at the University of Florida that fall while he was still in student mode. He graduated with a Master of Arts in May 2010.

Matt, his wife Katie, and dog Zero currently reside in Gainesville, but look forward to moving to North Carolina to find careers and be closer to their families.