


Fall 10-13-2017

# RE-THINKING APPRENTICESHIP IN ART EDUCATION

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**RE-THINKING APPRENTICESHIP IN ART EDUCATION**

By

**Kelly Nicole Denisson**

Bachelor of Fine Arts, University of Wyoming, 2003  
Masters in Art Education, University of New Mexico, 2007

DISSERTATION

Submitted in Partial Fulfillment of the  
Requirements for the Degree of

**Doctor of Philosophy**  
**Multicultural Teacher and Childhood Education**

The University of New Mexico  
Albuquerque, New Mexico

**December, 2017**

## **Acknowledgements**

An enormous amount of appreciation and thanks goes to Dr. Cheryl Torrez, the Chairperson of my dissertation committee and my advisor throughout the Ph.D. program. Dr. Torrez provided rigorous guidance, wise advice, and sympathetic encouragement during coursework, preparation for Comprehensive Exams, and throughout the entirety my dissertation research and writing. Dr. Torrez is not only an excellent mentor but also a model educator who will continue to inspire me throughout my education career.

Thanks also to the other in-dispensable members of my dissertation committee, Dr. Marjori Maddox Krebs, Dr. Leila Flores-Duenas, and Professor Ray Hernandez-Duran. Their background knowledge and thoughtful suggestions greatly improved the quality of my research.

Finally I'd like to acknowledge Professor Kathyne Cyman and the Arita Porcelain community of students. This process would not have been possible without your insight, inspiration, encouragement, and countless hours of travel and creating porcelain vessels. These experiences will continue to fuel my passion for teaching and learning, here's to the next 400 years.

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### **ABSTRACT**

Many students face isolation and meaningless experiences in their day-to-day routine in schools. The increasing focus on standardized tests and academic performance reinforces competition and extrinsic rewards for learning. This diminishes opportunities for creative thought, development of communities, and genuine meaningful connection to content, leaving students feeling disconnected to learning and their peers. Art education has long been an outlet in which to collaborate, embrace diversity, and transform throughout the learning process. This study uses the Arita Tradition of Porcelain, its instructional practices, community of practice, and studio classroom environment as a model for apprenticeship in art education. Participant experiences throughout the process of learning the tradition, becoming a community, and engaging in the spirit of the classroom environment are documented. Findings indicate an increase in self-motivation and connection to learning as well as a desire for life long learning. Professor Cyman, instructor of the course, sheds light on instructional practices and use of the Maori 5Rs Core Cultural Values in teaching the tradition to students in the United States. These values increase a sense of altruism over alienation and collaboration over competition. This unique course provides an example of art

education that allows students to build meaningful connections to learning, valuable connections with peers, and embrace cultural diversity.

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## Chapter One: Introduction

The research question in this dissertation study is: How can art education be better utilized to promote increased personal meaning in learning, community involvement, and culturally relevant pedagogy? The study is based primarily on participant experiences with the *Arita Tradition of Porcelain* in the United States. The following chapter provides an overview of the *Arita Tradition of Porcelain* course and of learning in Japanese traditional arts.

### General Background

Students experience limited meaningful experiences in schools (Suldo, Huebner, Savage, & Thalji, 2011). There is a general feeling of isolation, alienation, and disassociation among students (Aldridge, Fraser, Fozdar, Ala'i, Earnest, & Afari, 2016; Kochenderfer & Ladd, 1996). I have witnessed this first hand over my 10 year career as a middle school teacher. Feelings of hopelessness and isolation are common among students and teachers in K-12 education on into higher education (McLaren, 2015).

Throughout my career teaching middle school I have noticed students becoming more introverted, discouraged, disconnected with their peers, and generally unhappy. They seem detached from curiosity, wonder, and being passionate about learning. Wellbeing has an immediate effect on students that follows them into adulthood and impacts their economic and emotional happiness (Gibbons & Silva, 2011). There are three major things schools can emphasize regarding addressing student wellbeing: first, increasing students' positive and meaningful experiences in school, second, promoting and fostering genuine peer relationships, and third validating students' sense of belonging (Aldridge et. al., 2016).

The feeling of anxiety, loneliness, depression, and general off-centeredness does not end with students (McLaren, 2015). Teachers also experience hopelessness and despair. When teaching became stressful over the years, I turned to art. The process of creating, especially in porcelain, is therapeutic. It brings me back to center and helps me work through difficult situations. Over the past 10 years I have studied the *Arita Tradition of Porcelain*, and developed meaningful connections with the community of artists, who have since become trusted and valued friends, helping and supporting me through many difficult challenges in my day-to-day life. No matter how rigorous my doctoral studies were, or how challenging middle school teaching became, I had the comfort of creating art and the support of my peers, this in turn allowed me to better help my students.

There are three things I experienced in the *Arita Tradition of Porcelain* course that directly tie to things schools, classrooms, and teachers can address regarding student wellbeing. The first was a relevant and meaningful connection to learning content, second was increased connections and interactions with peers, and finally promoting a sense of belonging in a community of learners that is accessible to a wide range of diverse students.

### **The Research Problem**

Recognizing student isolation from peers and general unhappiness in school led to the research problem. Students are socialized into seeing their peers as competition rather than resources in learning. The result is a de-humanizing educational experience and a detached attitude towards others (Fromm, 1994; McLaren, 2015). There is a need for change in curriculum and teaching in order to re-connect students with each other and help them re-center. Rather than promoting academic learning alone, schools must also aim to provide a moral education with emphasis on nurturing wellbeing, genuine relationships, and caring

environments (Noddings, 2015). There is also a need for schools to become more culturally relevant given the increasing diversity of today's students. The wellbeing of all students should be top priority in education and in society.

### **Professional Significance**

In a recent study, Anderson and Graham (2016) asked students about their wellbeing. They found students had a higher sense of wellbeing when they felt they were listened to, had a say in learning, and their rights as humans were respected. In another study of student perceptions of wellbeing, genuine relationships were found to occupy a key role (Graham, Powell, Thomas, & Anderson, 2016). Interactions between students and their peers can benefit learning experiences and overall sense of belonging. Students can be taught to see their peers as resources in the learning process.

This dissertation developed from a growing concern regarding the need for increased cultural relevance, personal meaning, and community relationships in classrooms. Many educational practices feature a means-end approach (Eisner, 2005; Ravitch, 2016). Reform efforts overwhelmingly value exercises that emphasize standardization and test scores (Baer, 2016). Progressive educators and whole child advocates, starting with Dewey (1938), would argue that a narrow focus on measurable academic performance neglects student's emotional and social connection to education (Noddings, 2013; Taylor, 2009). Historically art classes have played a prominent role in addressing these emotional and social needs in schools (Noddings, 2015). Designing and maintaining open-ended holistic classroom environments at a time when schools emphasize high-stakes testing, uniformity, predetermined goals and fixed outcomes remains a constant challenge (Chapman, 2005). Using a combination of

approaches along with academic rigor may present a balance for students that also incorporates wellbeing.

Most educators agree that all students are unique, require different approaches to learning content, and learn at their own pace (Nieto, 2015; Ryan, Deci, & Vansteenkiste, 2016). Efficiency models have been shown to ignore differences in student's background, culture, learning processes, and overall wellbeing. The research question emerged from an awareness of this disconnect and sought out a more culturally relevant, meaningful approach to learning.

This dissertation study investigated the Arita Tradition of Porcelain course at The University of New Mexico, Albuquerque, New Mexico. This unique course brings a 400 year old Japanese porcelain pottery tradition to life in a contemporary classroom environment. Student experiences with the Arita Tradition of Porcelain course and the community of artists are documented in the following chapters.

### **Overview of the Methodology**

I continue to engage in the Arita Tradition of Porcelain. It is an integral part of my learning and reflection process as a doctoral student. Throughout the research process I created a body of artwork as I collected field notes and interviewed student participants as well as the instructor and designer of the course about experiences with the Arita Porcelain process. I also incorporated participant artwork, discussing their learning process and the personal significance of each participant's work. The artwork was collected as data and stands as a visual representation of learning experiences, student growth, and transformation. Reflecting on this experience has taught me much about myself as a learner and helped me



connect to my students as learners in a constantly evolving process of creating and becoming. This, in turn, has made a significant impact on the way I teach and my view of learning.

The research question is: How can art education be better utilized to promote meaningful learning experiences, increased community engagement, and culturally relevant pedagogy. The Arita Tradition of Porcelain had a big impact on me as a student and a teacher. I chose to document participant experiences with learning in the course in hopes that some of the instructional practices could be utilized in other art education courses. Little research is available on The Arita Tradition of Porcelain course in the United States. This study also sought to add to the knowledge base.

### **Brief Historical Background of The Arita Tradition of Porcelain**

The first attempt at making and firing porcelain pottery within this tradition occurred in 1616 soon after kaolin, the main ingredient in porcelain was discovered in Arita, Japan (Saga Prefecture, 2015). The tradition has been passed down over 400 years (Beittel, 1989). *Sensei* Manji Inoue holds the title of a *National Living Treasure of Japan*. He was awarded this title in 1995 for his dedication to creating and teaching within this porcelain pottery tradition in Arita, Japan (Adachi, Peccinotti, & Foreman, 1973).

The title National Living Treasure translates to a bearer of an *Important Intangible Cultural Assets* (Gotthardt, 2016). Awarding this title to artists began shortly after World War II when Japan was attempting to re-build and preserve their cultural traditions. There are 50 National Living Treasures working in Japan today, among them are kimono artists, woodworkers, metal work, paper making, and ceramic arts. Having the title brings a responsibility to share the craft with others and keep it vibrant in contemporary Japan (Gotthardt, 2016). The National Living Treasure system serves as a tool for preservation and

re-incorporation of traditional crafts. It also serves to raise the value of art in Japanese society.

Inoue's love of porcelain and desire to forward this tradition brought him to the United States in 1969 as artist in residence at Penn State University (Zurmuehlen, 1991). There he met Professor Beittel and Dr. Srubek. In 1980, Srubek started the first university course featuring the process of the Arita Tradition of Porcelain in Albuquerque, New Mexico. The University of New Mexico became the only place outside of Arita, Japan, where students had the opportunity learn about and create within this tradition.

Professor Cyman arrived at the University of New Mexico in 1988 and began studying under Srubek. She completed a four-month artist in residency in Takeo, Japan, in 1997 studying the Arita Tradition as it is taught in Japan. Cyman returned to New Mexico after being immersed in the porcelain tradition and continued to learn about, teach, and create in this method. After years of study, she was chosen by Inoue and Srubek to continue teaching Arita Porcelain. Cyman has been teaching and creating porcelain at the University of New Mexico since. Throughout her years of experience, she honed instructional practices that immerse students in the Arita Tradition of Porcelain.

Inoue and Cyman continue to travel internationally in hopes of further contributing to a culture of peace and international friendship through preserving and sharing the Arita Tradition of Porcelain. Few individuals have gained enough mastery to be able to accurately teach others and ensure students are learning the processes of the tradition correctly.

### **Japanese Traditional Arts**

Learning a traditional art in Japan is a transformative experience designed to encourage individual change. To become what one is capable of being requires in-depth,

diligent, and long-term practice (Carter, 2008). The learning of a Japanese traditional art is never an effortless or casual undertaking. It is just as much about everyday practice as theory, and is intended to immerse a student in the pursuit of the highest achievements attainable. This involves a serious commitment to studying over the course of a lifetime. It is expected that students will take ownership of their learning and become immersed in their process of connection and understanding (Deutsch, 2008).

A shift in the idea of knowledge as fixed towards knowledge that is flexible and constructed as a shared enterprise is exemplified in many of the Japanese traditional arts. Knowledge construction is a personal undertaking, unique to each student, but also shared with the community as a whole. Relevance is key in connecting knowledge to real life experiences and motivating the learning process intrinsically. Students make a conscious effort to learn all they can from their teacher rather than passively waiting for instruction (Carter, 2008).

Training in traditional arts in Japan is associated with the building of character that informs students in ways to engage in the world (Deutsch, 2008). There is an element of self-cultivation incorporated into learning processes that is as much about being in the world as about creating the art itself. A transformation occurs over time when engaged in the long-term practice of Japanese traditional arts. The path to moral development of a student is often considered similar to the training and dedication of a master artist (Deutsch, 2008).

In Japan, traditional arts are different from hobbies or vocational and commercial activities. Traditional arts are not to be engaged in as a form of entertainment or to be undertaken lightly. They are a serious form of self-development and a transformation of the individual (Carter, 2008). Japanese art traditions incorporate an element of moral learning

and often a spiritual journey. It is a matter of pride to be a part of the tradition and one that students do not take lightly. In the United States, especially in public schools, art education is associated with free time, leisure activities, and recess, if it is incorporated into the curriculum at all (Eisner, 2013; Greene, 1995). Art educators may benefit from understanding and incorporating a more eastern approach to educating young artists.

Cultural traditions in art making that represent long-standing histories passed down from generation to generation, are often overlooked in art curriculums in the United States (Meier, 2002). If taught, many times it is in a shallow way that offers students little insight into why the art and processes are relevant to the cultures that make them. Little emphasis is placed on how the traditions can be meaningful and relevant to artists today. This leaves students feeling like outsiders, disconnected and separate from the art they study, only conveying a surface level of understanding that is often not relevant to life outside of school and provides little meaningful connection (Ladson-Billings, 1992).

### **Delimitations**

This study is limited to participants of the Arita Tradition of Porcelain course in the United States. As it is the only course in the United States that teaches this tradition, it may not be generalizable to other art education courses. The uniqueness of the setting and participants provide insight into student experiences and instructional practices that held meaning for participants. The population of participants in this study is comprised of a select group of students that continue to enroll in the Arita Tradition of Porcelain over multiple semesters. The interviews did not include all students enrolled in the course, as such some students may not have shared the connection to learning the tradition that participants who were interviewed shared. Methods used to collect and analyze data situate the research

within the 400 year anniversary of this tradition in Arita, Japan, and is part of an ongoing and evolving process of apprenticeship in the United States.

As a student of 10 years, the researcher had insight into the participants' experiences that an outside researcher would not have, including understanding the norms of the course, language, artistic processes, community, and shared goals. At the outset of the study, the researcher was aware of advantages and disadvantages closeness with participants may cause. The study was conducted in a mindful and cautious way to ensure the researcher's interpretations did not undermine the perceptions of the participants. Precautions were made to ensure each participant received the same communication, courtesy, and respect regardless of relationship to the researcher. The potential limitations of my study depend on the degree of straightforwardness and consistency with which the participants describe their experiences. Not all students of the Arita Tradition of Porcelain course were interviewed, as such, participants experiences and responses can not be said to represent all student experiences with learning this tradition in the United States.

### **Definition of Terms**

*The Arita Tradition of Porcelain:* A 400 year old tradition of making porcelain pottery vessel from Arita, Japan (Saga Prefecture, 2015).

*The Arita Porcelain Course:* The only university course featuring the Arita Tradition of Porcelain in the United States, taught by Professor Cyman at the University of New Mexico, Albuquerque, New Mexico.

*The Maori 5Rs Core Cultural Values:* Values of respect, reciprocity, redistribution, relationships, and responsibility, believed by the Maori peoples to be shared globally with all

nations and all cultures promoting peace, harmony, and empowerment (Advancement of Maori Opportunity, 2004).

*Communities of Practice:* A group of people pursuing similar goals and interests through shared artifacts, language, and processes. These communities play a role in shaping members interactions with each other and with the world (Ostermann, 2015).

*Culture:* The act of developing the intellectual and moral faculties especially through education (Merriam-Webster, 2017).

*Culturally Relevant Pedagogy:* A strategy for consciously incorporating students' cultural background knowledge and experiences to help them succeed in school (Irvine, 2010).

*Cultural Tools:* Utilized in the same way as prior knowledge, to aid in creating and understanding new knowledge. Students inherently possess these cultural tools they cannot be taught or imposed by an outside institution. In a typical classroom, these tools are often placed at the margins of learning and interaction (Cornelius & Herrenkohl, 2004).

*Wellbeing:* The state of being happy, healthy, and successful (Merriam-Webster, 2017).

*Aesthetic Experiences:* From a psychological perspective, described as a disrupting and moving cognitive experience that elicits emotional and mental growth or adjustment (Funch, 2007).

## **Organization of the Dissertation**

Chapter Two presents relevant literature to the research question, including apprenticeship in learning, current trends in art education, classroom environments, communities of practice, and culturally relevant pedagogy. Chapter Three follows with a

detailed description of the methodologies used for data collection and analysis. Following is a brief overview of the two main methodologies used in data analysis.

### **Crystallization**

Crystallization is defined as the process by which crystals grow. The crystal itself is a solid substance, naturally geometric, and highly transparent; facets occur in a three dimensional pattern that is ordered and repeating (Merriam-Webster, 2017). Crystals exist in many different forms often intersecting with each other. Light shines through the angles and connects each facet in infinitely different ways. Crystallization, as a research process, combines multiple genres of representation and analysis, like facets that make up a crystal, in order to recreate an experience. It seeks relational moments and ways of producing knowledge through analysis that spans the qualitative research continuum (Ellingson, 2014).

Throughout the research process, the crystal became a conceptual framework for organizing thoughts and reflecting on data. I began drawing crystals expanding and representing themes that emerged in data as a form of analysis. As in the natural crystallization process, themes representing main crystals expanded and branched out becoming a three-dimensional organic growth of concepts, rather than a linear thought process. Each concept that emerged within themes became its own unique facet, remaining distinct and also an important part of the whole. Characteristics and patterns in data grew into crystallized structures featuring multiple perspectives on which to reflect.

### **Arts-based Research**

As part of the crystallization of data, arts-based research was used as another lens or framework with which to reflect and make connections. Arts-based research is a type of fieldwork (Richardson, 1998). Several hours were set aside each week to engage in creating

porcelain vessels. Drawings and collages were also made in research journals. While there is not room in this dissertation to include each piece made and its place in the chronology of the research and data analysis, examples chosen represent moments of insight and inspiration during the process. Photographs of work are snapshots of moments in time spanning data collection. They are not intended as finished pieces of art; rather they are tangible signifiers of process and reflection.

Chapter Four presents findings that emerged through data collection and analysis. Chapter Five includes a summary and discussion of findings, a more in-depth discussion of arts-based research, as well as suggestions for future research.

### **Summary**

Keeping longstanding cultural traditions of working in art alive and relevant to contemporary art education is an significant concept for art educators (Beittel, 1989). Raising awareness of artistic processes that are unique to particular cultures, and allowing students to explore these in depth, should consequently be a goal of art education. In classrooms, teachers face ever-increasing diversity in terms of student demographics and creating culturally relevant curricula (Bartell, 2005; Nieto, 2015; Zeichner & Hoeft, 1996). Art education offers opportunities to raise awareness as to the importance of the art made in diverse cultures throughout history and in contemporary society, while simultaneously honoring individual culture and expression (Greene, 1995).

Cyman's international connection with Inoue and the instructional practices she designed to share this tradition with her students represent a main focus of this dissertation study. Participant experiences are documented, described, and analyzed in the following chapters. Data analyzed through the methodologies of crystallization and arts-based



research, revealed themes in relation to being an artist and a learner within the Arita Tradition of Porcelain course. There is a connection between these themes and classroom communities, environments, and art education in relation to culturally relevant teaching and learning.

This study takes an in-depth look at a unique tradition in art education regarding instructional practices, learning that is meaningful and culturally relevant, and preparing students for a future of continued learning. Ways in which these approaches can be applied to art classrooms, as well as general education, are also considered. Connections to the Arita Tradition of Porcelain made today can further impact protecting, preserving, and teaching long-standing cultural traditions in the future. It is the responsibility of artists, art educators, and educational researchers to take on this challenge.

There is little research documenting The Arita Tradition of Porcelain in the United States and how it impacts learners (Beittel, 1973). First-hand accounts of those who have experienced and created in this tradition are presented in the following chapters. This dissertation highlights the experiences and teaching philosophy of Cyman. It also illuminates evolving relationships with a new generation of students, their experiences as learners, and the growing porcelain community in the United States.

The Arita Tradition of Porcelain turned 400 years old in 2016 (Saga Prefecture, 2015). Embarking on this study presented a unique opportunity for travel to Japan to celebrate with Inoue, and observe first hand what it means to learn, create, and carry on this tradition. Travel to Japan shed light on Inoue's goals for the next 400 years of the Arita Tradition and the important role of art education in keeping traditions alive.

Inoue holds a lifetime of insight in this traditional approach to art education. Cyman has taken much of this insight and adapted it into instructional practices that embody the importance of learning the tradition as a process rather than a product. Her approach to teaching has impacted students in the United States in a relevant way that engages their personal lives and inspires them to become immersed in learning, not just for one semester, but as a life-long endeavor.

Protecting and preserving cultural art traditions and increasing their relevance in classrooms today should be of interest to any art educator, as well as anyone designing and implementing art education programs (Eisner, 1998). Descriptions and connections made through this study add new knowledge to the field, as well another lens into the way we think about and use art education in schools. The culture of a classroom and the learning within it impacts the way students learn how to learn and how to develop strategies that will transfer to successful learning in other content areas and life outside of schools (Crick & Wilson, 2005).

## **Chapter Two: Literature Review**

This literature review begins with a brief history of apprenticeship as well as uses of apprenticeship in contemporary education. It will also discuss art education, current trends in art education, and a Japanese concept of guidance. The research question in this dissertation study is: How can art education be better utilized to promote increased personal meaning in learning, community involvement, and culturally relevant pedagogy? A section is included incorporating relevant literature on each facet of the research question including the importance of classroom environments, communities of practice, and culturally relevant pedagogy. Sections are broken up into separate categories to increase clarity. Although the sections are separate, it is important to note that they are all interconnected and overlap in significant ways.

### **A Brief History of Apprenticeship**

Art education emerged through guilds in the 19<sup>th</sup> century, as did the apprenticeship system, which, historically, was the most common way to pass on artistic techniques (Efland, 1990). Master artists were responsible for teaching and preserving their trade and could take on several apprentices at a time. The apprentice would start about age 13 and study intensely for five or more years. Once the apprentice could demonstrate sufficient mastery of skills and produce high quality art, they received the status of a master and could then take on new apprentices (Wygant, 1993). This proved an efficient system for art education outside of public schools but became problematic in classrooms as the ratios of students to teacher increased (Spence, 2001).

Historically, an apprenticeship served as an introduction to the world of work and a transitional period to becoming a productive member of society through the teaching and

learning process (Robinson, 2001). In the traditional apprenticeship model, the novice gains mastery in a chosen trade first through observation and then through direct experience. Central to apprenticeship is the choice of a master, who demonstrates, corrects, and guides the younger worker through the intricacies of the profession, relying on skills honed over many years of experience and practice. The master acts as a role model or guide for the apprentice, passing on the skills and secrets of the trade (Robinson, 2001). Doeherty (2009) notes there is no sharp distinction between teacher and student in the learning process of an apprenticeship, rather an organic overlap happens between the master and apprentice in which teaching and learning occur simultaneously.

Through the natural overlap in the skills of the novice and those of the master, a symbiotic relationship emerges in which each person learns from the other (Wygant, 1993). Not only does this process allow the student to practice and evolve through guidance and scaffolding of the master teacher, but the master teacher also gains new insight into the complex field of teaching and learning while continuing to refine their skill (Robinson, 2001). The apprentice shoulders a responsibility to learn the craft and also to carry it forward, thus becoming, like the master, a guardian of its values (Doeherty, 2009).

### **Apprenticeships in Contemporary Classrooms**

Today's classrooms are structured very differently from apprenticeships. Rather than an organic growth between teacher and student, many classrooms have grown more teacher-centered (Carpenter, 2016; Guthrie, 2017). Spence (2001) argues that teaching as telling, and learning as absorbing has not proven successful over time and defines the one-on-one apprenticeship model of learning as the most beneficial for humans. Unfortunately, he also notes that many classrooms in the United States make a personal one-on-one relationship

between student and teacher almost impossible due to sheer class sizes. The student to teacher ratio in schools and universities in the United States make individual guidance very hard to achieve within the allotted class time (Guthrie, 2017).

Most teachers fall back on a one size fits all or rote learning approach, not by choice, but out of necessity (Malatji, 2016; Spence, 2001). This standardized approach has an effect on student motivation to learn and to develop a real curiosity about the subject matter. Teacher-centered standardized approaches to teaching and learning can create a disconnect between students and their teachers and also between students and their peers (Guthrie, 2017). Similarly, Schulz and Rubel (2011) found that students experience alienation in school due to a lack of belonging, distrust in teachers and peers, and a feeling of low self-worth. This alienation could be a result of the sterilization of teaching into codified series of compartmentalized techniques and ideas, commonly referred to as rote learning approaches (Noddings, 2015).

Sharing the responsibility for creating knowledge has an effect on authentic learning and increasing motivation to learn (Cordova & Balcerzak, 2015; Crick & Wilson, 2005; Rule, 2006). Many cultural traditions of creating art place as much responsibility on the student as the teacher in actively pursuing the learning process (Beittel, 1973; Dewhurst, O'Neill Moanike 'Ala Ah-Lan Keawe, MacDowell, Okada-Carlson, & Wong, 2013). It is the student's responsibility to attain knowledge from the teacher and be self-motivated. In an apprenticeship relationship both the teacher and the student make a serious commitment to learning together (Doeherty, 2009; Robinson, 2001).

Any content area can benefit from incorporating an approach to teaching that shows students how to learn and how to inspire their learning processes, making content relevant,

meaningful, and connected to student lives (Crick & Wilson, 2005). The process of learning how to learn can be nurtured through an apprenticeship style relationship with students, encouraging a sense of shared commitment and responsibility for learning (Spence, 2001). In a classroom that nurtures shared responsibility, unique relationships exist between teacher and student, and also between students and their peers that have a positive impact on the overall learning of individual students as well as the community (Dewhurst et al., 2013).

The apprenticeship model of teaching and learning has generally been overlooked in contemporary education (Gradle & Bickel, 2010; Guile & Young, 1998). An apprenticeship relationship between teacher and students is often more in-depth than the relationships occurring in teacher-centered classrooms where students occupy the role of passive learners and receive one-sided knowledge and fixed lessons (DuFour, Eaker, & Many, 2006). While intended outcomes in apprenticeship and teacher-centered approaches are similar, in an apprenticeship relationship teachers and students share knowledge and evolve together. Researchers agree that apprenticeship offers a model of learning that emphasizes learning by doing, shared goals and responsibility, as well as real world tasks (Fuller & Unwin, 2012; Lerman, Eyster, & Chambers, 2009; Pilz, 2013).

Apprenticeships are not only useful for vocational learning or the work environment. Lerman and Pouncy (1990) indicate the incorporation of more apprenticeship learning can have a positive impact on elementary and secondary schools regarding preparing students with the practical knowledge needed to be successful in future careers and empowering them to take ownership of learning at early ages.

Lerman (2010) cautions the emphasis on publicizing school failures brought about reforms that emphasize learning the basics and testing, rather than developing practical as

well as higher order skills. He suggests the disconnect occurring between skills students have when entering the workforce and skills students need can be seen as a result of focusing too narrowly on academic learning alone. Research supports increased incorporation of hands-on and learning-by-doing approaches, which are key features of apprenticeship learning (DuFour, Eaker, & Many, 2006; Lerman, 2010; Regan & Sheppard, 1996).

Claxton (2014) defines schooling itself as an epistemic apprenticeship in thinking, learning, and knowing. Over the past 15 years, he investigated shifts in pedagogy that had a positive impact on student engagement and achievement, concluding that authentic learning involves curiosity and investigation rather than memorizing facts and achieving fixed outcomes through pre-determined goals. Changes are needed in the way teachers conceptualize learning and how activities are designed in schools at all levels of education (Claxton, 2014).

### **Art Education**

Art education is often considered less significant for students than other content areas and utilized as a counterbalance or break from academic learning (Marshall, 2016). While considered a core subject under *No Child Left Behind*, the arts continue to be marginalized if present in schools at all (Chapman, 2005; Turner, 2015). Eisner (2004) proposes students, teachers, and general education can benefit from practices common to art education in multiple ways. First, he notes, the concept that how things are taught and how classrooms are organized, have an impact on how students learn. Art education classroom environments offer unique insight into curriculum design and classroom organization that can be of use in general education. They often feature a more student-centered approach to hands-on learning than subjects generally considered more academic.

Second, Eisner (2004) highlights the concept of interaction as fundamental to art education, general education, and all human activity. Interaction defines the relationships among things. The character of interactions between teacher and students defines the learning experience and is largely based on what the students bring through prior knowledge and skill. Art education methodologies promote a one-on-one relationship between teacher and students by acknowledging that each student will start at a unique level and progress from there (Donmoyer, 2014).

In many content areas students are expected to start at the same place and progress at a standardized pace, even though each student has unique individual needs that must be recognized and addressed (Guthrie, 2017). For Eisner (2013), teaching becomes an art when the teacher is mindful of the nuances in each student's learning process and adapts instruction individual needs increasing the importance of student and teacher interactions and relationships.

Art education promotes imagination through open-ended tasks (Eisner, 2004). Open-ended tasks allow students to develop a sense of ownership over their work. Students respond to learning experiences intellectually, emotionally, and socially (Cortina & Fazel, 2015; Eisner, 2005). Starting learning at a place each student is comfortable and moving forward from there allows students to construct and reflect on their personal learning process increasing ownership and self-efficacy. Measuring academic performance alone is not enough. In the drive to boost test scores, schools have turned to standardization rather than emphasizing what is best for each student. This does little to promote intrinsic motivation to learn, problem solving, curiosity, or to develop the imagination (Eisner, 2013).



While art education has not typically been looked to as a resource for re-conceptualizing education, there is a need for a reawakening of holistic approaches in classrooms (Barrett, Davies, Zhang, & Barrett, 2017). Art education lends itself to the development of the whole child and reminds educators that there are different types of intelligence of value to students (Donmoyer, 2014; Eisner, 2013; Williams, 2015). Incorporating relevance, prior knowledge and involving students in making decisions about their learning can go a long way in boosting habits of mind that will aid them in the present and future. Habits of mind such as curiosity, active engagement, attentiveness, and reflection are fundamental components of not only education but also student wellbeing (Epstein, 2003; Gold, Kauderer, Shwartz, & Solodow, 2015).

Approaches to teaching and learning in art education have implications for constructing knowledge that easily transfers across content areas and are applicable in real life situations (Cerkez, 2015; Eisner, 2004; Sullivan, 1993). Art making is a form of cultural production and reproduction that is constantly changing and redefining itself. In an art apprenticeship, students and teachers learn and transform together through shared goals (Pilz, 2013). Approaching teaching and learning in any setting as a collective effort can serve to broaden understanding of how the ways we teach and learn impact what and how students learn (Eaker & DuFour, 2015; Eisner, 2005). Hyde (1983) sees the process of creating art as an agent of transformation that presents a unique gift to each human. He also sees teaching as an agent of transformation in which a mentor or master empowers students to see and strive to meet their potential and guides them along their path to achieving their goal.

## **Current Trends in Art Education**

Meita (2015) notes several factors affecting the current state of art education in United States schools. Current reform efforts have resulted in ongoing budget cuts. Since 2008 at least 80% of schools across the nation have experienced budget cuts. When budget cuts become necessary, art programs are among the first to go as is evident in the despairing availability of art to students today. Research indicates that government policies resulting from the No Child Left Behind Act passed in 2002, and the more current *Common Core State Standards* (National Coalition for Core Arts Standards, 2014) that followed contribute to the marginalization of art in schools (Americans for the Arts, 2015). The emphasis of these reforms is on funding the required state standardized tests tying a majority of a schools funding to the core test subjects in order to boost test scores (Chapman, 2005). This has resulted in many schools eliminating their art programs altogether (EdSource, 2014; Meita, 2015; Sabol, 2010).

Budget cuts have the biggest impact on impoverished schools and students with low socio-economic status (Americans For the Arts, 2015). Schools considered low performing experience increased pressure to conform to Common Core State Standards. Many schools are already on improvement plans that further emphasize math and language arts test scores in the overall school's evaluation. For these schools keeping, or restoring previously cut art programs is unlikely (Meita, 2015).

In a 2008 study, *Americans for the Arts* revealed minority students in the United States were twice as unlikely to have access to art in schools when compared to white peers. The rates of access to art education for African American and Hispanic students have been consistently declining since the 1990's. In 2008, only 26.2 % of African Americans had

access to art in school, and similarly 28.1 % of Hispanic students. Access to art has implications for all students, not just those fortunate enough to have sufficient funding. Research indicates an improved academic performance across content areas may be a result of exposure to art (Meita, 2015; Eisner, 2004). Hawkin's (2012) study shows students engaged in four years of art outscored students having one semester or less on the SAT by an average of 91 points. Research also shows schools with longstanding arts programs have higher graduation rates (Eisner, 2004).

Art experiences have been found to contribute positively to many stages of student development, from improving dexterity and use of descriptive language at an early age, to increasing awareness and tolerance of other cultures and traditions (Hawkins, 2012). Art experiences also positively impact developing creativity, innovation, judgment skills, problem solving, and seeing the world from multiple perspectives (Arts.org, 2009; Hawkins, 2012; Meita, 2015).

There is a common language in schools today that speaks to helping at-risk students be successful. Studies on art and at-risk students show exposure to art in schools improves academic performance (Meita, 2015). Exposure to art showed a three times higher probability of earning a bachelor's degree, while at-risk peers not exposed to art were five times more likely to drop out before graduation (Americans For the Arts, 2015).

Common Core State Standards do not hold art to be one of the core subjects (National Coalition for Core Arts Standards, 2014). However, New National Core Arts Standards were introduced in 2014 that have left some educators optimistic about more integration of art in schools. According to the *Model Cornerstone Pilot Project*, standards for art education were made in 2004, following the passing of No Child Left Behind (National Coalition for Core

Arts Standards, 2014). The standards aim to provide a process to educators that unify art education experiences in K-12 schools. Students are considered proficient, accomplished, or advanced based on measurable goals, performance standards, and specific evidence. Student artwork is then benchmarked and evaluated based on rubrics and pre-determined lessons. These standards further the trend of accountability and standardization in the attempt to make art neatly packaged, quantifiable, and testable. They further limit student and teacher roles in exploring content and learning together.

### **A Japanese Concept of Guidance**

*Guidance*, or *shintō*, is a common term utilized in secondary schools in Japan. Guidance is thought to embody the relationship between the teacher, the learner and the task at hand (LeTendre, 1994). LeTendre describes 10 elements essential to the concept of guidance in the teaching and learning process. First, knowledge is attained through experimentation involving physical, mental, emotional and ethical components. The second element begins with the teacher and the student embarking on a similar path outlining a series of discoveries and a natural order in which knowledge is acquired and understood. Third, the teacher is expected to have already experienced this path of knowledge construction and therefore be more advanced than the student. In the fourth element of guidance, it follows that the student not having completed the path, is dependent on the teacher, leading to the fifth element, where the teacher models the correct skills while the student imitates.

In LeTendre's (2009) sixth element of guidance, the teacher may begin selecting more challenging tasks, as exertion and effort are critical to building new knowledge. Although tasks advance in difficulty, the teacher may at any time come back to the basic

principles and ask the student to repeat certain things learned in the beginning. In Japan, it is thought that basic skills contain all elements needed for mastery. Also required for mastery is the eighth element of guidance, an appreciation of the hard work and effort necessary to complete the path through an individual sense of balance in the learning process. The ninth element of guidance concerns the learner's emotional balance and involves the teacher's outward appreciation of the hard work and efforts of the learner and an affirmation of the student's success thus far. Finally, the tenth element of guidance begins with reflections on the process, successes, and failures that hold valuable insight. In this model of guidance, teaching and learning are two parts of one process with the teacher and student equally committed to learning. These elements of guidance mirror learning in an apprenticeship (LeTendre, 2009).

Many of the current approaches to art education in the United States are rooted in Western European aesthetic theory, and methodologies (Bigger, 2013). This is problematic considering classrooms today continue to grow more diverse in terms of worldview and culture (Bartell, 2005; Nieto, 2015; Zeichner & Hoeft, 1996). Culturally relevant teaching in art requires going beyond commonly accepted pedagogies of dominant cultural groups and integrating culturally specific art forms that promote active engagement in learning through greater understanding of other cultures, as well as our own (Eisner, 2004). Culturally relevant art classrooms honor collaboration and all students that make up the classroom community nurturing individual growth, collective growth, and transformation (Illeris, 2014).

### **Transformative Classroom Environments**

Transformative learning represents the journey each person takes that can awaken endless curiosity and create meaning in school and life. According to Mezirow (1996, 1997,

2006), transformative learning is making sense of an experience through prior knowledge and creating new knowledge that then guides future actions. In a transformative learning environment, students get a chance to practice constructing new knowledge and making decisions about their learning (Mezirow, 2006). The environment itself should promote a shared purpose of learning how to learn among students (Meier, 2002). Life exists through and as a result of interactions within an environment, interactions that affect individuals in an intimate way (Dewey, 1934; Montessori, 1997).

There are implications for transformative learning environments at all levels of education regarding helping students be self-directed, intrinsically motivated, and create meaning through the learning process (Taylor, 1998, 2000, 2007). While students are capable of creating meaning in any learning environment, a setting emphasizing transformation nurtures and promotes self-directed construction of new knowledge via connection of prior knowledge, higher level reasoning, and critical reflection (Cranton, 1994; O'Sullivan, Morrell, & O'Connor, 2002; Taylor, 2007). The content of learning experiences involves more than just subject matter. Teachers can create transformative environments in any discipline and content area (Mishra, Koehler, & Henriksen, 2010). Greater empathy, flexibility in opinions and multiple points of view are found and nurtured in contexts where transformative learning occurs (Greene, 1995).

Crick (2005) describes transformative learning as a social journey that occurs within an active learning environment. The physical space of the classroom has an impact on the learning possible, and an impact on the goals, processes, and outcomes of learning (Fraser & Goh, 2003). It also influences what students are capable of doing and their relationships to each other (Cornelius & Herrenkohl, 2004).

In an analysis of classroom interactions research shows a correlation between students relationship with peers, their relationship with what they are learning, and their classroom environment (Cornelius & Herrenkohl, 2004; Dewey, 1961; Goodnow, 1990; Piaget & Inhelder, 1969). Students are more prone to transformation in a setting allowing them to be active contributors in classroom norms and content (Engle & Contant, 2002). Unfortunately, the structure and learning activities in most classroom environments are still decided by the teacher alone or designated curriculum leaving little room for genuine student investigation motivated by their own ideas. Roles of teacher authority in a transformative classroom require a shift back towards student-centered open-ended inquiry. This requires teachers give up authority empowering students to make decisions about the environment, norms, and learning processes (Taylor, 2007).

More studies are needed regarding the context in which learning takes place and the ways in which the physical, social, and cultural environment impacts the learning process and supports student growth and transformation. Classroom environments can be set up to promote active learning that is intrinsic, self-directed, reflective, collaborative, and culturally responsive (Meier, 2002; Mezirow, 2006; Montessori, 1997). The placement of educational materials, the development of class routines, and the community of students can aide in creating a transformative environment for learning.

Transformative learning environments strategically incorporate choice and inquiry to promote students sense of ownership of knowledge and of belonging in the space (Mezirow, 1997). Within the environment are multiple options for learning and opportunities to learn from peers, as well as the teacher. There are also multiple paths students can take in guiding their learning processes (Brown & Campione, 1998).

Transformative learning environments are effective because they incorporate an element of fun or love for the process of learning itself which further encourages students to take ownership of their learning (Csikszentmihalyi, 1997). Research shows a correlation between increased meaning in learning, communities of practice, and transformative learning environments (Ostermann, 2015; Rule, 2006; Taylor, 2007).

### **Aesthetic Experiences**

From a psychological perspective, an aesthetic experience can be described as a disrupting and moving cognitive experience that elicits emotional and mental growth or adjustment (Funch, 2007). This is not unlike Mezirow's (1996) disorienting dilemma, which serves as a catalyst for individual transformation. The physical environment of a classroom does not exist in isolation from the learning and interaction that occurs within it. More research is need on the aesthetic impact of physical classroom environments on students cognitive and sensory processing as well as knowledge construction and motivation to learn (Funch, 2007).

Aesthetic experiences involve the whole person and specifically highlight the senses and emotions. Redies (2015) suggests two stages necessary to an aesthetic experience. The first is a formalist stage and based on fundamental experiences that occur naturally and universally across cultures. The second stage is context based and dependent on environmental circumstances and perceived presentation of information. This stage will be interpreted differently based on student's cultural tools and prior knowledge. The way the physical context is set up for learning can impact how the students interpret the environment and access information (Hobbs & Kelly, 2017). This should be taken into account when designing and creating the physical space of any classroom.



Cultural tools exist within students and classroom environments that create and transform relationships to peers, content, and knowledge construction. Students rely on the use of these cultural tools in the same way as prior knowledge, to aid in creating and understanding new knowledge. Students inherently possess these cultural tools they cannot be taught or imposed by an outside institution. In a typical classroom, these tools are often placed at the margins of learning and interaction (Cornelius & Herrenkohl, 2004).

Lantolf, Thorne, and Poehner (2015) define Sociocultural Learning Theory as human learning and mental development, which are mediated through engagement with cultural artifacts, activities, and concepts. Development occurs in cultural, linguistic, and historically formed settings such as family life, organized social activities, and school settings (Ratner, 2016). Social and material environments inform cognitive activity. The physical environment creates conditions for development that will be approached differently by different cultures. Incorporating cultural elements within environments can help shape interpretations of content and learning processes of those who occupy the space in a more accessible and relevant way (Ratner, 2016).

Greene (1988) envisioned a classroom environment in which all students felt comfortable enough to perceive, interact, and collaborate with their peers on a human level, existing as they really are. This setting, she hoped, would appeal to students senses of freedom and curiosity rather than conformity and anonymity. This may be difficult to achieve given many schools increased distribution of testable information and focus on accountability, measurements, efficiency and overall management. The trend in education reduces classroom environments to factories mass-producing students who are exactly the

same, diminishing motivation to learn and increasing apathy and isolation in school in general (Spence, 2001).

### **The Physical Classroom Environment**

Many researchers agree that the physical environment is an active contributor to the learning process (Montessori, 1912; Nuikkiinen, 2011; Piaget, 1953; Ratner, 2016; Taylor, 2009; Ultanir, 2012). The quality of the environment will affect the quality of the learning that takes place within it. Taylor (2009) describes the environment of a classroom as a silent curriculum that positively, or negatively affects leaning experiences. Others describe it as a third educator and critical part of students' cognitive, social, and physical development (Rentzoul, 2014).

In a summary of research done on classroom environments, Tsiakara and Digelides (2015) note a call for environments that guide students towards the acquisition of regulated processes, provide opportunities for active learning, and develop inquiry skills. Ideal environments promote learning as a sense of belonging in a safe and trusted space. Thoughtful planning on the part of the teacher can transform the context of the classroom setting into a three-dimensional textbook architecturally designed to enhance educational goals, individual, as well as group learning. This type of environment responds to the needs of the community and is not governed by numbers and cost (Taylor, 2009).

Learning is inseparable from the physical environment. More research is needed in designing physical classroom environments on the part of educators, administrators, architects, and community members (Nuikkiinen, 2011). When designing a classroom, it is also important to seek the input from the students and teachers that will occupy the space. The physical design of classrooms impacts the community and culture. A goal of a

transformational environment is to create a space in which students grow and actively steward the physical and social interactions within it. Intentionally created environments lead to positive learning outcomes and support student progression (Acer, Gozen, Firat, Kefeli, & Asian, 2016).

There is lack of extensive research on the effect of a physical environment on student learning and wellbeing (LaTorre, 2006). Physical spaces may have more of an impact than we realize. Environmental impact has been researched in the health industry and health care settings. For example, Ulrich (1991) found that adding a window to rooms aided in recovery time and reduced hospital stay of patients. Adding plants, windows, or art to an environment can increase a sense of calm and safety. Color alone can drastically change a physical space and have a powerful and energizing effect on people. Thoughtfully applying color impacts comfort or stress levels of those who occupy it. Zube and Moore (2013) coined the term *supportive design* when looking at working environments, based on the concept of Feng Shui, which incorporates the physical arrangement of objects in a room and the promotion of feelings of harmony and balance.

Many educators do not think of their environments as tools for enhancing the sense of belonging and wellbeing for their students (LaTorre, 2006). However, the studies mentioned above indicate the environment impacts people, both physically and mentally. Bilchik (2002) believes these effects to be so profound that a setting itself, absent of other stimulus, may hold the capacity to transform a person's state of mind.

There are important design concepts for any educator to consider in enhancing the transformational and therapeutic qualities of their classroom space. These concepts can be applied in any setting to promote wellbeing and are a great step forward in creating an

aesthetically supportive atmosphere for transformation and a sense of belonging among the community of learners (LaTorre, 2006).

### **Communities of Practice**

This section focuses on creating a community of practice along with challenges and implications innate in the process. A community of practice can have a profound impact on the experiences of teachers and students in actively constructing knowledge (DuFour, Eaker, & Many, 2006). A community of practice is a group of people pursuing similar goals and interests through shared artifacts, language, and processes (Ostermann, 2015). These communities play a role in shaping members interactions with each other and with the world. A goal in developing a community of practice is enhancing the collective knowledge of the group while at the same time addressing individual knowledge (Bielaczyc & Collins, 1999).

Bielaczyc and Collins (1999) found four characteristics necessary to supporting and sustaining a community of practice:

1. The community must have varying expertise among members.
2. A shared commitment to advance collective skills and knowledge.
3. An emphasis on learning how to learn.
4. Procedures for sharing what is learned.

Combining a community of learners working toward a shared goal with a transformative classroom environment creates a shift from learning as an individual pursuit to a collective effort that connects students to each other as resources, rather than competition (Dewhurst et al., 2013).

Communities of practice offer a shared repertoire of resources, routines, artifacts, and vocabulary that are continuously developed by members over time (Dewhurst et al., 2013).

There is a reciprocal relationship that occurs between collective learning, actively working, and shared innovation among community members. Admiraal, Lockhorst and Van der Pol (2012) conducted case studies on how communities of practice appear at individual and collective levels. They also looked at how these communities are experienced by members. The studies offer a model including three core features of communities: group identity, a shared domain, and a shared interpersonal repertoire. These three features involve mutual engagement that binds the community together increasing a sense of community involvement where students feel that they are a part of the group.

Admiraal, Lockhorst and Van der Pol's (2012) model of communities of practice takes a social perspective in analyzing communities behavioral, cognitive, and affective elements and emphasizes process rather than the outcome. In addition to community development, they also note the importance of the context in which the community is situated. Admiraal, Lockhorst and Van der Pol's call for more investigation into how communities are affected by their environments. In conclusion, the authors note that in mature communities of practice processes are shared, balanced, and centered on a common goal. There is also an intact feeling of group identity and belonging (Admiraal, Lockhorst, & Van der Pol, 2012).

Research points to contemporary theories like incorporating communities of practice as better suited for today's classrooms but tend to be underutilized in classroom environments (Goodyear & Casey, 2015). Over 20 years ago, A. Brown (1994) suggested the reason for this lack of influence as the difficulty involved in creating and sustaining a community of learners. It is easier to adopt a teacher-centered approach with rote memorization and fixed outcomes. Creating and sustaining a classroom that fosters complex

group thought shifts the norms of many classroom settings and is a daunting task, especially for new teachers, and requires fundamental changes in roles of authority (Goodyear & Casey, 2015). It requires a broad definition of learning, flexibility, and teachers sharing control with students.

Students continue to be seen and treated as passive learners in classrooms (Baer, 2016; Brown & Campione, 1998; Eisner, 2013). The common assumption is that the teacher holds power and knowledge to be passed to students, leaving little room for student contribution (Freire, 2009). These classrooms focus on rote learning and drill and kill approaches that emphasize basic retention; learning is seen as static and fixed not fluid and constructed over time (Mishra, Koehler, & Henriksen, 2010).

In teaching about diverse cultural traditions, especially in art education, it is important not to fall back on teacher-centered classroom approaches. Research indicates those approaches do not engage students in self-reflective active learning or critical inquiry, they also do little to promote student collaboration (Baer, 2016; Brown & Campione, 1998; Eisner, 2004; DuFour, Eaker, & Many, 2006).

When creating a community of practice, teachers must serve as active role models of the learning process and guides along the student's path to discovery. Teachers can focus on individual instruction in an environment that fosters authentic learning, as well as student expertise. Assessment, rather than emphasizing a final product, centers on the student's ability to construct and apply knowledge over time (Larrivee, 2005).

All learners within a community of practice, including the teacher, are engaged in the process of actively constructing knowledge (Freire, 1998). In such a context, the teacher is also a learner. Freire (2009) used the term *reciprocity of action* to define what occurs when

teachers and students learn together. This process involves collaboration between all individuals in the classroom working towards a shared goal.

Brown and Campione (1998) outline essential characteristics for a community of practice. First, students must actively seek knowledge and share it with each other. The teachers provide guidance and support ongoing inquiry, allowing the community to grow organically. Finally, the whole group touches base periodically to track and review progress.

A. Brown (1994) describes this learning as distributed expertise, a process in which the students co-construct their curriculum, changing and growing together.

Palincsar (2012) developed a concept of co-construction and reciprocal teaching intended to incorporate student's zones of proximal development into a community of practice. They found that group cooperation was an essential element in creating meaning, and increasing relevance. Group cooperation also played a role in ensuring understanding had occurred even though some students were not yet capable of full comprehension. Within classrooms of distributed expertise, everyone in the community is a teacher and a learner (A. Brown, 1994). In environments such as this, communication and cooperation are imperative, and discussion and questioning are part of the foundation (Krahenbuhl, 2016; Palincsar, 2012).

Learning is about more than content or skill acquisition and concerns the whole person acting in the world (Crick & Wilson, 2005; Gold et al., 2015). Modern society and schooling tend to focus on the compartmentalization of parts where mind and body become separate. The focus on parts has made us forget the whole (Greene, 1995). The value of education should be judged in relation to the health and wellbeing of students, not based on competition and an ethos of every individual for her or himself (Reardon, Nordland, & Zuber

1994; Williams, 2015). Caring and relationships are fundamental aspects of communities of practice and basic to all human life. Developing a student's capacity to care is a primary objective of educating the whole child (Noddings, 2002). Caring helps build trust and relationships of reciprocal action and a strong foundation for communities of practice (Freire, 1998). In a community of practice, students grow to see their peers as powerful resources in their overall progression and become genuinely involved in each other's learning and transformation.

### **Defining Culture**

In the field of education there are varying definitions of culture. The dictionary defines culture as the act of developing the intellectual and moral faculties especially through education (Merriam-Webster, 2017). Culture is then further defined as the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations as well as the customary beliefs, social forms, and material traits of a racial, religious, or social group and the characteristic features of everyday existence shared by people in a place or time (Merriam-Webster, 2017).

Researchers agree that people are shaped by culture, but as a social process, culture also shapes people (Coen, 2014; Ladson-Billings, 1995; Paris & Alim, 2017). Social interactions bring culture to life in settings where humans interact on a daily basis in which they create and share personal meanings. In this way culture is shaped by the environment and can evolve and change based on how we see ourselves and others. Individuals share many different cultures at given times that can be used as resources in building knowledge and meaningful experiences (Coen, 2014). Culture is not a static thing, it is shaped by



interactions with environments and other people, this especially occurs in classrooms and schools where people gather routinely.

### **Culturally Relevant Teaching**

The United States has experienced a major demographic change regarding race, culture, and diversity (M. Brown, 2007; Brown-Jeffy & Cooper, 2011; Nieto, 2015). The increased diversity of schools poses a challenge for educators in responding to this cultural shift in a way that provides all students an equitable education that both addresses individual need and the collective needs of the whole group (Nieto, 2015). Culturally relevant teaching is a strategy for consciously incorporating students cultural background knowledge and experiences to help them succeed in school (Irvine, 2010). According to Ladson-Billings (1995) culturally relevant teaching involves a systematic incorporation of cultural knowledge as official knowledge, and a willingness to incorporate cultural competence and critical consciousness in a way that aids each student's academic development.

Culturally relevant teachers see themselves as active members of the classroom community and believe this engagement to be worthwhile (Yee, 2015). They take pride in the efforts and growth of their students and celebrate cultural diversity. Social interactions within the classroom environment are consciously designed with a goal of boosting academic success, cultural competence, and critical reflection (Ladson-Billings, 1995).

Culturally relevant classrooms often incorporate reciprocal relationships between teacher and students and provide students an opportunity to share expertise with their peers (Ladson-Billings, 1992). Emphasis is placed on the entire class succeeding through cooperative and collaborative learning, rather than on competition and isolated individual success. This is similar to goals embodied in communities of practice, where collective

learning is of equal importance to individual understanding (Palincsar & Brown, 1984).

Culturally relevant teachers believe knowledge to be experiential, shared, and co-constructed within an active environment. They are passionate about learning and actively modeling the process for their students (Yee, 2015).

Powell (1998) conducted a longitudinal study on the purposeful implementation of culturally relevant teaching and found three themes to be particularly essential to its success in the classroom. The first is acquiring cultural sensitivity, the second is adapting and reshaping the curriculum within the classroom, and the third is openly inviting students to engage in active learning. Ladson-Billings (1995) study also suggests ways to consciously and intentionally incorporate diverse cultures and cultural sensitivity into classroom settings. These studies show important features necessary to culturally relevant teaching include helping students succeed academically, supporting cultural competence, and developing a critical socio-political consciousness. Both researchers call for more exemplary models of culturally relevant pedagogy to be documented and analyzed by educational researchers as well as further investigation into alternative models of teaching.

Cajete (1999) notes that all cultures have ways of learning understood through their art forms, community engagement, common language, and the environment. These cultural contexts are holistic and often differ from the western cultural perspective commonly found in schools. Incorporating diverse cultural traditions and values in modern classrooms is a step towards elevating relevance and increasing cultural awareness. It can also serve to empower students to take ownership of learning and feel a sense of belonging in the classroom and community.

## Summary

In an art environment students cultural tools and prior knowledge can be honored through the incorporation of artifacts that hold significant meaning. According to Chapman, (1978) an artifact can be anything intentionally created or selected to serve a purpose within a given culture. Cultural artifacts originate from similar things among cultures, the need for food and shelter, documentation of individual and group identity, and celebrations of important events. For example, pottery is held sacred in many cultures for its connection to the physical and spiritual nourishment of families and communities (Cajete, 1999). All people seek to remember times and places that helped build their identity and contributed to who they are. Fundamental reasons for the creation of artifacts directly tie to the social values of the community (Chapman, 1978).

Students are constantly exposed to visual stimuli loaded with symbolic meaning. The visual dialogue of classrooms and the silent messages conveyed will impact each student differently. Culturally relevant art classrooms should strive to incorporate artifacts from all different cultures and actively discuss their meaning, similarities, and differences. This means building relationships and talking to students about their lives, not just conveying basic terms and processes of art. Student perceptions in any environment are conditioned by the dominant forms within it, the physical space of the classroom can create a visual symbol of respect accessible by all students (Chapman, 1978).

Many teachers reach classrooms underprepared to meet the challenges and needs of ethnically diverse cultures and students (Meier, 2002; Paris, 2012). Gaining an explicit knowledge of cultural diversity is imperative in meeting these needs. This includes incorporating and understanding the contributions, cultural traditions, language, learning

styles, and values of particular ethnic groups within the overall curriculum (Ladson-Billings, 2014). Attention must also be given to building a community of learners and an environment in which culturally responsive learning can take place. Being culturally responsive means sharing an ethical, academic, and often emotional partnership that is anchored in respect, integrity, collaboration, and transformation (Paris, 2012). This echoes the student and master commitment to an apprenticeship and incorporates the Japanese concept of guidance.

Teachers benefit when shown how to develop classroom environments and communities within their classroom that value and incorporate these characteristics. Doing so can profoundly change the types of learning that take place in schools, the type of individuals our students become, and the very nature of our society (Eisner, 2013; Dewey, 1934). More research is needed in helping teachers create genuine communities of practice within classrooms that empower students to learn from each other, as well as incorporate strategies for creating inspirational, transformative learning environments that honor our increasingly diverse cultures.

According to Freire (1998) learners and teachers are engaged in continuous transformation. “To teach is not to transfer knowledge, but to create the possibilities for the production or construction of knowledge” (Freire, 1998, p. 30). Within a classroom community, there are many individuals engaged in personal and collective transformation.

The community of learners within a learning environment, the norms, routines and values, and the roles students and teachers play have a significant impact on student learning (Ladson-Billings, 2014). More attention should be given to strategies that aid in successfully creating environments that honor individual students, small groups, and the entire community of learners as they grow and transform together. Helping students learn how to learn and

how to value and teach each other are among the most profound things a teacher can achieve in their classroom (Noddings, 2002).

Students invent themselves through education (Eisner, 2013). Cultural literacy and critical thinking encourage students to actively create their minds and transform. Schools that neglect cultural literacy produce semiliterate students. Eisner (2004) advocates for a more encompassing definition of literacy. One that is not limited to conventional uses of language and formal use of numbers. Beyond reading and writing, literacy involves the ability to create and decode meaning in cultural forms of expression, such as music and art.

Connecting students to unique cultural traditions through art education is an important concept for classrooms. More research is needed on how collectively learning a unique cultural tradition informs students about another culture as well as their own. Learning how to learn is, in the end, something people do for themselves (Crick & Wilson, 2005). Although learning is often seen as a personal activity, it is not a private activity. The social environment and types of learning relationships have a significant impact on learners (Eisner, 2013).

There are significant connections between the classroom environment, the community of learners, and the need for students to take ownership of, pride in, and feel connected to their peers, teachers, and the learning process. What we do in our classrooms each day has a significant impact on our lives and our student's lives in the future. Participant experiences in the Arita Tradition of Porcelain course were sought regarding these connections and their understanding of learning. The following chapter will present the methodologies used in this study to collect and analyze data.

### **Chapter Three: Methodology**

This qualitative study represents the experiences of multiple participants engaged in the *Arita Tradition of Porcelain* course at the University of New Mexico. The Arita tradition encompasses a 400 year old Japanese method for making porcelain pottery on a potter's wheel (Saga Prefecture, 2015). Following is an explanation of procedures used in carrying out data collection as well as the methodologies utilized in data analysis.

#### **General Perspectives**

As humans, we construct perceptions of reality through interpreting meanings connected to experience and social interactions (Creswell, 2013). Qualitative research investigates these experiences, interactions, and contexts (Fraenkel & Wallen, 2009). The community formed within the Arita Tradition of Porcelain is a socially constructed one that has evolved and changed through generation and geographic location. Therefore the underlying conceptual framework of this dissertation is social constructivism.

Qualitative research emphasizes commonalities among different participants' interpretations of similar experiences and the meanings attributed to their interpretations (Fraenkel & Wallen, 2009). This study investigated how students of the Arita Tradition of Porcelain course made sense of their experiences, the impact participation had on their learning, and the meaning given to social interactions within the studio classroom environment. Data was analyzed through crystallization and arts-based research.

The research question is: How can art education be better utilized to promote increased personal meaning in learning, community involvement, and culturally relevant pedagogy? Looking in depth at the instructional practices and student experiences in learning the Arita Tradition of Porcelain was a main goal in documenting this tradition in the

United States. Data was collected on the Arita Tradition of Porcelain course, participants' connection to the learning process, the studio environment, and community of peers.

### **The Arita Tradition of Porcelain Course at the University of New Mexico**

The Arita Tradition of Porcelain course is unique to the University of New Mexico. It is an art studio course that features hands on learning of the steps used to create porcelain vessels in Arita, Japan. The steps have been honed by potters over the past 400 years and passed down from generation to generation.

As a researcher completing 10 years of apprenticeship in this process, I cannot claim to be objective, as such, a research methodology was needed that includes rigorous data analysis and reflection, as well as a creative form of representation to aid in exploring this phenomenon further in depth.

### **Crystallization**

Ellingson's Crystallization framework (2009, 2014) provides a methodology that best fit the needs of this study. Ellingson's crystallization incorporates multiple genres of representation and analysis. It seeks knowledge of a particular phenomenon via a complex interpretation of details that provide insight into everyday life and experience.

Crystallization rejects claims of objectivity in research that lead to one right answer or single truth. Instead, it seeks relational moments and ways of producing knowledge through analysis that spans the qualitative research continuum (Ellingson, 2014).

Based on a combination of social science relativist perspectives, social constructionism, and artistic paradigms, crystallization opposes the art versus science dichotomy that pervades traditional research and presents an innovative approach to the representation of sense making. Seeking multiple perspectives, the framework of

crystallization incorporates an analytic emphasis on one side and a narrative, visual, or creative approach on the other. The middle ground incorporates a social constructivist approach (Ellingson, 2014).

Incorporating multiple research lenses generates knowledge about a phenomenon via different forms of representing, organizing, and analyzing data (Ellingson, 2009). It also integrates a creative approach to data collection and analysis that calls for making sense of data through multiple ways of knowing and reflecting. Crystallized texts combine several genres of representation and weave together multiple modes of expression through crossing epistemological boundaries imposed by traditional research approaches.

Crystallization proposes that incorporating different ways of knowing can reveal subtleties in data that may be overlooked in a single genre approach. It "embraces, reveals, and even celebrates knowledge as inevitably situated, partial, constructed, multiple, and embodied" (Ellingson, 2014, p. 3). Each account connects to a story that is constantly evolving, never complete. The stories represent an equal balance between the voices of participants and the researcher, emphasizing deeper understanding.

Crystallization also incorporates an emphasis on the researcher and self-reflection throughout the process of research design, data collection, and representation (Ellingson, 2009). As the researcher was already immersed in the cultural tradition studied, the critical reflection part of this methodology proved a valuable addition to data collection and analysis. Throughout the study, researcher reflexivity was documented through keeping rigorous and detailed research journals and through the creation of a body of artwork including porcelain pottery that visually represents the sense-making process during research, data collection, analysis, reflection, and writing.



The researcher created a body of art using techniques learned in the Arita Porcelain Tradition throughout the dissertation study. The process of creating reinforced the idea of knowledge that is situated, embodied, and contains multiple perspectives. Sullivan and Hafeli's (2017) arts-based research model was incorporated in creating the artwork and analyzing its connection to the evolving study and participants' experiences. The artwork was interwoven with all other aspects of the research process as a visual record, demanding an abandonment of objectivity and culminating in a dissertation and body of artwork that evolved continuously throughout data collection, collaboration with participants, and reflective practice.

The lack of objectivity does not mean that we cannot make claims to know, recommendations for action, pragmatic suggestions for improving the world, and theoretical insights. All of these remain not only possible, but also more probable, because of the depth of consideration and reflection that went into the creating the crystallized text. (Ellingson, 2009, p. 16)

Leonard and Odutola (2016) describe crystallization as an analytical tool similar to the validity tool *triangulation* in which data from two or more sources is cross-verified. Crystallization allows for sense making and multiple levels of complexity in analyzing participants perception of a given phenomena. Denzin and Lincoln (2005) see crystallization as a combination of themes that overlap rather than points that linearly connect in a triangle. Crystals create multiple patterns and branch out in different directions acknowledging complexities and relationships that are non-linear (Richardson, 2000).

This dissertation study follows a layered account, shifting between academic research, narrative, and arts-based research. Layered accounts connect theory and research to

personal experiences and include cultural critique and methodological issues. Crystallization calls for a break with traditional boundaries and an inclusion of multiple perspectives and aesthetic ways of knowing (Reinharz & Davidman, 1992).

Social justice and transformation are significant facets of crystallization, sharing a goal of impacting the world in a positive way. Power was shared equally between participants and the researcher in a co-participatory manner where questions and insights into phenomenon emerged collaboratively. Throughout crystallization, participants created data via narrative, art, photography, and collaboration. One of crystallization's strengths is its adaptation and flexibility in use. Combining several lenses for data analysis allowed for a complex picture of the Arita Tradition of Porcelain in the United States to be illuminated.

As noted in the literature review, making art connects people and holds personal meaning. It provides a common ground and window in which to get a glimpse into the lives of others; this window increases tolerance, empathy, and cultural exchange (Greene, 1995; Kraehe & Acuff, 2013). Creating art can also help people make sense of experiences and undergo self-transformation (Allen, 2014; Carter, 2008).

### **Arts-Based Research**

Arts-based research and crystallization carry a goal of enhancing perspectives involving human activities and making sense of experiences (Barone & Eisner, 1997). It holds the assumption that engaging in an artistic activity is in itself, a form of research requiring thought, reflection, action, planning, and analysis (Sullivan & Hafeli, 2017). Arts-based research differs from traditional forms of research in that it seeks not just to discover, but also to add insight to perspectives and incorporate new ways to view phenomena (Barone

& Eisner, 1997). It looks at the process of art making in a whole new light, not only as an act of creation but as a valid process of inquiry and knowledge construction.

Arts-based research explores connections between social sciences and artistic creation and has gained momentum over the past two decades (Faulkner, 2016). It counters perceptions that art is too subjective to be used as research, and that only artists need be concerned with how what they make informs what they know. In using an art object to represent research and reflection, the process of creating art is also represented. More discussion is needed on how art is created, analyzed and understood as a research process.

In a recent study on identity, Chappell (2016) identifies the process of creating art as a journey of becoming. She calls for a heightened recognition of arts humanizing qualities and a need for a new conception of creativity in schools. Chappell suggests, today, more than ever, emphasis needs to be placed on art's contribution to a whole person living and interacting with others. Much of the utilized curricula featuring creativity and art today emphasize an end goal of preparing students to contribute creativity to work and capitalist growth (Chappell, 2016). Art, aesthetics, and creativity, however, are rooted in the senses and emotions, which are fundamental human qualities. The focus on work and capitalist growth does a disservice to the potential of creativity in other areas of development.

Chappell's study (2016) *Wise Humanizing Creativity*, emphasizes the interrelationship between engaging in creativity and identity. *Wise Humanizing Creativity* is a result of collaborative thinking and shared action to develop new ideas of importance and value to a community of learners. As shared action is a cooperative endeavor, individuals naturally build relationships that emphasize the values of those making up the community.

Chappell also stressed immersion into the act of creating art while sharing ownership of ideas and group identity.

Arts-based research is a type of fieldwork. Richardson (1998) suggests, "we experience epiphanies in fieldwork that show humanity, and we wish to retrieve the instant, to show a moment of truth" (p. 11). Just as the arts are considered to be a universal language, arts-based research can also be considered a language. One that researchers can turn to when other forms of research do not portray the phenomenon they wish to represent in a way that honors their work and the work of the participants in an accessible and genuine way (Faulkner, 2016). In this dissertation, the researcher having extensive knowledge of the Arita Porcelain course and its components proved a vital part of understanding data collected.

Arts-based research and crystallization share many characteristics. One of the most important is active reflection. In this study, active reflection occurred through field notes in research journals, collaborating with participants, and the process of making art. Both research strategies can be revolutionary and socially responsible, action-oriented, participative, and transformative while incorporating multiple lenses for data collection and analysis (Ellingson, 2014; Finley, 2008). Throughout the research process, the combination of research methodologies utilized allowed for the exploration of multiple ways of knowing and honored participants as co-constructors in an evolving study.

### **Research Contexts**

The study took place in three different and interrelated contexts:

1. The first context was in Japan during a class trip in June, 2016 with the instructor and 20 students of the Arita Tradition of Porcelain course.

2. The second context for research was the Arita Porcelain studio at the University of New Mexico, in Albuquerque, New Mexico. The Arita Porcelain studio was founded at the University of New Mexico in 1980 and remains the only university outside Japan where this unique tradition exists.
3. The third context was the researcher's studio where interviews were conducted with participants and arts-based research occurred. Arts-based research artifacts were also created in this context.

All data was collected within these three contexts. Multiple settings provided different lenses with which to look at experiences and reflect on different perspectives. It is important to note that the Maori 5Rs were present in each context and used in developing interview questions.

### **Participants**

This study incorporates interviews with Cyman and student participants who were currently or previously enrolled in the Arita Tradition of Porcelain course and had knowledge of the Arita Porcelain studio classroom environment as well as the community of practice. Active involvement in the studio community was required for participation in this study. Through arts-based research, the researcher also participated in the study.

**Instructor and Designer of the Arita Tradition of Porcelain Course in the United States.** Cyman began learning the Arita Porcelain Tradition in 1988 at the University of New Mexico. In 1991 she took over developing and teaching the course at the request of Manji Inoue, *National Living Treasure of Japan*. Throughout her years of study she has visited Japan five times, once for an extended period as an *Artist in Residence*, and three times leading a group of her own students. Cyman was a key participant given her extensive

experiences in teaching and learning this porcelain process and her mentorship under Inoue. Interviews emphasize the instructional methods she created over the past 30 years in teaching this tradition to students in the United States.

**Student participants.** Student participants who contributed to this study were divided into two groups:

1. The first group comprised of students enrolled in the Arita Tradition of Porcelain course during field observations at the University of New Mexico. Participants in this group ranged in age from 18 to 86 and represented a wide range of university majors including engineering, business, pharmacy, education, science, as well as fine art and art education. Among participants were Hispanic, White, Asian, and Native American students including students from China, Taiwan, Canada, Iran, and the United States. The majority of students in the course had been enrolled for multiple semesters; some had continued to enroll for a decade or more.
2. The second group of participants was made up of current and former students of the Arita Tradition of Porcelain course that were selected for interviews. Participants interviewed represented the diversity of the porcelain course, ranging widely in terms of age, cultural background, socio-economic status, and university major. They also ranged in number of semesters having been enrolled in the course. Following is a brief description of student participants who were interviewed in this study.

**R. O.** R. O. is 63 years old and a Veteran retired from uniformed services. He has been studying the Arita Tradition of Porcelain for 14 semesters. He has an extensive history of travel growing up in Rhode Island, living in Alaska and finally moving to New Mexico. He has a background in environmental health and a Bachelors in Fine Art.

**C. R.** C. R. is 30 years old and has a degree in pharmacy. She has been studying the Arita Tradition of Porcelain for six semesters and currently teaches a ceramics class for adults. She is originally from Seattle but has been in New Mexico for several years. Katy traveled to Japan in 2016 for the 400 year anniversary of Arita Porcelain.

**A. B.** A. B. is a biochemistry student with a minor in art history. She has been studying the Arita Tradition of Porcelain for 7 semesters and traveled to Japan on the class trip in 2016. She was born and raised in New Mexico.

**K. W.** K. W. is 51 years old and works as an art educator for high school students. She has a background in fine art and art education and has been studying the Arita Tradition of Porcelain 4 semesters. She is from New Mexico and has lived in Albuquerque for 25 years. Carrie also attended the 2016 trip to Japan.

**M. M.** M. M. is 34 years old and in semester 13 studying the Arita Tradition of Porcelain. She was born and raised in New Mexico and Majored in studio art. She was also among the students that traveled to Japan in 2016.

**M. P.** M. P. is 37 years old and from Las Cruces, New Mexico, and Laguna Pueblo. She has been studying the Arita Tradition of Porcelain for 11 semesters and has taught high school art for the past 10 years. Margarita is well known in Albuquerque for her large tile murals and work in the community.

**C. P.** C. P. is 33 years old and works in the emergency room at the University of New Mexico hospital. He is also a potter and runs a ceramic studio in Cedar Crest, New Mexico. He has been studying the Arita Tradition of Porcelain for 13 semesters and traveled to Japan in 2016.

**R. P.** R. P. is 33 years old and works in medical records. She also went on the class trip to Japan in 2016 and works in Cedar Crest, New Mexico, as a potter. Nadia has a Bachelor of Fine Art. Originally from Wisconsin, she has lived in Albuquerque for the past 12 years.

**B. F.** B. F. is 31 and currently lives in Japan. He is originally from Taiwan and has spend a lot of time in China. Jon graduated from the University of New Mexico in business and has been studying the Arita Tradition of Porcelain for 10 semesters. Jon also attended the trip to Japan in 2016.

**M. R.** M. R. is 20 years old and currently in her third semester studying the Arita Tradition of Porcelain. While she has not yet chosen a major, she plans to continue taking the porcelain course throughout her career as a student.

Ten participants were chosen for interviews in this study. Participants from both groups attended the class trip to Japan in June 2016 to celebrate the 400 year anniversary of this porcelain tradition, although travel to Japan was not required of participants. Enrollment in the Arita Tradition of Porcelain course, experience with the studio classroom environment, and active engagement with the community were the main requirements for participation.

Following is a table outlining participants in both groups, participants that were interviewed, participants that engaged in arts-based research, as well as the participants that traveled to Japan for the 400 year anniversary of the Arita Tradition of Porcelain.



Table 1

## Participants

Participants	Participated in Studio Observations	Participated in Interviews	Participated in Travel to Japan in 2016	Participated in Arts-based research
Group One: 19 students enrolled in the Arita Tradition of Porcelain the University of New Mexico, fall semester, 2016	Yes	3 of 19 were also in the second group of interview participants	11 students enrolled traveled to Japan	2 students enrolled participated in arts-based research
Group Two: Interviewees				
Professor Cyman	Yes	Yes	Yes	No
R. O.	Yes	Yes	No	Yes
C. R.	No	Yes	Yes	Yes
A. B.	No	Yes	Yes	No
K. W.	Yes	Yes	Yes	No
M. M.	No	Yes	Yes	Yes
M. P.	No	Yes	No	No
C. P.	No	Yes	Yes	No
R. P.	No	Yes	Yes	No
B. F.	No	Yes	Yes	No
M. R.	Yes	Yes	No	Yes

**Procedures**

In June 2016, the researcher traveled to Japan for the 400 year anniversary of the Arita Tradition of Porcelain along with the instructor of the course and 20 students. The group met with Inoue, his top students, and honored guests. We visited Inoue's porcelain studio, the *Arita Porcelain College*, as well as the studios of Inoue's top apprentices. Field notes were recorded daily throughout the 10 day trip in a research journal. Upon return to the

United States, initial interviews and follow-up interviews were set up and conducted with participants. Initial interview questions for the instructor and students are included in Appendix A and Appendix B.

The initial interview was scheduled not to exceed two hours, giving enough time for in-depth answers but not being too much of a burden on participants. Questions focused on learning experiences with the Arita Tradition of Porcelain methodology, peers, and classroom environment. Emphasis was placed on questions being clear and open-ended which suggested free dialogue and an absence of one right or appropriate response (Creswell, 2007; Glesne, 1999). Emphasis was also placed on flexibility insuring interviews evolve organically. Interviews and follow up interviews occurred between August, 2016 through February, 2017.

Following the first interviews, questions for the second interview were developed. These questions focused less on the learning, studio environment, and students of the Arita Tradition of Porcelain course and more specifically on participants' experiences and perceptions with the process of creating art. Interviews occurred individually in the same setting as initial interviews. Participation in arts-based research was optional, participants were asked to provide a photograph of a piece of pottery they made that was influential in their learning process. Each participant met with the researcher a minimum of two times and maximum of four to clarify and discuss the significance of their experiences.

**The Maori 5Rs Core Cultural Values.** The Maori *5Rs Core Cultural Values* were incorporated into the Arita Tradition of Porcelain instructional practices in 2001 (K. Cyman, personal communication, November, 12, 2016). Their perceived influence on students was used in developing interview questions. The 5Rs are respect, relationships, reciprocity,

redistribution, and responsibility. They are believed by the Maori culture and to be “common to all nations and Indigenous cultures” (Advancement of Maori Opportunity, 2004, p. 1).

The 5Rs provided a common theme and also a lens for data analysis.

### **Data Collection**

Informed consent from all participants and IRB approval was obtained prior to collecting field note observations or conducting interviews. Consent forms are included in Appendix C. Interviews were scheduled not to exceed two hours, giving enough time for in-depth answers but not taking up too much of participants’ time. Questions focused on learning experiences with the Arita Porcelain methodology, peers, and classroom environment. Interview questions also focused participants’ experiences and perceptions with the process of creating art.

The researcher recorded field notes in four journals during 10 days of travel in Japan and over a series of 13 visits to the Arita Porcelain studio at the University of New Mexico. Observations at the Arita Porcelain studio were approximately an hour each. Detailed records of experiences, reflection, and analysis were maintained throughout the study. Field note observations documented ways participants interacted throughout the learning process in the Arita Porcelain studio environment and throughout travel in Japan noting how they developed as learners both individually and collectively.

### **Data Analysis**

Interviews were transcribed directly after taking place. Weekly field note observations were recorded in research journals as were new questions that arose, for example, how is the Arita Porcelain community of practice impacted by the 5Rs Core Cultural Values? Researcher reflexivity was also recorded through journaling and making art

throughout arts-based research process documenting reflection on data collected. Each piece of art made by the researcher came to represent key facets of the data analysis process. Crystallization of interview transcriptions and journal entries occurred in a separate journal twice a month. Crystallization and arts-based research were the main processes used to analyze the data and interpret findings.

Participants were honored as co-constructors, all data collected was openly shared and discussed. Throughout data analysis multiple themes emerged. Borrowing techniques from Leonard and Odutola (2016) the researcher used strategic coding. First, transcribed interviews and field note observations were organized by descriptive phrases or specific words. Next, the researcher looked for patterns in responses. Themes were then arranged by most frequently occurring and highest significance to participants. Lastly, the researcher focused on relationships between themes. Photographs of participant's pottery and arts-based research were included as data visually representing the sense-making process.

As noted in the beginning of this chapter, descriptive research studies a sample of a unique population in order to find common themes or characteristics that describe a phenomenon (Glatthorn & Joyner, 2005). The Arita Tradition of Porcelain course is a result of a unique international friendship between porcelain potters in Japan and New Mexico (K. Cyman, personal communication, June 26, 2016). There is no other course to compare it to in the United States. A thorough data collection and reflection process as well as several meetings with each participant to clarify statements and engage in the process of co-construction addressed internal validity threats.

Observations and interviews evolved organically throughout the study due to the flexible nature of crystallization. The researcher was prepared to alter the number of

participants and data collection procedures as needed throughout the study to ensure research goals were met. Although all the participants in this study shared experiences of the phenomena, not all were interviewed, as such, findings cannot be claimed to extend to all students of the Arita Tradition of Porcelain course in the United States. Not all participants enrolled in the course had meaningful connections to the content and peers. Three students of the 22 enrolled in the fall semester 2016 Arita Tradition of Porcelain course dropped early in the semester. This could have been due to the unique instructional practices and structure of the community and environment not being conducive to the learning styles of the participants, or due to the challenging nature of the porcelain material itself.

As a student of 10 years, the researcher had insight into the participants' experiences that an outside researcher would not have, including understanding the norms of the course, language, artistic processes, community, and shared goals. The experiences shared with participants, including travel to Japan, increased comfort with participants and ensured open dialogue regarding the significance of their experiences.

At the outset of the study, the researcher was aware of advantages and disadvantages closeness with participants may cause. The study was conducted in a mindful and cautious way to ensure the researcher's interpretations did not undermine the perceptions of the participants. Precautions were made to ensure each participant received the same communication, courtesy, and respect regardless of relationship to the researcher.

This study is limited in that it is a unique phenomenon and therefore not generalizable. Future research is needed in order to explore this phenomenon further and provide more findings that add to our current knowledge base about the Arita Tradition of Porcelain instructional practices used in the United States today. More research will add

insight into alternative approaches to teaching and learning through art education with and about other cultures as well as shedding light on new strategies that incorporate culturally relevant pedagogy.

### **Summary**

In summary, the data was collected through interviews and field note observations in a descriptive manner appropriate to the population being studied. Data analysis occurred through crystallization, arts-based research, and reflective practice. Journal entries of field notes and observations in both Japan and the United States were crucial to providing insight analyzing data.

Keeping rich descriptive records of data collected and reflection was vital to the crystallization and arts-based research process. Generating data via multiple forms of representing, organizing, and analyzing provided diverse perspectives in which to view and reflect on findings (Ellingson, 2009). The arts-based research approach incorporated a creative analytic element adding another lens to data analysis. Participant co-participation greatly enhanced perspectives and incorporated multi-faceted ways to view learning experiences in the Arita Tradition of Porcelain course.

This dissertation utilizes both crystallization and arts-based research as methodologies for collecting, organizing, and analyzing data. Findings that emerged through analysis of field note observations, interviews, and arts-based research are presented in the following chapter.

## Chapter Four: Findings

Crystallization and arts-based research incorporated multiple angles and perspectives to view data collected. Participants were honored as co-constructors of data and analysis and helped shed light on the many facets that emerged. This chapter is organized around these three main facets to increase clarity. The facets are:

1. Facet One: Importance of the methodology and classroom environment.
2. Facet Two: Active engagement in a community of practice.
3. Facet Three: The Maori 5Rs Core Cultural Values.

As this dissertation is a layered account, analysis is provided from multiple perspectives shifting between academic research, narrative, and arts-based research. Crystallization and arts-based research provided the main frameworks for analysis, they will be present throughout the chapter.

The research question in this dissertation is: How can art education be better utilized to promote increased meaning in learning, community engagement, and culturally relevant pedagogy? A major component of this study was documenting participant experiences in the *Arita Tradition of Porcelain* course at the University of New Mexico. Data collected focused on instructional practices utilized in the *Arita Tradition of Porcelain* course, the classroom environment, the community of practice, and the Maori 5Rs Core Cultural Values. Crystallization was interwoven with data analysis. Through crystallization, culturally relevant teaching approaches surfaced that were utilized in the *Arita Tradition of Porcelain* course. These approaches have implications for classrooms and suggest ways art education can be adapted to better support diverse cultures. Data was collected and analyzed through crystallization and arts-based research.

## Artwork as Data



*Figure 1. Blue and White*

This image represents many experiences I had while engaged in arts-based research. I rarely created without a journal close at hand. Blue cobalt, or *Gosu*, is commonly used in Japan for fine painting and intricate details. The drawings on the left combine pottery shapes and landscape drawings. The bowl on the right is a separate series involving repeating geometric patterns I found myself creating, perhaps due to the influence of crystallization.

During travel to Japan, I was inspired by the blue and white patterns I saw on the work of top porcelain potters. Drawing in journals and painting repeating patterns in the *Gosu* provided a canvass on which to reflect on data differently. It was more of an internal and quiet reflection where thoughts flowed in and out like waves, much less linear and categorical.

Research journals were an indispensable part of data analysis and aided greatly in the crystallization process of themes that emerged. They provided an environment for



organizing and re-organizing thoughts and also a space to reflect more deeply on the data collected through observations, field notes, and interviews. The following photograph shows the research journals created throughout the dissertation study.



*Figure 2. The Research Journals*

Three main facets emerged during data collection, analysis, arts-based research, and the crystallization process that were essential to the research questions as well as the structure and function of the Arita Tradition of Porcelain course. These facets are intertwined and overlap on many different levels:

1. Facet One: Importance of the methodology and classroom environment.

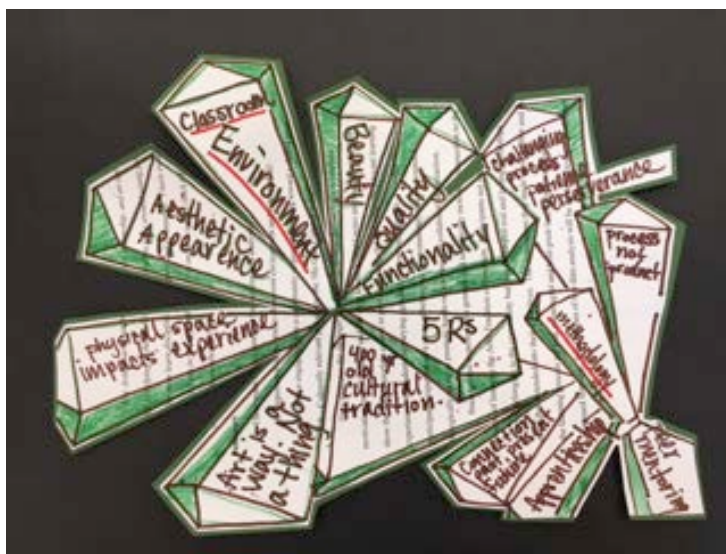


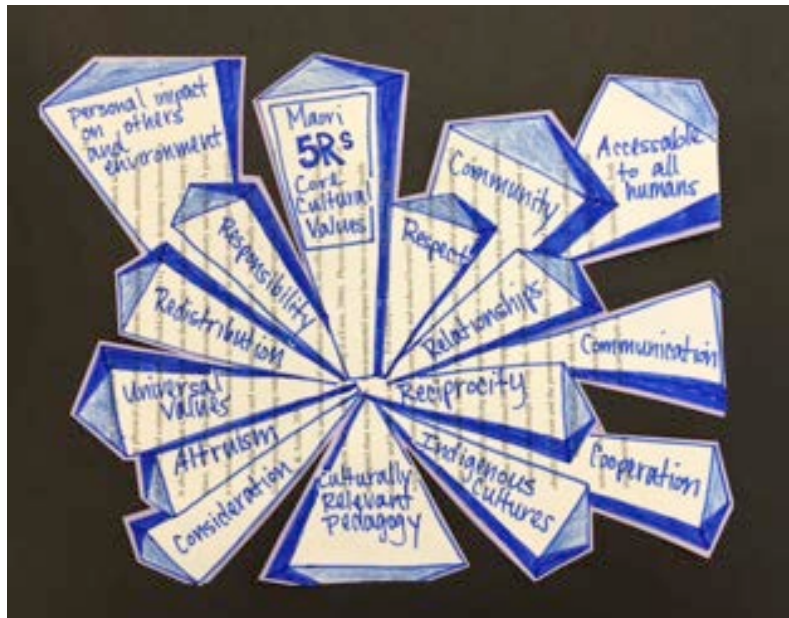
Figure 3. Facet One Crystals

2. Facet Two: Active engagement in a community of practice.



Figure 4. Facet Two Crystals

### 3. Facet Three: The Maori 5Rs Core Cultural Values.



*Figure 5. Facet Three Crystals*

Following is an analysis of the findings in each of the three main facets that emerged during the study. While interconnected each facet became its own unique element with key characteristics. The first facet that emerged through observations and participant interviews was the importance of the Arita tradition of Porcelain methodology and the physical environment in which it exists.

#### **Facet One: Importance of the Arita Porcelain Methodology and Classroom Environment**

The Arita Porcelain instructional practices were honed over years of studying the porcelain process as learned in Japan. The classroom environment in the United States echoes the physical layout and cleanliness of Japanese porcelain studios. Professor Cyman adapted the methodology from a traditional one-on-one apprenticeship approach, to a contemporary version more suited to larger class sizes and schools the United States.

**Creating the Arita Porcelain methodology in the United States.** In interviews, Professor Cyman explained how the Arita Porcelain methodology was developed for students in the United States. Cyman has been studying this Japanese tradition for 30 years and teaching the tradition for 26 years. The University of New Mexico is the only university in the United States that offers the Arita Tradition of Porcelain.

After several trips to Japan and an extended stay of four months as an *Artist in Residence*, Cyman began developing a methodology for passing on this tradition on to others. In 2001, Manji Inoue, *National Living Treasure of Japan*, personally chose Cyman to take over teaching the course. Following is an excerpt from an interview with Cyman describing her background with learning the tradition, and the prior knowledge and personal experiences that led to developing the methodology for students in the United States.

Following years of learning and practice, I set up a pedagogy of processes and protocols, handed down from generation to generation, that I could transfer to students. After first implementing it in the United States, I made some modifications due to a difference in culture and societal values. Japan is a monoculture; the United States are widely diverse in terms of income, ability, race, etc., across the board. All diverse individuals that continue to exist at UNM today. Developing this was a matter of using my own experiences in both cultures, what I understood the language of art to be and how to convey it in between two very different cultures. (K. C., personal communication, January 3, 2016)

Having years of experience with the Arita Tradition of Porcelain informed creating the methodology and implementing it. According to Cyman, understanding the process students undergo in learning the Arita Tradition was integral to creating a methodology

designed to hand the tradition down to students in New Mexico. Cyman also used her knowledge of how the tradition is taught in Japan to inform the methodology in the United States. The apprenticeship approach utilized in Japan provided a starting point and framework.

**Apprenticeship.** In Japan, learning the Arita Tradition of Porcelain vessels is an apprenticeship. On a class trip to Japan to celebrate the 400 year anniversary of this tradition observations recorded this apprenticeship. Field notes during travel to Japan recorded apprentices and master teachers work together and holding high expectations of each other. Inoue further explained the importance of honoring past, present, and future potters as a goal of learning the tradition, explaining that the Arita apprenticeship has stood the test of time (M.I., personal communication, June 24, 2016). Continuing the international exchange between students in both countries was a goal Inoue hoped would carry forward in the next 400 years. Students from the United States were invited into potter's studios, welcomed as honored guests, and treated as a part of the tradition rather than outsiders.

Today we traveled to Arita, Japan, and were guests of Sensei Inoue's on a cruise around the southern most islands of Japan; Inoue's top apprentices joined us. After the cruise we were honored with a traditional meal that included five courses of some of the most beautiful food I have seen, served on the finest pottery. Speeches were made by Sensei Inoue and his apprentices reinforcing the importance of working together to carry the Arita Tradition of Porcelain into the future. During the dinner and speeches, it became clear that the Japanese potters not only welcomed us in seeing their culture and art, but considered us important contributors in preserving the

tradition in the next 400 years. This was an incredible honor. (observation, June 25, 2016)

As stated in the literature review, the student in an apprenticeship is responsible for gaining as much knowledge as they can from the master about the technique being learned. The master is responsible for modeling the techniques and guiding the student along their path (Spence, 2001). The significance of the apprenticeship relationship was recorded in observations throughout the trip to Japan and impacted many aspects of the potter's lives outside of creating porcelain.

In Arita, Japan, apprentices start by creating work exactly as the master with vessels being precisely the same height, width, and weight. Studying this tradition begins with a 10 year apprenticeship. It is extremely disciplined and requires long hours of hard work and dedication. Doing well is a matter of pride for apprentices and master teachers alike. No variation from the master's technique is accepted during early stages of the apprenticeship. (observation, June 24, 2016)

The Arita methodology in the United States has adapted apprenticeship to contemporary life and the way schools and learning are structured. One-on-one apprenticeships have proven difficult in the United States given the prevalence of large numbers of students per class (Spence, 2001). Cyman recognized adjustments had to be made to the Arita methodology that were more conducive to teaching and learning in the United States.

Several facets of apprenticeship emerged during data collection and analysis of the Arita Porcelain methodology in the United States that are different from a traditional one-on-

one apprenticeship model used in Japan. The most commonly noted and significant to both participants and the methodology was peer mentoring.

**Peer mentoring.** During a class observation, Cyman described the Arita Tradition of Porcelain course in the United States as a contemporary apprenticeship. Similar to Japan, students learn one-on-one from the master teacher, but they also learn from each other as a large group. Field note observations documented students progressing together, sharing goals, and mentoring each other. These peer interactions are an adaptation of the one-on-one apprenticeship relationship to that of a community of apprentices, or rather, a community of practice. The students come together to form a group that actively assists in peer learning. Students range in years of experience and ability level within the community of practice, each having unique insight to contribute to the group, building reciprocal relationships through the learning process.

The Arita Tradition of Porcelain methodology incorporates peer mentoring as part of the learning process. Advanced students are expected to model techniques and mentor others, shouldering a responsibility to learn the porcelain process well, and help others learn. Thus students become, like the master teacher, guardians of the traditions values, which is a crucial part of apprenticeship (Doeherty, 2009). In 2001, during the first year teaching the Arita Tradition of Porcelain at the University of New Mexico, Cyman noticed students showing improvement when teaching and learning from each other. As such, peer mentoring was intentionally built into the function of the porcelain course. Following is an excerpt from field notes providing one of many examples of students learning from each other.

Today beginning students (students in their first semester) are learning to make and sharpen trim tools. This is a big deal, almost like a right of passage between learning

the steps of throwing a vessel and transitioning to trimming. Advanced students are teaching the beginning students how it is done. It is uplifting to see how excited the beginning students are to have come this far in their learning and be moving to the next stage. Advanced students are also excited and proud of their peers. Everyone in the community seems to share a sense of ownership of in the beginning student's success. (observation, November 23, 2016)

The contribution of the community of learners through peer mentoring was commonly noted in field notes as well as interviews. Teaching and learning from peers proved an important part of student experiences and contributed the uniqueness of the overall classroom environment.

The adaptation of a one-on-one apprenticeship approach to that of a community of practice holds important implications for incorporating apprenticeship into contemporary classrooms in the United States. The shift from master and apprentice to master and community of apprentices makes the ratio of student to teacher in the United States possible. Findings indicate this shift has the potential to make peer mentoring an important part of curriculum and building genuine peer relationships.

### **Environments**

An *environment* is defined as circumstances, objects, and conditions by which one is surrounded (Merriam-Webster, 2017). It is also described as a result of social and cultural factors that influence the life of an individual or community. Further noted in defining environment are the conditions that surround someone or something that affect growth, health and progress (Merriam-Webster, 2017).



The importance of the environment in which things exist was another theme; both physical and metaphorical environments emerged. Field notes and reflections commonly referred to the research process and analysis as existing in an ocean, where there is a constant need to dive deeper in a vast expanse of information. Following are two examples of arts-based research and reflections that describe existence with in this metaphorical ocean.



*Figure 6. Tsunami Plate Sketch*



*Figure 7. Tsunami Plate Carved*

As I carve the waves, I am thinking of timelessness and longevity. Past, present, and future wrapped into one plate. All the layers and spirals a representation of swirling thoughts about this process and 400 year old tradition. Tsunami waves do not instantly build; they result from an abrupt movement on the ocean floor, the entire ocean at work in one moment. At this early point in my study, I can clearly see the wave, it is what lies beneath that holds the answers to the research questions I seek. I can't help but feel I have a long journey ahead of me. (observation, August 24, 2016)



*Figure 8. Seahorse Carving*

At this point in the dissertation study I have descended far below the tsunami waves at the surface of the ocean and am finding myself near the ocean floor. I have collected a lot of data and experienced many moments of insight. I feel like a seahorse in the expanse of an entire ocean. The waves push and pull me in all different directions in my path to discovery. Like waves crashing on the shore, or the spinning of a potter's wheel, I experience continuous circling and repetitive questioning. I feel small in comparison to the big ideas I seek to illuminate. (observation, February 20, 2017)

Environments emerged as key facets in arts-based research reflection and continued to grow in significance through data collection and analysis. While much of the arts-based research dealt with environments as a metaphor, physical environments also had significance. My research journals became a significant physical space for data and reflection that were integral to the organization of the study. The importance of the physical environment of the Arita Porcelain classroom was commonly noted in observations and interviews and became a main facet of analysis through crystallization.

**The physical classroom environment.** Student participants interviewed from the Arita Tradition of Porcelain course regarded the studio environment as different from other settings they had experienced in education. The physical space, modeled after studio spaces in Japan, set the scene for learning content and sustained active creation and collaboration. Aspects that make the methodology unique were interwoven into the physical space reinforcing and nurturing key ideas through routine and set norms.

The studio setting itself has an initial calming feeling. It is an amazingly quiet space considering the number of students working. The walls are shades of blue and green with maps of Japan, pictures of pottery, and pictures of Sensei Inoue. The potter's wheels line the walls, and there are tables in the center where people can gather or work on carving and glazing. Every time I visit there are fresh flowers throughout the room. The student's shelves are all beautifully arranged with only necessary items for working in porcelain. There is a pervading simple elegance to the space that is reflected in the demeanor of the students. (observation, September 13, 2016)

Like Japan and the studios there, the environment of the porcelain studio is clean, simple, and beautiful. Orchids and hand made pottery pepper the room,

producing an inviting and inspiring place to produce work. I consider the studio a sanctuary. Kathy's class attracts an incredibly diverse group of students. Despite the variety of backgrounds of the people involved, we form a cohesive community. Each week, we share numerous hours together, learning, teaching, and creating. (A. B., personal communication, November 4, 2016)

Planning the physical appearance of the space was an important facet in the overall methodology of the Arita Porcelain course. Observations noted special care taken in student interactions with the classroom environment. Cyman relied on aesthetic values in setting the tone for the physical environment of the Arita Porcelain classroom.

**Aesthetic values.** Through interviews and crystallization the aesthetic values of beauty, quality, and functionality emerged. Data shows these values to be infused into the physical studio environment impacting the norms and routines of the class. These aesthetic values were present in the way students set up their potter's wheels, shelves, and cared for the space. Aesthetic values also influenced the art made within the studio. Of the participants interviewed, 6 of 10 described the aesthetic values as having an impact on care for the studio environment as well as student pride in their work.

The studio space is immaculately clean with only what is needed for creating porcelain vessels. All students are conscientious of the physical appearance of the space and the influence it may have on the work they create. At the end of each class, students do an extra cleaning job in order to keep the studio nice. Jobs that seem trivial are held important by the community; wiping clay off door knobs, dusting the top of the rack holding aprons, mopping under the wheels, washing doors and walls, etc. I have not encountered this level of care for the environment in any other clay

class. Students' efforts make a difference in how the studio functions, the success of their work and the work of their peers. Maintaining the beauty, quality, and functionality of the environment and the creative work produced is a top priority for us all. (R. P., personal communication, October 2, 2016)

This excerpt from interviews illustrates participant sense of care and the importance of the physical environment that was common to other interviews and studio observations.

The Arita Porcelain studio setting and methodology worked together to emphasize a connection between care for the aesthetic appearance of the space and how that care impacts those within it. Influenced by the setup and cleanliness of studios in Japan there were high expectations for the physical space, which influenced routines, and the materials used. It also influenced the pottery students made in the environment.

In interviews, participants further noted the appearance and function of the physical studio environment. They used words such as *serene, vigorous, and evolving*. During participant interviews, six described an energy or creative spirit existing in the classroom environment. All participant interviews mentioned respect and pride existing in caring for the classroom. Interviews also attributed uninterrupted creative flow as a result of the structure and function of the physical studio environment.

The studio is always clean and neat, allowing for uninterrupted creative flow and the community is supportive and motivating. (M. R., personal communication, November 15, 2016)

The environment engaged the community as a whole and also spoke to each student on an individual and personal level. The overall respect for the physical space was apparent

in each observation, but students connected to the studio in their own personal ways that were further revealed through interviews.

I was drawn to the class and studio following military service because I needed a quiet place to reflect and re-center my life. I needed a refuge. I needed beauty. Quiet beauty, to prove that it was still there. (R. O., personal communication, September 23, 2016)

The design and layout of the Arita Porcelain classroom was intentionally set up to facilitate the process of learning the tradition. The room was uncluttered providing a space for many artists to create simultaneously and efficiently among each other. Routines for setting up, creating porcelain, and clean up were established and accepted within the first two weeks allowing for an easily sustained environment that was conducive to nurturing learning the process of Arita Porcelain pottery.

### **The Process of Creating Arita Porcelain**

In initial interviews, participants were asked why they were drawn to, and continue, to take the course. All participants described the Arita Porcelain course as a rewarding challenge and spoke of finding a passion for and love of the process used in creating porcelain pottery. Participants also shared an experience of personal connection to something meaningful, or what some described as bigger than themselves. All participants interviewed planned to continue studying the Arita Porcelain Tradition and maintain a connection with their teacher, studio, and community of peers. Following are segments of transcribed interviews highlighting student experiences with the process of creating in the Arita Porcelain Tradition. These interview segments represent commonly shared experiences of participants.

The Arita Porcelain Tradition has taught me about the beauty of the process. Which, for me, takes pottery making to a higher level, a level that goes beyond just product. It has given me a vehicle to explore that rich experience of a technical process alongside the personal connection of creating. That experience has enriched many areas of my life, as it has allowed me to delve deeper into myself and how I view the world. (K. W., personal communication, October 11, 2016)

The Arita Porcelain course has allowed me to understand patience and respect while working with clay, both with myself, and the clay body. There are strict subtleties in how the hand is held against the clay and how the tools are used to form shapes, because of this the process, pottery making has become creative determination. It is not hard for me to know that this is what I want to do with my life because of the feeling I get when I am sitting down at the wheel and letting the creativity flow. It is the only thing that makes sense to me; it is my life, my passion, my inspiration. (C. R., personal communication, November 18, 2016)

The physical space of the classroom had an impact on the quality of learning participants experienced within it and prepared them to make quality work. Participants noted a heightened sense of wellbeing after working in the studio. Implications of these findings will be discussed further in the next chapter.

The studio classroom environment and methodology that set the norms for the course proved important facets in student experiences of learning the tradition. Although distinct from each other, the environment and methodology were interconnected and interrelated in a multitude of ways. Among the most important was providing a setting where students feel comfortable, and learn together. Peer mentoring was indispensable to both the methodology



and the physical set up of the environment. Collaboration among peers created a community of practice sustained through interactions with the environment and instructional practices. Findings show the community of practice had a tremendous impact on student experiences emerging as the second main facet of the data analysis through arts-based research and crystallization.

### **Facet Two: Active Engagement in a Community of Practice**

A community of practice is defined as a group of people pursuing similar goals and interests through shared artifacts, language, and processes (Ostermann, 2015). These communities play a role in shaping members interactions with each other and with the world. A goal in developing a community of practice is enhancing the collective knowledge of the group while at the same time addressing individual knowledge (Bielaczyc & Collins, 1999).

The established language, routines, and norms of the porcelain course were immediately evident during studio observations, as was the diversity of the students, which emerged as an important facet of the community of practice. Students in the fall semester course, 2016, ranged in age from 18 to 86. Students also ranged widely regarding university major, representing engineering, business, pharmacy, education, science majors as well as fine art and art education. A majority of students in the course were enrolled for multiple semesters; some have continued to enroll for a decade or more. Field notes capture first impressions of the classroom community during the initial observation in the studio at the University of New Mexico.

The diversity of students is remarkable. Upon asking students, I have found that there are people from all over the United States and from multiple different countries.

There are also students from all different university majors. The course is not

exclusive to fine art or art education, which is unique for a ceramic studio. I have never seen a community of students more diverse in age and culture; it is astonishing how seamlessly the students interact and share the space. (observation, September 10, 2016)

The diverse backgrounds of students in the class allowed for rich interactions between students that began with mutual respect and a desire to learn from and about each other. Observations show students going out of their way to develop and nurture meaningful relationships with peers.

**Importance of peer relationships.** Peer relationships emerged as a common facet throughout observations and interviews. A result of peer mentoring, relationships were easily formed and maintained, often growing into genuine friendships. Of participants interviewed 7 of 10 referred to the community in the Arita Tradition of Porcelain course as a family. All interviews noted relationships of caring and closeness. It became apparent through field note observations and interviews that students within the community saw each other not only as resources, but also invaluable contributors in learning and encouragement.

My relationship with peers in the class is very supportive and helpful because we are all trying to learn the same techniques. This has a positive and comforting effect on my learning. (M. R., personal communication, January 13, 2017)

Students in the Arita Porcelain course made conscious efforts to help and encourage others in the class. Each participant interviewed indicated sharing a common goal in the learning process lessened individual competition and created a common ground that students accessed in their own way. There was a heightened level of understanding and respect

gained through the difficulty of the learning Arita Porcelain process that built strong relationships and inspired students to continue learning and struggling together.

The studio itself is unique in that there is an air of respect and pride in what happens there. UNM is lucky to have such a program because the tradition is so protected in its motherland and the students who study at UNM quickly learn how special it is.

With that being said, it's held dear by everyone who studies it and we all become like family; eating together, sharing our personal lives with each other and caring for one another as people tend to do in families. (M. M., personal communication, December 16, 2017)

Participants indicated relationships were of profound importance in learning, with consideration and care common motives for peer interactions. The community of practice made extra efforts to include and help others. The following arts-based research photographs and reflections are a result of interactions with the Arita Porcelain community.

This week a student in the porcelain course gave me acorns. She was giving them to students for no reason other than she thought they were interesting and beautiful. I agree. I don't think she had any idea how happy they made me. I have decided to use them for inspiration for my next series of work. Acorns are small and intimate, full of detail and wonder. (observation, October 4, 2016)



*Figure 9. Acorn Jars*

Carving the lids of the acorn jars were a reminder of how crystals form, each one begins with a geometric pattern but somehow branches out in its own movement and shape. The jar series contained many acorns. Each one became individual with distinct features, shape, and personality. The acorns jars came to symbolize participants and the entire community of practice, each jar was unique, capable of standing alone and yet belonging to the whole group.

In reflecting on the acorn jars I made over the past couple weeks I am struck by how much each one has come to represent the different participants I have interviewed. Each jar started with a general idea, but evolved organically and transformed into its own unique persona. I feel as though I can take the lid off and hear the words and

stories of recent interviews. Reflection on their words goes hand-in-hand with the carving process, each time I carve into the clay, deeper meanings surface; layers of ideas come to light. Things I thought insignificant at first, like a small acorn, have come to hold great meaning and proven insightful and worthy of exploring deeper, just like each interview and interaction with the porcelain community. (observation, October 26, 2016)

The overall sense of belonging among the Arita Porcelain community and environment was held in high regard, participants created genuine friendships with classmates that extended beyond the course into everyday life.

My peers are like family, cousins, sisters and brothers, even uncles and aunts.

Everyone has different experiences and insight that they can offer. When it comes to learning, often times others can see the process from a different angle and give feedback that helps you find a better, more efficient or effective way to approach your work. We accomplish a lot more when we work together or are even just able to discuss and get feedback on what we want to accomplish. A few encouraging words and a little constructive criticism go a long way. It helps us to understand if we are on the right track or if we should choose a different approach to what we want to achieve. (M. M., personal communication, December 16, 2016)

**Shared values and sense of belonging.** Observations and field notes highlighted the feeling of belonging in the Arita community during each studio observation at the University of New Mexico. The sense of belonging in the studio translated directly to the relationships within it and set a tone for peer mentoring, a key facet to the porcelain methodology.

Of participants interviewed, seven mentioned concern for others and care for relationships transferring to other classes and relationships in their daily life.

I think that the feeling of community has spilled over in my other classes. Where I feel more open and excited in the community of learning in all my classes and am more likely to seek feedback from classmates and collaborate. (K. W., personal communication, October 7, 2016)

The Arita classroom and the people studying in it, acted as a team to create an environment of learning and creative growth. It was a place for friendships and camaraderie that made the environment even more comfortable for its students to allow creative prosperity. The ability to have such an environment came from the teacher, the tradition, and the students. It was and is a special class that means so much to me. It is where I created and where I made most of my lifelong friendships. The other students, simultaneously struggling to master this tough but unique tradition created a bond that has lasted post graduation. (C. R., personal communication, November 22, 2016)

Communication, collaboration, and cooperation were facets that surfaced through crystallization in relation to shared values within the community. These proved important aspects of the peer mentoring that defined Cyman's contemporary vision of apprenticeship and were purposefully introduced to the community of students on multiple occasions.

Throwing porcelain definitely reinforces discipline and the need to be inquisitive. You quickly realize that if you do not take pride and spend the necessary time in making pieces, the quality of your work suffers a great deal. Also, you learn that everyone has a different perspective on the process and what works for them. Asking

questions and interacting with peers helps us refine our own craft. In other areas, the same applies. If you don't fully understand how to handle a situation, you have to inquire, do some research and put in a lot of hard work. Collaborating with the porcelain community helps us all grow. (M. M., personal communication, December 16, 2016)

Participants connected communication and cooperation to feelings of increased trust and support of peers. In interviews, Cyman defined an overall sense of altruism as being a guiding principle in decisions made about the course and community interactions. She hoped students would be embraced these values and share them with other students.

Field notes and interviews confirm care and genuine relationships proved integral to the methodology of the Arita Tradition of Porcelain. Participants experienced compassion and shared values, extending learning beyond what is capable of an individual in isolation. All interviews documented a shared sense of ownership and commitment to the studio space and the community of artists working in it.

The Arita porcelain studio is a community setting. It is rare to be alone in the studio for an extended period of time; more often than not, there are multiple people using the space simultaneously. The Maori Core Cultural Values play a huge role in the functionality of the studio. Respect for the teacher, the studio, the students, and the work are essential to keeping the studio running peacefully. Reciprocity can be seen in the shared space and tools of the studio. Mutual respect is the basis of the relationships built in the studio. This respect leads to communication and collaboration amongst peers, allowing for students to share their insights about the process with each other. (A. B., personal communication, November 24, 2016)

It became apparent through observations and interviews that the function of the studio environment and effectiveness of genuine relationships that emerged were a direct result of the Arita Porcelain community's most commonly shared values, the Maori 5Rs Core Cultural Values. These values governed all community interactions in the classroom environment and were accepted and valued by all participants. Although the 5Rs were considered in initial interview questions, they emerged as much more meaningful and relevant to participants than originally thought. As such the 5Rs make up the third main facet that emerged through crystallization.

### **Facet Three: The Maori 5Rs Core Cultural Values**

Perhaps the most important facet is the Maori 5Rs Core Cultural Values. These values unified all other facets. Although they were used in developing initial interview questions for participants, the 5Rs emerged as much more significant to participant experiences than originally thought. Like a light shining through crystals, it connected each facet, reinforced concepts, and brought new insight. The 5Rs emerged as integral to the function of the instructional practices, environment, and community of practice.

The Maori 5Rs Core Cultural Values are respect, relationships, reciprocity, redistribution, and responsibility. They are believed by the Maori peoples to be common to all Indigenous cultures (Advancement of Maori Opportunity, 2004). Findings indicate the 5Rs had an impact on every aspect of the studio environment, community, and individual student learning as evidenced by observations and field notes. All participants interviewed attributed a great deal of importance and personal relevance to the 5Rs both in the Arita Porcelain classroom and in daily life.



The 5Rs are taken very seriously. This allowed for a studio open to creativity and friendship. These qualities are what made the atmosphere so special. (R. P., personal communication, November 4, 2016)

Field notes and interviews confirmed the functioning of the environment and community interactions benefited from an immersion in the guiding values of the 5Rs. The 5Rs embody a poetic simplicity that each student, regardless of cultural background, could access, relate to, embrace in their own way, and easily adapt to their art, interactions, and life. Following are excerpts from interviews that collectively summarize participant experiences with the 5Rs.

These five values are sort of like our commandments in the studio and wherever we are out representing Arita Porcelain, but also, in everyday life, I think they are a recipe to build integrity in a person. We strive to have and show respect for the process, the end product, each other and the people who appreciate our work.

Reciprocity I think holds more importance than it might seem. If we do not support each other, show encouragement and stand by one another when we need it, the whole of us falls apart. Everyone contributes to the community in some way, but if only one person does all the work, makes all the effort and no one else does, the community collapses. Redistribution to me is similar to reciprocity because if unused resources are not shared or too much is taken for oneself and hoarded, this also affects the community. If you see that someone or a place is lacking something that you have an excess of, it benefits others and yourself to share what you have so that they can better contribute to the community. Since humans tend to be social creatures,

relationships are also very important. (M. M., personal communication, December 16, 2016)

I was delighted to learn about the 5Rs the first time I heard about them. It was wonderful to discover a culture made an effort to contemplate and distil them into existence. They summed up a philosophy for the studio. They made it easier to let your work go sharing it with others. I feel the United States, in general, needs to embrace these values. (R. O., personal communication, September 7, 2016)

Among the 5Rs, relationships were attributed a heightened importance in the learning, environment, and community of the Arita Porcelain course. In interviews, participants not only highlighted the importance of their relationship with their peers but also with their teacher.

**Student and teacher relationships.** Relationships emerged as an integral part of the 5Rs and also the Arita Porcelain community of practice and studio environment. Field notes document Cyman actively modeling the importance of the 5Rs in teaching and learning situations and also modeling the importance of building relationships.

Today Cyman gathered the class to reflect on the 5Rs. She asked each student to list them and write a short paragraph on how they embody these values when in the studio. She also asked students to think about how they can further incorporate the 5Rs into their relationships and daily lives. The discussion that followed was rich and meaningful, with students eager to share what they had wrote and hear each other's input. (observation, November 4, 2016)

Participants interviewed commented specifically on their relationship with their teacher. Not only did data show participants having respect for Cyman's extensive

knowledge of Arita Porcelain, they were also inspired by her technical skill, and admired how seriously she takes her role as professor of this unique course. Following are excerpts from interviews exemplifying participant experiences of their relationship with their teacher.

Professor Cyman takes the Arita porcelain method seriously. But this is because it is so important to her and she has a lot of respect for what she does. She holds her students to the highest standard and always encourages them to push their limits, to make the best work that they can. If she believes you are not putting forth your best efforts, she will let you know, but she tries to do it in a constructive and courteous manner. I know that she really cares about her students, not just in how they are progressing in her classes, but also how they are doing in their everyday lives. She makes extra efforts to check on people and encourages them to take care of themselves. She always acts with the 5Rs in mind, which is why our relationships with her are so meaningful (M. M., personal communication, December 16, 2016)

I would say that she (Cyman) is very wise and I enjoy that she does not only teach art, she teaches her students values that they can carry outside of the classroom and into the rest of their lives. For example, she promotes mental and physical health, creativity and critical thinking, and she urges her students to be aware of their impact on the environment and others. The 5Rs have really helped me build real relationships with my peers and my teacher. (M. R., personal communication, February 27, 2017)

I would describe Professor Cyman as a natural born teacher of values. Sensei Inoue chose her for a reason. A master recognizes a master. She is as complex and challenging as the subject she teaches. I find myself marveling at the lessons she

manages to impart to such a diverse group of students. (R. O., personal communication, September 7, 2016)

Cyman's relationship with her students follows that of a master and apprentice relationship. She has made a commitment to pass on the tradition and simultaneously continues to learn alongside her students. She acts as a mentor or guide throughout the process of learning, stepping in when she feels it is necessary and allowing students to make mistakes and discover on their own. In interviews, Cyman was the first to admit the difficulty of the process and hopes of encouraging students through stories of her own learning and struggles.

Over the years I have heard her (Cyman) say many times, "maybe in my next lifetime I will be good at this process; there is always more to learn." It is encouraging and inspiring to students to learn along with their teacher. It shows them learning is a continuous process that we all engage in together. Stories of her struggles throughout the years are powerful and let students know that their own struggles and failures are an equally important part of their learning to be expected and embraced as critical to future successes. (observation, December 9, 2016)

### **Summary**

In summary, three main facets emerged through arts-based research and crystallization analysis on the data:

1. Facet One: Importance of the methodology and studio classroom environment.
2. Facet Two: Active engagement in a community of practice.
3. Facet Three: The 5Rs Core Cultural Values.

Findings from field notes and student interviews indicate the Arita Tradition of Porcelain course provided meaningful and culturally relevant learning experiences to students of varying ages and cultural backgrounds. Findings also indicate participants experienced a sense of belonging in a community and environment strategically set up to promote art making and collaborative interaction.

Participants experienced a genuine and intrinsically motivated connection to the process of learning the Arita Tradition of Porcelain. They also experienced a sense of belonging to the community, developing lasting friendships with peers that extended into their daily lives. The connections they made to each other and to the learning process are real, meaningful and hold inspiration in a future of continued learning.

The following chapter will look more closely at findings, arts-based research, and connections to the research question. It will also incorporate sub-facets that emerged through crystallization data analysis, recommendations, and suggestions for future research.

## **Chapter Five: Summary and Discussion of Findings**

In order to increase clarity, this chapter will briefly restate the research problem, data collection procedures, and methodologies used in data analysis. It will also present a summary of findings and a discussion of results as well as recommendations and suggestions for future research.

### **Research Problem**

In public schools students are socialized into seeing their peers as competition rather than resources in learning. The result is a de-humanizing educational experience and a detached attitude towards others (Fromm, 1994; McLaren, 2015). There is a need for change in curriculum and teaching in order to re-connect with and re-center students. Rather than promoting academic learning alone, education must also aim to provide a moral education with an emphasis on nurturing wellbeing, increased personal meaning in learning, and genuine relationships (Freire, 2009; Noddings, 2015). There is also a high need for schools to become more culturally relevant given the increasing diversity of today's students (Reardon, Nordland, & Zuber, 1994). Wellbeing and connections to peers should be a top priority in education and in society as it impacts student success in all other areas of learning (Yee, 2015). The research question in this dissertation is: How can art education be better utilized to promote increased meaning in learning, community engagement, and culturally relevant pedagogy?

### **Potential of Art Education**

Art education provides a connection to learning and self-expression that is fundamentally human. Art classes can be structured in ways that are designed to connect to students in a meaningful way and build genuine relationships among peers. This dissertation

used the *Arita Tradition of Porcelain* course at the University of New Mexico as an example of art education that promotes meaningful connection to the learning process, the studio environment, and community of peers among participants.

### **Data Collection and Analysis**

Three main facets emerged during data analysis and the crystallization process that were directly related to the research questions, and proved vital to the structure and function of the *Arita Tradition of Porcelain* course:

1. Facet One: Importance of the methodology and classroom environment.
2. Facet Two: Active engagement in a community of practice.
3. Facet Three: The Maori 5Rs Core Cultural Values.

Following is a summary and discussion of findings revealed in the three main facets. As this dissertation is a layered account, findings are provided from multiple perspectives shifting between academic research, narrative, and arts-based research.

The first facet that emerged through crystallization and arts-based research analysis was the significance of the *Arita Tradition of Porcelain* methodology and the physical environment in which it exists.

**Facet One: Importance of the methodology and classroom environment.** The *Arita Tradition of Porcelain* classroom environment was intentionally designed with collaboration among students and the unique steps of the *Arita Tradition* of creating vessels in mind. In interviews, Cyman noted the importance of the physical space in conveying significant class values.

The studio space is influenced by studios in Japan and designed with the idea of high levels of production and creative flow. The 5Rs were important values to instill into

the space and studio interactions. Also important was the aesthetic values of beauty, quality, and functionality. The classroom serves as a setting promoting communication and cooperation among students as well as active engagement in this difficult art form. (K. C., personal communication, October 12, 2016)

The routines and norms of the physical space allowed participants to interact and work together as a team in a reciprocal learning process and set the stage for genuine community interaction. Student isolation and competition were not part of the norm in the studio classroom environment. Collaborative learning allowed for meaningful connections with peers as well as the 400 year old tradition of pottery making.

*Connection to Arita instructional practices and traditional process of creating.* The traditional process of throwing porcelain pottery, the nature of the clay, and the refined outcome of the finished work struck a chord in participants. Field note observations recorded participants connecting to an endless process of trying, failing, getting frustrated, celebrating small successes, trying again, looking to others for guidance, offering guidance, taking risks, and engaging in a continuous challenge. The difficulty of the material alone warrants a high level of respect for the process and the hard work needed to succeed. The camaraderie built through struggling towards a common goal made competitiveness a rare occurrence.

I have a great deal of respect for the students in the porcelain course. They are committed and dedicated, spending hours repeating the basic steps of the tradition. It is an extremely rewarding process because it is so difficult. We have all struggled due to the nature of porcelain. This has made us more supportive of each other and proud when our hard work pays off. (M. P., personal communication, January 4, 2017)



In general, there is little awareness in the United States of the hard work and dedication that is needed in order to create a high-quality piece of art (Carter, 2008). The students of the Arita Porcelain course do not take their art lightly; they do not approach it as a fun recess activity. They approach creation within this tradition with dedication, persistence, and perseverance. Students have made a commitment to work hard and create quality work as a matter of pride.

Learning a traditional art in Japan is a transformative experience designed to encourage individual change. To become what one is capable of being requires in-depth, diligent, and long-term practice (Carter, 2008). The learning of a Japanese traditional art is never an effortless or casual undertaking, it involves everyday practice, and is intended to immerse a student in the pursuit of the highest achievements attainable; this involves a serious commitment to studying over the course of a lifetime. It is expected that students will take ownership of their learning and become immersed in the process of connection and understanding (Deutsch, 2008).

There is an altruistic sense to how students create and regard their work and the work of their peers. Acceptance that the quality of individual work affects the work of the community as a whole emerged through field note observations and was a norm in the studio classroom environment. Observations recorded students as well as the instructor pushing each other to elevate the beauty, quality, and functionality of their work. This, in turn, impacted the researcher's arts-based research process.



*Figure 10. Cup Carving*

Today in class students learned about surface decoration and were challenged to incorporate carving and painting designs into their work. Cyman spoke of the importance of the design or pattern becoming a part of the vessel, rather than simply adding color or design on the surface, thought should be given to how the pattern enhances the integrity of the piece and becomes a part of it. Patterns and designs, either painted or carved, should embody beauty, quality, and functionality.

(observation, November 13, 2016)



Figure 11. Carved Cup Series

Inspired by Cyman's talk on carving and surface design, I have started a series of cups. Instead of imposing a predetermined pattern, I approached each cup as a unique form in which the patterns emerged organically. I have really connected to the carving process throughout this research, so much insight lies below the surface level of things. The students in the class have also approached surface design with their own uniqueness bringing a little piece of themselves to each vessel they design.

(observation, November 22, 2016)

***Connection to content.*** Several factors emerged through data analysis that influenced students having a meaningful connection to the content in the course. First, the content was student-centered and accessible to all participants who were able to relate to it on a personal level. This made the tradition relevant to the participants engaged in the process.

Second, the content of a 400 year old Japanese cultural tradition was highly respected by all studio community members, above all the instructor. Her regard of the Arita Tradition and incredible skill level in creating within it made her passion for the content evident and inspiring to students. Participants understood the reason for learning this tradition and valued being a part of carrying it on and keeping it alive. As a result of engaging in the Arita Tradition of Porcelain course and travel to Japan, participants felt connected to past, present, and future.

Cyman is a fabulous instructor. She is passionate about the Arita process, its preservation, and passing it on to future potters. She understands the magnitude of her role as the only professor teaching this tradition outside of Japan. Her students do not overlook that significance either. Being a part of this tradition connects to all the potters of the past, to each other in the present, and to future potters. (A. B., personal communication, November 1, 2016)

The third factor that influenced students having a meaningful connection to the content in the course was the challenging nature of the material and process of creating. Interviews show participants reflecting on the Arita Porcelain process as providing infinite possibilities for learning throughout a lifetime.

I adore the porcelain community. My life is much richer having met them. These relationships have restored some youth in me. I often learn new things and new techniques from Cyman and my fellow students. There is always more to learn. I will continue to create porcelain vessels for at least two reasons:

1. I will never master the medium in my lifetime.

2. Every time I make a piece, I create something that has the potential to greatly outlast my life.

My porcelain pieces provide a means of leaving something of myself that extends beyond my mortality. (R. O., personal communication, September 7, 2016)

This quote represents many participant experiences with the content and the determination to rise to the challenge of creating within the Arita Tradition of Porcelain. Findings suggest that challenging content is related to intrinsic motivation to learn. Participants became more invested as challenges increased. The space of the classroom was guided by patience and perseverance in the face of these challenges providing more meaningful engagement with content.

The factors that emerged through data analysis and influenced participants having a meaningful connection to the content in the course align with current research on increasing student wellbeing, as noted in chapter one, there are three main things schools can address with wellbeing in mind. First is increasing student's positive and meaningful experiences in school, second, promoting and fostering genuine peer relationships, and third validating student's sense of belonging (Aldridge, et. al., 2016). These were all present in the Arita Porcelain studio and community of practice.

***Connection to the physical environment.*** The physical environment of the Arita Porcelain studio played an integral role in the interactions of the students and the quality of the porcelain pottery being made. The environment itself contained the aesthetic values of beauty, quality, and functionality. As a norm, attention was paid to the physical appearance and aesthetic of the studio classroom environment. It became clear through analysis that participants felt the physical environment had an influence on the art made within it.

We are taught to revere the studio as a library for creative minds. The space helps us center and focus on creating. The way the studio is set up and functions allows each of us to make our best work. I really think watching others interact and create has made my work better. It has definitely given me an appreciation of the studio space. It is more than a comfortable environment, the studio has an energy that pushes us towards transformation of our work and ourselves (C. P., personal communication, January 4, 2017)

The physical layout of the classroom was purposefully set up for fluid creative engagement with the porcelain process and the community. The space, designed for continuous activity, had a calming, quiet, and meditative quality that resulted from student's respect for the environment and their peers. It became evident through field note observations and interviews that participants regarded the studio as a special place where they were able to make sense of the process as well as other aspects of their lives.

*Aesthetic experiences.* It is worth reiterating here that eight participants interviewed believed the physical appearance of the classroom had an impact on their art, relationships, and overall sense of wellbeing. As noted in the literature review, the aesthetic appearance of a physical space has an effect on those who frequently occupy it (Taylor, 2009; Ultanir, 2012). Many of today's classrooms continue to have blank walls and desks aligned in rows, these spaces are not conducive to promoting peer interaction or inspiration in the learning process (Noddings, 2013). They are standardized and sterol, setting a tone for individual competition and isolation. Transforming the environment itself can help to transform interactions with people engaged in the space and meaningful connection to content.

Aesthetic experiences involve the whole person and specifically highlight the senses and emotions. Redies (2015) suggests two stages necessary to an aesthetic experience. The first is a formalist stage and based on fundamental experiences that occur naturally and universally across cultures. The second stage is context based, dependent on environmental circumstances and perceived presentation of information. This stage will be interpreted differently based on student's cultural background and prior knowledge. The way the physical context is set up for learning can impact how the students interpret the environment and access information especially students from diverse backgrounds (Hobbs & Kelly, 2017). This should be taken into account when designing and creating a physical classroom environment.

Cultural tools exist within students and classroom environments that create and transform relationships to peers, content, and knowledge construction. Students rely on the use of these cultural tools much the same as prior knowledge, to aid in creating and understanding new knowledge and experiences. Students inherently possess these cultural tools, they cannot be taught or imposed by an outside institution. In a typical classroom these tools are often placed at the margins of learning and interaction, which does a disservice to the way students approach and interact with their environment and also receive and interpret information. (Cornelius & Herrenkohl, 2004).

The Arita Tradition of Porcelain classroom environment served as a model of a space intentionally designed to increase comfort in creating art and interacting with the classroom community regardless of cultural background. Ideal classroom environments promote learning as a sense of belonging in a safe and trusted space (Tsiakara & Digelides, 2015). Thoughtful planning on the part of the instructor can transform the physical space of the

classroom setting into a 3-dimensional textbook designed to enhance educational goals and individual, as well as group learning. This type of environment responds to the needs of the community and reinforces a sense of belonging (Taylor, 2009). This leads to the second facet that emerged through crystallization and arts-based research, the significance of belonging to a community of practice working toward shared goals.

**Facet Two: Active engagement in a community of practice.** Students did not separate the environment of the Arita studio classroom from the community of artists working within it during observations and interviews. The studio environment and community created and sustained one another in a symbiotic and reciprocal relationship. Findings show the Arita Porcelain community of practice became a team, a family, working together to create and sustain high quality artwork and a beautiful environment for creating.

Findings also show participants felt a strong and genuine connection to their community of peers. Participants cared not only about the success of community members in creating porcelain but also about the general wellbeing and happiness of each other's lives outside of school. It was common for friendships to be formed that evolved into a closeness associated with family that extended beyond the classroom. Participants noted many of their closest, life long friendships began in the Arita Porcelain course.

The success and happiness of my peers in the Arita Porcelain class is important to me. Through learning together, we have shared and over come many difficult situations. I not only feel comfortable asking for their help with porcelain, but I also seek their advice about other problems in life. The friendships we've made will last throughout our lives. We have grown to really care about each other. (R. P., personal communication, January 4, 2017)



More opportunities for genuine relationships with peers are need in schools today. Isolation and competition do not set a stage for meaningful interactions with content and peers (Noddings, 2013). An important shift occurred in the community of the Arita Tradition of Porcelain course in which students saw and interacted with each other as resources rather than competition. This helped set the stage for creating and maintaining genuine relationships. When students share in struggles and see each other as allies, learning becomes humanized (Fromm, 1994). This should be taken into account when designing curriculum and the environment as it impacts the community and the learning possible.

***Student and teacher relationships.*** Cyman referred to the Arita Tradition of Porcelain course in the United States as a contemporary apprenticeship. Similar to Japan, students learn one-on-one from the master teacher, but they also learn from each other in a larger group. They progress together sharing goals and mentoring each other, adapting the one-on-one apprenticeship relationship to that of a community of apprentices, rather, a community of practice. Participants came together to form a group that actively assisted in peer learning. As noted, participants in the Arita Porcelain course ranged in years of experience and ability level, each having unique insight to contribute to the group, building relationships of reciprocal learning through the art making process.

***Reciprocal learning.*** Reciprocal learning was a valuable aspect of peer relationships and also relationships between participants and their instructor. Reciprocal learning proved a significant facet in building relationships. Field note observations noted students teaching and learning from each other as a symbiotic process in which individual success and group success were inseparable. According to Freire (1998) all learners within a community of practice, including the teacher, are engaged in the process of actively constructing

knowledge. In such a context, the teacher is also a learner. Freire (2009) used the term *reciprocity of action* to define what occurs when teachers and students learn together. This process involves collaboration between all individuals in the classroom working towards a shared goal.

Brown and Campione (1998) outline essential characteristics for a community of practice. First, students must actively seek knowledge and share it with each other. The teachers provide guidance and support ongoing inquiry, allowing the community to grow organically. Finally, the whole group touches base periodically to track and review progress. A. Brown (1994) describes learning in a community of practice as distributed expertise, a process in which the students co-construct their curriculum, changing and growing together. This is similar to Freire's (2009) concept of reciprocity of action and was evident in interactions within the Arita Porcelain studio.

Participants in the Arita Porcelain course shared a unique relationship of mutual respect and reciprocal learning with their teacher and their peers. Cyman, as well as advanced students actively modeled values important to the Arita Porcelain instructional practices and the rewards of working towards attaining the highest quality art possible both individually and collectively.

Cyman's students' work and abilities to create are in direct relation to her teaching style. She never made it seem as though we couldn't learn or be a part of this tradition. If we worked hard and paid attention to her teachings, we would be successful. She never failed to be uplifting, wise, kind, and inspiring to us all. Rather than learning from her, we felt we were learning along side her. This made a

difference in the work we made and our motivation to do better. (C. R., personal communication, November 3, 2016)

Mutual respect for community members and the Arita Tradition of Porcelain, reciprocity of action, and the seriousness participants felt in taking responsibility for their learning added richness to the personal relationships participants experienced. All these characteristics are aspects of the Maori 5Rs Core Cultural Values (Advancement of Maori Opportunity, 2004).

Crystallization and arts-based research indicate the primary reason the community interactions and classroom environment of the Arita Porcelain studio functioned so well was the underlying impact of the 5Rs. They framed each action and interaction that occurred during travel to Japan, field note observations, and interviews throughout the study and rose above all other facets in terms of significance to participant experiences. The 5Rs hold many implications for art education and general education regarding culturally relevant teaching.

**Facet Three: The 5Rs Maori Core Cultural Values.** The Maori 5Rs are respect, reciprocity, redistribution, relationships, and responsibility (Advancement of Maori Opportunity, 2004). They are beautifully simple, accessible, and were easily adapted to prior knowledge and cultural tools of participants. Findings indicate the 5Rs offer possibilities for adapting classrooms to be more community centered and culturally relevant. As with any guidelines for behavior in classrooms, the 5Rs have to be introduced in a genuine way that is accepted as valid and acted on by all members of the learning community, as was the case in the Arita Tradition of Porcelain course. Students not only embraced the 5Rs in the classroom but also made meaningful connections to the 5Rs in their lives outside of school. Several participants referred to the 5Rs as a way of living.

Analyzing the impact of the 5Rs on art education, the community of practice and the classroom environment of the Arita Tradition of Porcelain shed light on the interconnectedness of each and reinforced the importance of building culturally relevant strategies into all aspects of an educational experience. The community of learners, environment, and types of learning approaches that are valued and modeled by the teacher have a significant impact on the outcome of learning (Ladson-Billings, 1995). Any classroom setting can benefit from critically reflecting on how the community and environment can be intentionally set up to encourage strong learning strategies, genuine community involvement, and cultural diversity. Findings indicate these facets can aid students throughout a lifetime of learning and transformation (Claxton, 2014).

Underlying values are promoted in how teachers approach setting up classrooms, routines, and how they incorporate collaborative learning among students. Skills, knowledge, and values actively modeled by the teacher impact the learning within any classroom environment (Claxton, 2014). Participants in this study actively embraced the incorporation of the 5Rs as values in learning the Arita Tradition and in community engagement.

The Arita Tradition of Porcelain course demonstrated a shift in classroom structure from isolated individual learning to an active emersion in learning that values collaboration and meaningful connections to learning as well as cultural awareness and personal transformation. These are a key features of wellbeing and culturally relevant pedagogy (Ladson-Billings, 1995).

## **Cultural Relevant Pedagogy**

The United States has experienced a major demographic change in terms of race, culture, and diversity (M. Brown, 2007; Brown-Jeffy & Cooper, 2011; Nieto, 2015). The increased diversity of schools poses a challenge for educators in responding to this cultural shift in a way that provides all students an equitable education that both addresses individual need and the collective needs of the whole group (Nieto, 2015). Culturally relevant teaching is a strategy for consciously incorporating students' cultural background knowledge and experiences to help them succeed in school (Irvine, 2010). According to Ladson-Billings (1995) culturally relevant teaching involves a systematic incorporation of cultural knowledge as official knowledge, and a willingness to incorporate cultural competence and critical consciousness in a way that aids each student's academic development. Culturally relevant teaching requires going beyond commonly accepted pedagogies of dominant cultural groups and integrating culturally specific art forms that promote active engagement in learning through greater understanding of other cultures, as well as our own in an environment of trust and mutual respect (Eisner, 2004).

Greene (1988) envisioned a culturally relevant classroom environment in which all students feel comfortable enough to perceive, interact, and collaborate with their peers on a human level, existing as they really are. This setting, she hoped, would appeal to student's sense of freedom and curiosity rather than conformity and anonymity. Findings in this dissertation study indicate the three main facets that emerged through data collection and analysis have the potential to move classrooms closer toward this vision. The set up of the physical space as well as student interactions were shown to increase meaningful connections

to the classroom, content, and peers. Participants experienced a valid sense of belonging to the classroom environment, community of practice and the Arita Tradition.

Arts-based research provided a culturally relevant approach to collecting and analyzing data, and enhanced the way participants represented their experiences. Commonly in western research, the focus is on written and spoken words in data collection, which limits the extent to which diverse cultural groups can narrate their experiences (Sunderland, Kendall, Marshall, & Barlow, 2016). This dissertation utilized arts-based research as one form of reflection and data analysis. Following is a more in-depth look at arts-based research data and findings.

### **Arts-Based Research**

In the first semester of the Arita Tradition of Porcelain course, students receive an article titled “Manji Inoue: Art is a Way, Not a Thing.” It describes Inoue’s art and philosophy. In the article, Inoue reflects on making pottery,

My pieces seem to naturally emerge while I stand at my wheel. It’s almost a habit, something intuitive, perfected over five decades. By definition my craft must combine utility of function and beauty of form...but only by personally interacting with others can you understand what to create. Art is not a thing; it’s a way (p.2).

During travel to Japan, Inoue advised students that creating within this tradition takes effort, discipline, passion, and a curious imagination. He spoke of learning the Arita Tradition as a life-long endeavor that involves strategic planning, hard work, reflection, and dedication. Each piece of pottery teaches something about the next one. Each firing gives insight to work yet unmade. It is a continuous process of learning and discovery. Upon

return to the United States, participants echoed Inoue's philosophy in observations and interviews in terms of dedication and a drive to continue learning.

Sensei Inoue is a great inspiration for me as a student of this tradition. He has spent his whole life living and breathing the porcelain process and sharing it with others. I am honored to be included as part of the contemporary lineage of this tradition. I hope to spend the rest of my life refining my skills and helping others learn and carry on this process. (R. P., personal communication, January 4, 2017)

As a part of follow up interviews with participants, and as another facet to crystallization, a narrative element was added to the dissertation based on porcelain pottery created by participants. This arts-based research element was optional. Each participant selected a piece of porcelain pottery and re-told the story of how it was created. Participants were encouraged to include how the vessel represented their process of learning, transitions in thinking or technique, new insights gained and why the piece held significance to them. Of participants six of the 10 interviewed further engaged in the arts-based research component. Inspiration for this part of the dissertation study began with recognizing that engaging in the process of creation is in itself a form of research leading to personal, often intrinsic growth (Sullivan & Hafeli, 2017).

Sullivan & Hafeli's (2017) recent work in the field of arts-based research emphasizes the research cultures that emerge through communities of practice. Like the community in the Arita Porcelain studio, these communities apply common principles and pursue common goals. They share values, beliefs about contributing to the human good through study, communication, and reflection. There is an overlap between research through creating art that is guided by curiosity, exploration, and experimentation in arts-based research.

Current studies in arts-based research indicate exploration through works of art allows students to see and sense in a different way. Arts-based research assumes artists will invoke insightful, rigorous, and imaginative approaches throughout experiences where knowledge is uncertain (Sullivan & Hafeli, 2017). When viewed as a valid process of inquiry, the combination of art and research have the potential to create educational change and empower art students and teachers (Sullivan, 2014). The personal journey that revolves around moments of insight during creating leads to a unique type of problem solving and discovery.

Inspiration for the arts-based research part of this dissertation was based on excerpts from a poem in *Zen and the Art of Pottery*, by Kenneth Beittel (1998), one of the only books documenting the Arita Tradition of Porcelain. The poem has resonated with me since my first semester in the Arita Porcelain course, 2005.

Inside this clay jug are canyons and Pine Mountains, and the Maker of canyons and Pine Mountains. All seven oceans are inside and hundreds of millions of stars... And the music from the strings that no one touches, and the source of all water... (p.7).

Participant narratives confirm there is much more in each piece of pottery than a simple cup, bowl, or end product. There is a story, a learning experience in each. This part of the dissertation is about honoring participants' stories, research, and art. Narratives shed light on the process of creating as a form of active research and also highlight how creative acts exemplify a culturally relevant approach to data collection, in that the language of dominant western research approaches does not limit participants.

Arts-based research provided a significant lens in which to collect and analyze data. Participant narratives, tied to their finished works of art, show the act of engaging in art



making to be a journey that includes learning, experience, relationships, memories, and meaningful expression. Finished pieces of art stand as a physical record of thinking, experimenting, reflection, and motivation to continue learning. Following is an arts-based research narrative that exemplifies experiences participants had with the act of creating and reflecting on their work.



*Figure 12. C. R. Cherry Blossoms*

This piece was made in my final year at the University of New Mexico. It embodies an accumulation of all of my artistic knowledge and hard work. This piece was made with the intent of showing off the porcelain in all of its glory. Taking inspiration from Manji Inoue and his simplistic and honorable work, I felt this piece had to reach certain expectations in order to be able to show off the porcelain. There are many techniques I learned throughout my years at UNM in order to create something that is so perfect in its simplicity.

After four years of working with this clay and the kilns, I was skeptical for the success of this piece, but was very inspired when it made it through. Many people

will look at this piece and think that in its simplicity it was easy to produce, but knowing what I know now after creating pottery for so long, I look at pieces like this and see many hours of hard work, dedication, and struggle. This piece would not have come to fruition without the immense amount of knowledge I learned from Professor Cyman, Sensei Inoue, and the porcelain community during my years of practice. It is a springboard for similar pieces I intend to create in the future. (C. R., personal communication, December 3, 2016)

This narrative focuses not only on one piece of pottery but also all the efforts and learning that went into its creation throughout the entire process of learning the tradition. The participant also notes inspiration and challenges met along the way.

Among participants, five of six stated that the work of art held personal significance and exemplified collective learning experiences with the Arita process, and the community of practice. Participant responses commonly highlighted intrinsic motivation creating porcelain leading to personal transformation. Each participant indicated his or her work was an inspiration for future work, four participants referenced their work as one step among a life-long pursuit of creating within the Arita Tradition.



*Figure 13. R.O. Corn Jar*

I wanted this particular piece to tell a story, representing corn plants and ghost like shapes. I consciously worked to incise deeper onto the surface to develop shadow and relief relying on hours of carving practice that went into earlier pieces. I recall (Cyman) holding the jar after it came out of the glaze firing, looking intently at the frieze, saying, “I would make these the rest of my life.” I was shocked and embarrassed by her positive critique. She went on to say, “This captures the spirit of where we live.” I eventually came to understand her conviction about it. Since then, I have embraced her advice, developing techniques to carve deeper. I have devised a visual vocabulary of icons and shapes that are meaningful to me, yet decipherable by others. This piece embodies transformation in skill level, technique, and personal expression. Because of this transformation, I feel that I have the capacity to make

narrative porcelain jars the rest of my life. (R.O, personal communication, December 16, 2016)

### **Researcher Reflective Practice**

Arts-based research, like all forms of inquiry, can have unexpected results. Self-study in arts-based research is often multi-purposed including research, teaching, learning, and active reflection (Sunderland et al., 2016). Borrowing from Weber (2014) this dissertation uses an approach to arts-based research that sought to answer reflective questions about new insights, data collection, and the art making process in connection to qualitative research.

Continuing to use crystals as a metaphor, arts-based research expanded organically like crystal structures in nature, each independent and yet interconnected. Images of the work simultaneously represent multiple perspectives and different interpretations. Data emerged through drawing, writing, collages, and porcelain pottery. The body of work created embodies and situates this research in a constantly evolving process containing obstacles, successes, and newly formed insight. Each piece of art represents a lived experience separate and at the same time connected to all other lived experiences during the study.

Creating this work allowed for active reflection on ideas and themes emerging through interviews and research. Just like the participant's pottery and narratives, the arts-based research made throughout this study tells a story of understanding and knowledge construction at a particular moment in time between August 2016 and March 2017. While there is not room in this dissertation to include each piece of art made along the way, several pieces are chosen emulating signposts throughout the journey in arts-based research.

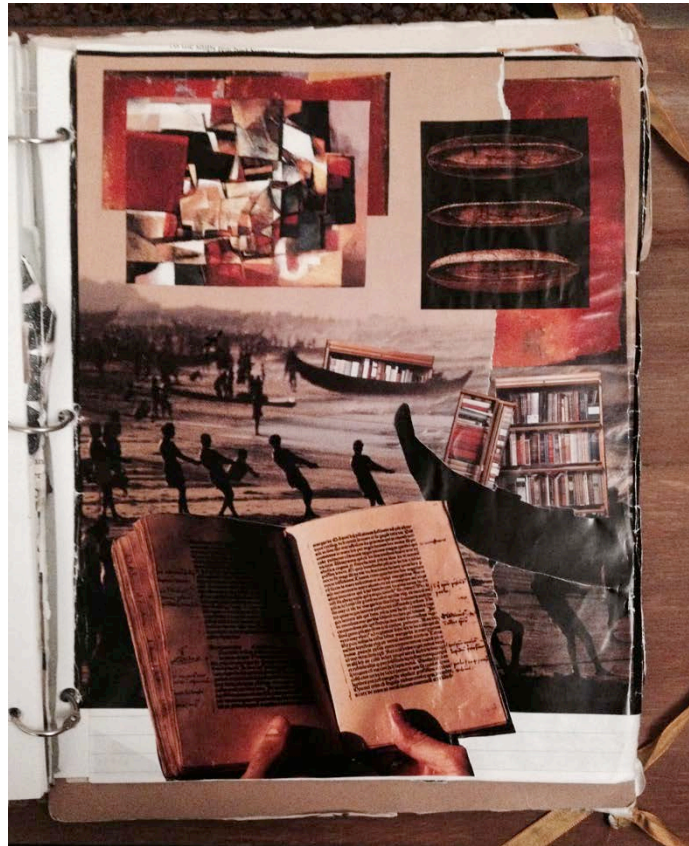
### Reflective Artwork

This collage is made of fragments of things collected during travel to Japan. Among the first in the arts-based research journal, this page became a metaphor for the journey ahead, embarking on the dissertation study. On another level collage became a metaphor for the entire research process. Data collection, observations, and analysis were fragments that needed reassembled in a way that made sense to me and provided insight.



*Figure 14. Traveling*

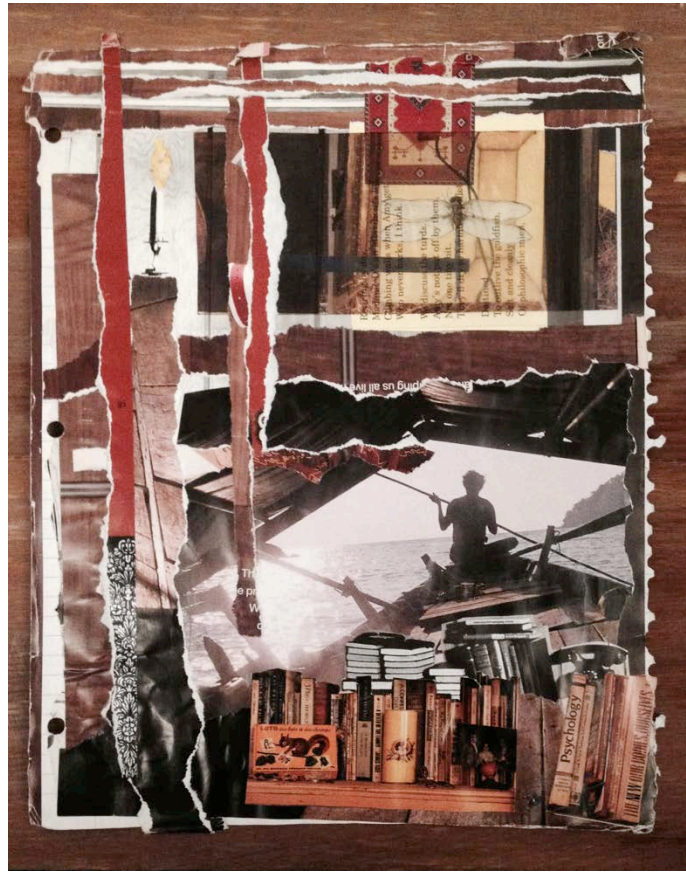
Upon reflecting on the collages made during the study I was surprised at how well each represented a specific stop along the journey and captured the emotions and overall mood of the moment. The following collage was made during the last week of data collection.



*Figure 15. Arriving*

Research nearly completed and all data gathered. Now to put the pieces together.

There are so many insights and ideas to follow, so many currents under the waves. I feel as though I need a village of workers to help me unload and process all this information. At least we have arrived at the shore. (observation, February 19, 2017)



*Figure 16. The Next Adventure*

After collecting and analyzing data I have emerged on the other side equipped with relevant information for fitting the pieces together. Finally everything in one boat. There is light ahead and a dragonfly above, a symbol of transformation. Although I am nearing my goal in this study, learning never stops, it always leads to the next adventure. (Observation, March 17, 2017)

Participant narratives in arts-based research revealed themes I also experienced, including personal significance that exemplified collective learning experiences, intrinsic motivation for making art that lead to increased understanding and personal transformation, and inspiration for future work, thus beginning the cycle of creation over again.

Arts and science research both attempt to illuminate aspects of the human condition. They rely on exploration and revelation in understanding human experiences. There is a profound relationship between arts and science that is emulated in the field of arts-based research (Leavy, 2015). Data collected in this arts-based research section of this dissertation shows examples of finished pieces of art standing as a metaphor for learning, experiences, memories, and meaningful expression. The art is a physical record of thinking, experimenting, and reflection. Arts-based research data indicates transformation occurred among participants as well as the researcher throughout arts-based research regarding thinking about learning and their peers.

Creating art is a human endeavor, as is the process of learning and engaging in communities. The arts-based research narratives attest to connections the process of creating had to participant's inspiration, hard work, community relationships, personal transformation and motivation to continue creating porcelain pottery. These connections would not have occurred without the reciprocal relationship between the three main facets that emerged through the study.

### **Summary of the Three Main Facets**

Again, the three main facets that emerged through arts-based research and crystallization were:

1. Facet One: Importance of the methodology and studio classroom environment.
2. Facet Two: Active engagement in a community of practice.
3. Facet Three: The Maori 5Rs Core Cultural Values.

These facets directly tied to participants' meaningful connections with content, peers, and their environment. Findings from field notes and student interviews indicate the Arita



Porcelain course provided meaningful and culturally relevant learning experiences to students of varying ages and cultural backgrounds. Findings also indicate participants experienced a sense of belonging in a community and environment strategically set up to promote art making and collaborative interaction.

Participants acknowledged a genuine and intrinsically motivated connection to the process of learning the Arita Tradition of Porcelain. They also experienced a sense of belonging to the community, developing lasting friendships with peers that extended into their daily lives. The connections they made to each other and to the learning process are real, meaningful and hold inspiration in a future of continued learning.

Further crystallization of participant experiences with the three facets noted above indicate the instructional practices of the Arita Porcelain course, the studio environment, and the community of students lead participants towards similar outcomes. Through data analysis new themes, or sub-facets surfaced that were common among participants. Future research is recommended in each of these sub-facets.

### **Suggestions for Future Research**

Among the sub-facets commonly noted by participants were personal transformation, a shift in seeing learning as a life-long endeavor, student motivation to learn through intrinsic reward, meaningful experiences with arts-based research, and reciprocal learning. These sub-facets emerged through crystallization as common outcomes participants experienced after immersion in the main facets discussed above, like crystals evolving from the main facets, they became significant to the phenomenon of the Arita Porcelain course. More research is proposed in each of the sub-facets as categories for further research regarding

their influence on meaningful learning experiences, increased community engagement, and culturally relevant pedagogy.

### **Recommendations**

Careful consideration of the physical set up of classroom environments and their effect on students are recommended of educators at all levels of education. Findings indicate the physical space has an impact on the relationships and learning that is possible.

Consideration of classroom routines and norms designed for students is also needed.

Findings indicate an increase in motivation and in-depth learning as well as meaningful experiences with peers exist in classrooms emphasizing reciprocal learning and collaboration rather than isolation and competition. Keeping these instructional practices in mind when designing curriculum has the potential to improve the teaching practice.

Based on the facets that emerged through responses of the participants in this study, teachers should consider how much understanding they have of their students' cultural backgrounds as well as any bias they may hold (Ladson-Billings, 1995). In order to increase communication and cooperation among students and build genuine relationships, teachers should take steps to increase cultural understanding and awareness. Teachers with increased cultural understanding create not only more culturally responsive lessons but also environments that nurture community building. Taking into account cultural backgrounds in designing and implementing curricula can increase student sense of belonging and empower them to take responsibility for learning. These features have also been linked to student wellbeing.

When two people learn something together, and share a similar goal, both individuals have the potential to benefit. This is different from a teacher-centered approach that focuses

on the transmission of knowledge (Freire, 2009). Rather, it involves the active construction of knowledge (Crick, 2005). Incorporating peer apprenticeships and a wide variety of choice in learning empowers students of all ages to construct their own learning process through collaboration and guidance from each other. Although not all classrooms and content will be conducive to the structure utilized in the Arita Tradition of Porcelain course, keeping the three main facets in mind when designing curriculum has the potential to help build peer relationships and personal relevance when engaging students in content. The teacher assumes the responsibility of a mentor or guide, a facilitator of opportunities for knowledge construction and provider of challenges to spark curiosities and ignite passion (Brown & Campione, 1998). In such a context the teacher is also a learner, here teachers and students learn simultaneously (Freire, 1998).

A shift in the idea of knowledge as fixed towards knowledge that is flexible and co-constructed as a shared enterprise is exemplified in many of the Japanese traditional arts. Knowledge construction is a personal undertaking, unique to each student, but also shared with the community as a whole. Relevance is key in connecting knowledge to real life experiences and motivating the learning process intrinsically. Students make a conscious effort to learn all they can from their teacher rather than passively waiting for instruction (Carter, 2008).

Education is a self-generated process fueled by curiosity (Freire, 2009). When curious about the world and open to change, people naturally begin to transform themselves, and others. This learning continues throughout a lifetime, long after students have left the classroom. Curiosity, wellbeing, and intrinsic rewards can motivate learning in ways that grades, tests, and extrinsic rewards/punishments cannot. More research is needed in shifting

the structures within classrooms to involve more student-centered learning and culturally responsive teaching. With high stakes tests and mandated curricula, shifting from a teacher-centered classroom to one that requires full community engagement will not be easy. Public schools have grown accustomed to relying on drill and kill approaches for passing on knowledge and individual competition that reproduces inequality in schools. Raising awareness in new teachers is critical since there is much more involved in learning than regurgitation of facts. Learning is a human endeavor that has the capacity to change minds, change lives, and change the educational system for the better in honor of the very people that make up that system, students and teachers.

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**Appendices**

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### **Appendix A: Interview Questions for Student Participants**

1. When did you start learning the Arita Tradition of Porcelain? How many years have you studied this process?
2. In what ways has learning the Arita Tradition of Porcelain impacted your understanding of pottery making?
3. In what ways has learning Arita Tradition of Porcelain impacted your life outside art making?
4. How has engaging in the community in the Arita Porcelain studio at the University of New Mexico impacted your learning in other academic areas?
5. What influence, if any, have the Maori 5Rs Core Cultural Values had on the way you learn and create porcelain pottery? On your life in general?
6. Describe your relationship with your teacher. Describe your relationship with peers. What roles do these relationships have in your learning?
7. What is the most important thing you have learned through your study of the Arita Tradition of Porcelain?
8. How has engaging in a long-term study of the Arita Porcelain process informed your understanding of Japanese art and culture? Has it informed your understanding of your own art and culture?
9. As an artist, do you feel you are a part of the Arita Tradition of Porcelain or do you engage in the process as an outsider?
10. Have you changed perceptions and/or transformed in any way from the beginning of your study in porcelain up until now?

11. What do you hope to get out of the serious study of this porcelain tradition as an artist and as a learner?

12. In what way, if any, did travel to Japan in 2009, or 2016 impact your study of this cultural tradition?

9. Explain, or tell the story of the porcelain piece you made and brought with you today.

How does it represent your learning process? How does it represent Japanese culture? How does it represent your culture? Why is the piece important to you?

**Appendix B: Interview Questions for Professor Cyman**

1. How did you been teaching the Arita Tradition of Porcelain?
2. Why do you feel it is important to protect and preserve this porcelain pottery tradition?
3. As a teacher, what is the most important thing you want your students to know and be able to practice?
4. What do you hope to see happen with the teaching and learning of the Arita Tradition of Porcelain in the next 400 years?
5. What advice would you give to art educators in connecting to and inspiring students?
6. What is the most important part of your role professor of this course in the United States?
7. What is most important part of your role as an artist?
8. What is the most important part of your role as a teacher?
9. What advice can you give in educating students of diverse cultures and varying ages in the Arita Tradition of Porcelain?
10. What impact has travel to Arita, Japan had on your art and your teaching?
11. How have your teachers influenced you as an artist and as a teacher?

## **Appendix C: The University of New Mexico**

### **Consent to Participate in Research**

#### **Introduction**

You are being asked to participate in a research study that is being done by Nikki Denisson, who is the Principal Investigator and PhD Candidate, from the Department of Teacher Education. This research is studying The Arita Porcelain Tradition and Alternative Approaches to Art Education.

You are being asked to participate in this study because you have experience in studying the Arita Porcelain Tradition and actively engaging in the community studio. Ten people will take part in this study at the University of New Mexico. Three people will participate in Arita, Japan.

This study is not funded.

This form will explain the research study, and will also explain the possible risks as well as the possible benefits to you. We encourage you to talk with your family and friends before you decide to take part in this research study. If you have any questions, please ask one of the study investigators.

#### **What will happen if I decide to participate?**

If you agree to participate, the following things will happen:

An initial interview will be set up in which meet for approximately two hours and I interview you about your experiences in learning the Arita Tradition of Porcelain process of making functional porcelain pottery. We will also discuss your experiences engaging with the studio community and studio setting. Follow up meetings will also be scheduled to reflect on and discuss your experiences more in-depth.

Before the first interview, I ask that you choose a piece of porcelain pottery you have made, that exemplifies an important learning experience or meaningful story you encountered during your study of Arita porcelain. This artwork will be photographed and discussed during the initial interview and in subsequent meetings.

#### **How long will I be in this study?**

Participation in this study will take a total of 6 hours over a period of three meetings.

#### **What are the risks or side effects of being in this study?**

There are risks of stress, emotional distress, inconvenience and possible loss of privacy and confidentiality associated with participating in a research study.

For more information about risks and side effects, ask the investigator.

**What are the benefits to being in this study?**

There will be no benefit to you from participating in this study. However, it is hoped that information gained from this study will help further knowledge about the Arita Porcelain Tradition.

**What other choices do I have if I do not want to be in this study?**

You have the option not to take part in this study. There will be no penalties involved if you choose not to take part in this study.

**How will my information be kept confidential?**

We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in your study records is used by study staff and, in some cases it will be shared with the sponsor of the study. The University of New Mexico Institutional Review Board (IRB) that oversees human subject research and/or other entities may be permitted to access your records. There may be times when we are required by law to share your information. Your name will not be used in any published reports about this study.

**What are the costs of taking part in this study?**

There is no cost to participants in this study.

**Will I be paid for taking part in this study?**

This is not a paid study.

**How will I know if you learn something new that may change my mind about participating?**

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

**Can I stop being in the study once I begin?**

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without affecting your future health care or other services to which you are entitled.

**Whom can I call with questions or complaints about this study?**

If you have any questions, concerns or complaints at any time about the research study, contact the PI at 307-214-9348.

If you need to contact someone after business hours or on weekends, please call and ask for Nikki Denisson.

If you would like to speak with someone other than the research team, you may call the UNM Office of the IRB at (505) 277-2644.

**Whom can I call with questions about my rights as a research participant?**

If you have questions regarding your rights as a research participant, you may call the UNM Office of the IRB (OIRB) at (505) 277-2644. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human participants. For more information, you may also access the OIRB website at <http://irb.unm.edu>.

**CONSENT**

You are making a decision whether to participate (or to have your child participate) in this study. Your signature below indicates that you/your child read the information provided (or the information was read to you/your child). By signing this consent form, you are not waiving any of your (your child's) legal rights as a research participant.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate (or let my child participate) in this study. A copy of this consent form will be provided to you.

---

Name of Adult Subject (print)

---

Signature of Adult Subject

---

Date

**INVESTIGATOR SIGNATURE**

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

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Name of Investigator/ Study Team Member (print)

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Signature of Investigator/ Study Team Member

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Date