A Study of Change: Exploring the Impact of a Professional Learning Community on the

Implementation of a Federal Art Demonstration Grant in Three Northwestern

Pennsylvania Rural Elementary Schools

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This academic research represents five years of work and the realization of a life goal I set for myself on the afternoon of my graduation from Indiana University of Pennsylvania in May, 1973. I remember making the statement to my husband that I would go back to school to get my Master of Education degree, and, eventually, my doctorate. The goal of earning the Master's degree came relatively quickly in my career. I enjoyed teaching and never planned to leave the classroom. It seems my destiny was to do other things that I never really planned for myself. A fast forward through 41 years in public education resulted in a career as a principal, assistant superintendent, and, finally, as a superintendent.

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Dedication

I dedicate this dissertation to my husband, Tom, my father and mother, Jack and Shirley

Kohler, my children, Nathan and Terra, my son-in-law, CJ, and my granddaughter, Stella Mae.

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Abstract

Superintendents and school boards must balance state and federal mandates, requirements

of new legislation, and policy changes as they search for best practices in education that

will result in increased student achievement. Pressure has increased, with an emphasis on

high stakes testing and accountability since the implementation of the No Child Left

Behind legislation in 2001. Federal dollars, in the form of demonstration grants, have

been used by some districts to try innovative instructional practices. The challenge for

school districts is sustaining effective change practices after the grant money is gone.

The purpose of this study is to examine a federal arts demonstration grant, the Art in

Action grant, implemented for three years in three rural elementary schools in northwest

Pennsylvania. Feedback from participants in the grant is used to identify important

characteristics of successful implementation and sustainability. One of the schools in the

study implemented Professional Learning Community (PLC) practices. Participants were

surveyed about their experience with the Art in Action grant. The survey generated a

concourse of statements that formed a Q Set. Twelve participants performed a Q Sort

using the statements from the concourse. PQ Method was used to analyze the responses.

Trained facilitators conducted interviews with participants. Results indicated participants

found the Art in Action experience beneficial for students, especially those with special

needs. Sustainability of the program appeared dependent upon principal support and a

philosophical or emotional connection made by the teacher to the art inclusion

instructional practices. Teachers valued the collaboration time provided by the grant.

Chapter 1

The purpose of this study is to examine a federal arts grant in three rural elementary schools in northwest Pennsylvania using feedback from participants in the grant to determine important characteristics of successful implementation and sustainability. The Art in Action federal grant has infused $1.4 million into Crawford Central School District, PENNCREST School District, and Union City School District over four years. The project has facilitated an innovative approach to teaching reading and math in three elementary schools in these districts. The core subjects have been taught by integrating graphic art, movement, technology, drama, and music. The purpose of the Art in Action grant is to demonstrate an instructional approach for teaching reading and math which results in higher student achievement as measured by the Pennsylvania System of School Assessment (PSSA) and report card grades. Federal demonstration grants are one way that change occurs in education.

Superintendents and school boards must balance state and federal mandates, requirements of new legislation, and policy changes as they search for best practices in education that will result in increased student achievement. Pressure has increased with an emphasis on high stakes testing and accountability since the implementation of the No Child Left Behind (NCLB) legislation in 2001 (Public Law 1076-110). Federal dollars in the form of grants have been used by some districts to try innovative instructional practices. The challenge for school districts is sustaining effective change practices after the grant money is gone.

The Art in Action federal demonstration grant is significant because it examines student achievement in grades three to six in rural Pennsylvania. The grant places an

emphasis on intensive professional development for the teachers in each of the treatment schools. The review of literature indicates that the middle and upper elementary grades are age levels that need more research regarding arts integration instruction. With increased pressure from school boards to hold the line on costs and do more with less, administrators are searching for ways to expend professional development funds most effectively to reach the goal of increased student achievement. This study is also significant because it explores the effect of principal leadership, school climate, and the Professional Learning Community (PLC) concept on the implementation of a federal demonstration grant.

The PLC concept is a framework that defines how the educators in a building interact to foster increased student achievement. Emphasis is placed on time for collaboration through a purposeful design in the master schedule in a school. Teachers in a grade level are given common planning time each day. Teachers are encouraged to write common assessments and use a backwards design to teach concepts. Students are divided into flexible groups, taught key concepts in reading and math, and then assessed to determine if they have learned the concepts. There is a plan for what to do when students learn a concept quickly as well as what to do when students do not learn something. Data analysis is a key aspect of the Professional Learning Community. Cambridge Springs Elementary School is unique as a participating school in the Art in Action grant because it uses the PLC framework. The other two treatment schools, First District Elementary School and Union City Elementary School, use a traditional master schedule. Teachers do not necessarily have common planning time for collaboration (DuFour, DuFour, & Eaker, & Many, 2010).

Problem Statement

It is imperative to understand the impact of the units of study and activities included in the Art in Action grant on student learning as indicated by teachers, building administrators, and guest artists.

Potential Contributions

Prospective applicants to federal demonstration grants may find the feedback from participants in the Art in Action grant informative as they plan their grant applications. It makes sense to include strategies that will insure a successful implementation. It is also the goal of a demonstration grant to showcase an instructional strategy that will result in higher student achievement. The challenge is to insure sustainability of the change after the grant money is gone. Information from this study will make a contribution in the body of research about change in education.

A second contribution from this study is in the research on Professional Learning Communities (PLC). Cambridge Springs Elementary School, one of the treatment schools in the Art in Action grant, uses the PLC framework to insure collaboration among the teachers. Information from this study will add to the growing body of research on PLCs as defined by Richard DuFour (DuFour, DuFour, Eaker, & Many, 2010).

Outcome Measures

The outcome measure for the Art in Action grant is student achievement on the PSSA and on student report cards in math and reading. The outcome measure for the current investigation is a Q Sort and factor analysis of statements from participants in the grant to determine characteristics the participants feel are important to successful grant implementation.

Research Questions

The emphasis of the research is to determine effective characteristics of a successful implementation of a federal arts demonstration grant in three elementary schools in rural Northwest Pennsylvania.

1. What characteristics of the implementation of the Art in Action grant do participants identify as most important to insure sustainability of change in reading and math instruction?

2. What impact does the Professional Learning Community framework have on the implementation of the Art in Action grant?

3. What effect does a principal's leadership and the overall school culture have on the implementation of the Art in Action grant?

4. What patterns or relationships exist between the proposed research and the Art in Action Demonstration grant research?

Limitations of Study

This study is designed to identify characteristics of the successful implementation of a federal arts demonstration grant in grades three to six in three elementary schools in rural Northwest Pennsylvania. A secondary focus is on the impact, if any, of the Professional Learning Community framework on the implementation of the grant. There are limitations to the study that include, but are not limited to:

- Information from three rural elementary schools in Northwest Pennsylvania may not be applicable for urban or suburban schools;

- Information from teachers in grades three to six may not apply to other grade levels;

- Teachers have had different levels of experience with Professional Learning Communities;

- The researcher is the superintendent in one of the districts included in the study;

- There have been staff changes in all three elementary schools in the study, both among the teachers and administrators; and

- The Art in Action grant spanned four school years, which is a short period of time from which to draw data on student achievement and teacher impressions.

The researcher hopes to provide insight into the characteristics of a successful federal grant implementation. Through the current research a list of strategies can be developed as a guide for future demonstration grant participants.

Key Terms

Art in Action- the name given to the project funded by an education model development and dissemination grant provided by the U.S. Department of Education for four years at over $1.4 million for a consortium of three school districts, Arts Erie, Edinboro University, and Allegheny College in Northwest Pennsylvania.

Artist in residence- a professional artist who collaborates with a classroom teacher to design lessons and activities from the planning stage to implementation.

Arts Erie- the first arts' council in Pennsylvania comprised of 11 counties in Northwest Pennsylvania. Charter members include the Erie Civic Ballet, the Art Center, the Erie Philharmonic, and the Erie Civic Theater.

Arts in Education Partnership- established in 1991 with the PA Council on the Arts.

Focus is on arts' integration in the classroom curriculum using artist residencies.

Arts' integration instruction- infusing reading and math instruction with the visual arts, music, movement, and drama.

*Principal/School Leader Rating Tool-*a Pennsylvania Department of Education rating instrument for principals and school leaders based on the work of Charlotte Danielson. It is divided into four domains: Strategic/Cultural Leadership, Systems' Leadership, Leadership for Learning, and Professional and Community Leadership.

Professional Learning Community (PLC)- "An ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. Professional learning communities operate under the assumption that the key to improved learning for students is continuous job-embedded learning for educators" (DuFour, DuFour, Eaker, & Many, 2010, p. 11).

Proposed Data Analysis: Q Methodology

Q Methodology is the method best suited for the current research because it provides a means to gather and analyze opinions of the participants in the Art in Action federal grant. The sample size is relatively small, yet the opinions of the participants can provide valuable information about an arts demonstration grant.

In factor analysis, the researcher is studying a group of variables to determine if there are patterns of association. The procedure begins with the inter-correlation of all of the measured variables that results in a variable-by-variable correlation matrix. A standardized score (*z-score*) is calculated as a mathematical expression of the distance between an absolute score and the mean average score of the measured sample. R Methodology refers to methods that employ tests or traits as variables using a sample of persons.   It is a system that examines group traits, but does not compare individual

differences. Q Methodology attempts to address this concern by inverting the R

Methodology and transforming the people as variables. It is a by-person factor analysis

using individual subjects who complete a sorting of statements. This sorting process

permits individuals to rank or scale statements according to their opinions. The ranking

of statements can be enhanced through a forced or prearranged sort distribution known as

a Q Sort (Watts & Stenner, 2012).

Q Methodology is characterized by two distinct designs. A single-participant

design requires a single person to perform a Q sort on the same set of statements under

different conditions of instruction. In this design, the Q sorter is the subject matter of the

study. A multi-participant design uses more than one person performing a Q sort of a

wide range of statements. Each person performs the sort on the same statements using a

forced Q set design or distribution. Q sort statements are derived from a variety of

sources around a research question. The statements may come from the literature review,

a survey, and interviews. These sources are known as the concourse and it is from the

concourse that the final list of Q sort statements is derived. Ideally, it is recommended

that the researcher use from 40-80 statements in the Q sort. The number of statements is

not important, but rather that the statements reflect a variety of opinions on the research

question. According to Watts and Stenner (2012) a good Q sort has "coverage and

balance" exemplified by the statements (p. 58).

Reliability and validity are important considerations in R Methodology but are not

applicable to Q Methodology. Q Methodology provides a variety of viewpoints of the

participants, and by this method, is valid. The participants are asked to sort items and

express their individual viewpoints on a concourse or discussion about a topic. This

methodology is suited to a specific group providing their viewpoints on a simple research

question within a specific institution. It was selected for this research because it best fits

the purpose of determining opinions of the participants in three elementary schools of

their experiences with a federal demonstration arts' grant.

Chapter 2

Literature Review

A review of the literature for this study is organized under five sections. The first section will set the stage for the study by discussing change research in education. It is important to understand the history of change and consider some of the viewpoints about change in order to place the current study in the proper context. The second section examines the literature about professional learning communities. This provides background information that leads to research about this framework as defined by DuFour, DuFour, Eaker, and Many (2010). The third section discusses the role of grants as a vehicle for change in public schools. The fourth section examines state (Pennsylvania) and national initiatives affecting the arts. The fifth section examines arts' education research in settings around the world and in the United States providing a variety of approaches to educating students. Finally, a description of the Art in Action grant application process is presented to set the context for the current study.

Change Research

A theme in American education is that things are always changing. This statement appears to be a paradox; however, an observation that is difficult to dispute is that no two academic years in a school are exactly the same. There are changes in staffing, curriculum, and types of students served. Furthermore, there are ongoing policy updates as a result of new legislation, litigation, and social pressures from interest groups that force administrators and teachers into a constant mode of change. The superintendent and school board must balance these mandates and forces for change with fiscal responsibility and ultimately define what education looks like in the local school

district. It is a continuous struggle to implement the best research practices in an affordable way to produce higher student achievement and success for all. The pressure has increased with an emphasis on high stakes testing and accountability since the implementation of No Child Left Behind (NCLB) legislation in 2001 (Public Law 107-110). It is critical that change and innovation be purpose-driven in order to meet these requirements.

Everett M. Rogers (2003) studied diffusion, the planned and spontaneous spread of new ideas, over five decades. In his book *Diffusion of Innovations*, he examined the spread of ideas in a variety of situations including agriculture, technology, and education from the 1940s to the 1970s. Diffusion is the "process in which an innovation is communicated through certain channels over time and among the members of a social system" (p. 5).

Early education diffusion studies were conducted at Columbia University Teachers College under the direction of Dr. Paul Mort. Data were often gathered in the form of questionnaires administered to superintendents and principals. The unit of study was the school system. Dr. Mort and his colleagues found that there is a considerable time lag for the adoption of an educational innovation (Rogers, 2003, p. 61). This time lag is a contrast to innovations in business, where new ideas must be implemented on a regular basis for a business to remain competitive and attract new customers. Research and development is often the responsibility of a team or department in a major corporation.

One aspect of diffusion is how interpersonal communication influences the rate of adoption of an innovation. A classic study that illustrates this concept is the diffusion of

modern math among 38 superintendents in Allegheny County in Pennsylvania described by Richard O. Carlson in *Adoption of Educational Innovations*. The study included a socio-gram that identified six superintendents who were friends. They formed a clique in the region. They agreed to implement modern math in their respective districts and the rate of adoption of modern math in the Pittsburgh area increased rapidly as a result. The rate of diffusion was partially attributed to the personal relationships between the superintendents (Rogers, p. 62).

Daniel Duke defined educational change as "a change intended to alter the goals of education and/or to improve what students are expected to learn, how students are instructed and assessed, and how educational functions are organized, regulated, governed and financed" (Duke, 2004, p. 31). He considered change as a "social construction" and that successful change often depends on stability in an organization (Duke, p. 11). Hall and Hord (2010) described change as a process, and not a single event, with the school positioned as the primary unit for change in education. Through their research, they developed Stages of Concern (SoC) which addresses the affective aspect of change including people's feelings and attitudes. They developed a Diagnostic Dimensions of Levels of Use framework to identify behaviors and how people act during a change event (Hall & Hord, p. 93). The Levels of Use categories include Knowledge, Acquiring Information, Sharing, Assessing, Planning, Status Reporting, and Performing. The *Knowledge Level* includes "that which the user knows about characteristics of the innovation, how to use it, and consequences of its use" (p.102). When an individual begins soliciting information about an innovation through questioning experts and seeking resources about the topic, he has entered the *Acquiring Information Level*. The

third level is *Sharing*, where discussion with others takes place. When an individual

begins to examine the use of the innovation, he has moved to the fourth level of the

Levels of Use framework, which is *Assessing*. The next Level of Use is *Planning*, when

an individual begins to make short and long term decisions about schedules, resources,

and organization. In *Status Reporting*, the individual can describe his personal stand on

the innovation. Finally, at the *Performing* stage, the individual actually implements the

activities needed to put into operation the innovation (Hall & Hord, 2010).

Michael Fullan (2001) wrote a trilogy of books on school leadership and the role

of the administrator during a "culture of change." He identified five components of

leadership that reinforce change. The components possessed by a successful change

leader are: having a moral purpose, understanding the change process, improving

relationships, creating and sharing knowledge, and making coherence a perennial pursuit

(p. 3).

James Kouzes and Barry Posner (2007) suggested that "leadership is not about

personality; it's about practice" (p. 63). They listed five common practices of leaders

who have positive leadership experiences. These include modeling the way, inspiring a

shared vision, challenging the process, enabling others to act, and encouraging the heart.

Embedded in these five practices are 10 commitments of leadership. Table 1 illustrates

the relationship between the common practices and commitments of leadership.

Table 1.

Five Leadership Practices and Commitments

Practice	Commitment
Model the Way	1. Find your voice by clarifying your personal values.
	2. Set the example by aligning actions with shared values.
Inspire a Shared Vision	3. Envision the future by imagining exciting possibilities.
	4. Enlist others in a common vision by appealing to shared aspirations
Challenge the Process	5. Search for opportunities by seeking innovative ways to change, grow, and improve.
	6. Experiment and take risks by generating small wins and learning from mistakes.
Enable Others to Act	7. Foster collaboration by promoting cooperative goals and building trust.
	8. Strengthen others by sharing power and discretion.
Encourage the Heart	9. Recognize contributions by showing appreciation for individual excellence.
	10. Celebrate the values and victories by creating a spirit of community. (pp. 71-72)

Lessons can be learned from disciplines outside of education about creating a culture for change and innovations. John Kotter (1996), Konosuke Matsushita Professor of Leadership, Emeritus, at the Harvard Business School wrote several books on business leadership including *Leading Change.* He proposed an eight-stage process for creating major change in an organization. The process begins with *establishing a sense of urgency*. During this stage a crisis, potential crisis or a major opportunity is identified. The second stage is *creating the guiding coalition.* A team of people is organized to help solve the problem. The third stage is *developing a vision and strategy to direct the*

change effort. Next, the leader needs to *communicate the change vision* using every possible vehicle to disseminate the message. Another stage encourages the leader to *empower broad-based action* by getting rid of obstacles and changing systems. Risk-taking is encouraged during this stage. The sixth step in the change process is *generating short-term wins* and making certain to recognize the wins. Next, it is important to *consolidate gains and produce more change* by developing people in the organization who can implement the vision and continue with more innovation and change projects. The final stage is *anchoring new approaches in the culture*. It is important for the leader to encourage more and better leadership, articulate the new behaviors with the organizational system, and develop a means of succession in the organization (p. 21).

In an attempt to synthesize successful leadership principles from the business world, Charles Schwahn and Willam Spady (2006) developed a change model for educational leaders detailed in their book *Total Leaders*. The authors defined a total leader as one who is purpose, value- and vision-driven. He or she is a visionary, relying on future forecasting with a commitment to being a life-long learner (Schwahn & Spady). They listed 15 performance roles of a total leader that include:

- Creating and sustaining a compelling personal and organizational purpose;
- Being the lead learner;
- Modeling core organizational values and personal principles;
- Defining and pursuing a preferred organizational future;
- Consistently employing a client focus;
- Expanding organizational perspectives and options;

- Involving everyone in productive change;

- Developing a change-friendly culture of innovation, healthy relationships, quality, and success;

- Creating meaning for everyone;

- Developing and empowering everyone;

- Improving the organization's performance standards and results;

- Creating and using feedback loops to improve performance;

- Supporting and managing the organization's purpose and vision;

- Restructuring to achieve intended results; and

- Rewarding positive contributions to productive change.

(p. 43)

Another factor for consideration in the change process is school culture. Terrence Deal and Kent Peterson (2009) defined school cultures as "complex webs of traditions and rituals built up over time as teachers, students, parents, and administrators work together to deal with crises and accomplishments" (p. 7). They reviewed a series of studies that emphasized the significant contribution that school climate has on student achievement. In the late 1970s and early 1980s, effective school research acknowledged the importance of school climate and *ethos* in student learning (Levine & Lezotte, 1990). In a British study by Rutter, Maughhan, Morritimore, Ouston, and Smith (1979), school ethos made a principle contribution to academic success. Later studies identified school culture as critical in improved teaching and learning (Rossman, Corbett, & Firestone, 1988; Fullan, 2001; Leithwood & Lewis, 1998). Teachers in successful schools often had a belief that they could improve, demonstrating a sense of efficacy (Goddard, Hoy, &

Hoy, 2004). Research was not limited to public schools. Bryk, Lee, and Holland (1993) found a sense of community was instrumental in developing excellence in communal private schools. Marzano, Waters, and McNulty (2005) completed a meta-analysis on research of leadership and student achievement and found a strong correlation between school culture and student performance.

Anthony Muhammad (2009) examined school cultures in 34 public schools from across the United States. The sample included 11 elementary schools, 14 middle schools, and nine high schools from the East, Midwest, South, and West. He collected data over a three year period using informal observations of classrooms in session during regular school hours, staff meetings, teacher team meetings, and other informal gatherings of staff. He conducted formal interviews with principals and randomly selected teachers in each school. He also completed a document review in each school. He concluded that "schools that want to produce a healthy learning environment must first and foremost be clear about their collective purpose" (p. 100). The schools must be focused on student achievement. The principal must be willing to celebrate the successes to reinforce what is valued in the school culture. Successful schools encouraged collaboration and provided intensive professional development. These goals were accomplished with skilled leadership by the principal (Muhammad, 2009). Muhammad sited Richard DuFour, Robert Eaker, and Rebecca DuFour as educators who espouse the concept that all children can learn when the school culture provides the right environment. These educators have been visionaries in the Professional Learning Community movement in education.

Professional Learning Communities

The origin of the term Professional Learning Community (PLC) emerged in the 1960s as a reaction to the isolation experienced by teachers in the teaching profession. It was common practice for teachers to work in isolation in their classrooms. Once the door was closed, the teacher was left on his or her own to teach the curriculum to the students often using the approved textbook as the guide to units of study. Conversations between teachers occurred but not necessarily focused on instructional strategies or student learning. More often, the topics involved discipline or the logistics of field trips and day to day scheduling. In *Good Schools: What Research Says about Improving Student Achievement,* published in 1984 in the Peabody Journal of Education, Hawley, Rosenholtz, Goodstein, and Hasselbring synthesized best practices in schools. One of the things they found was "staff interactions in effective schools are characterized as task-focused, cooperative, and frequent" (p. 71). Susan Rosenholtz studied 78 schools in 1989 and found "learning enriched schools" often had an emphasis on "collective commitments to student learning in collaborative settings" (Rosenholtz & Simpson, 1990, p. 241).

In 1993, Judith Warren Little and Milbrey McLaughlin reported on their research in *Teachers' Work Individuals, Colleagues and Contexts.* They examined the school workplace and found

> the school workplace is a physical setting, a formal organization, an employer. It is also a social and psychological setting in which teachers construct a sense of practice, of professional efficacy, and of professional community. This aspect of the workplace- the nature of the professional learning community that exists

there- appears more critical than any other factor to the character of teaching and learning for teachers and their students. (p. 99)

Two years later, McLauglin (1993) presented at the annual conference of the National Staff Development Council and reported "we are closer to the truth about school improvement than ever before. The most promising strategy for sustained, substantive school improvement is developing the capacity of school personnel to function as a professional learning community" (p. 99).

In 1995, Fred Newmann and Gary Wehlage prepared a report by the Center on Organization and Restructuring of Schools for the Wisconsin Center for Education Research, detailing an examination from 1990-1995 on educational reform and restructuring of schools. They concluded that, for successful restructuring to work, "a school must build the capacity of its staff to work well as a unit" (p. 2). They found that the most successful schools provide opportunities for teachers to collaborate and help one another. They function as a professional learning community.

In 1998, Karen Louis and Helen Marks studied 24 schools (elementary, middle, and high schools) and reaffirmed that professional learning communities had an impact on classroom practice and student achievement. Their data "suggested that individual teacher performance in classrooms is critical but that both immediate collegial support and extensive external support may be necessary to get there" (p. 561). Louis, Marks, and Kruse (1996) identified five elements that contribute to increase student achievement. The elements are shared norms and values, collective focus on student learning, collaboration, deprivatized practice, and reflective dialogue.

The National School Reform Faculty, based at the Harmony Education Center in Bloomington, Indiana, has adopted a different approach to school reform and collaboration. They have established a network of Critical Friends Groups (CFG). The idea of CFG was developed in 1994 by the Anneberg Institute for School Reform. "A CFG is a professional learning community consisting of approximately 8-12 educators who come together voluntarily at least once a month for about 2 hours. Group members are committed to improving their practice through collaborative learning" (p. 1). These educators are not necessarily from the same school, but share a common desire to improve their professional practice. Another difference from professional learning communities is that members claim they feel more comfortable expressing opinions, critiquing colleagues, and taking risks than in a school-based professional learning community. This is another approach to school reform through professional collaboration.

DuFour, DuFour, Eaker, and Many (2010) dedicated their efforts to spreading the message of professional learning communities. In *Learning by Doing: A Handbook for Professional Learning Communities at Work,* 2nd edition, Dufour et al. defined a PLC as "an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve" (p. 11). Implicit in the concept of the PLC is the role of the school leader in communicating the *big ideas* that provide focus for the work of the educators. These three ideas comprise the framework of a PLC. The first idea is "the purpose of our school is to ensure all students learn at high levels." The second idea is "helping all students learn requires a collaboration and collective effort." The third idea is "to assess

our effectiveness in helping all students learn we must focus on results- evidence of student learning- and use results to inform and improve our professional practice and respond to students who need intervention or enrichment" (DuFour et al., 2010, p. 14).

Race to the Top, an initiative established by the Obama administration, focused attention on teacher effectiveness tying federal funds in the form of Title I dollars to student performance. One response to this initiative was professional learning communities. In a five-year study of Title I schools serving more than 14,000 students, Gallimore and Ermeling (2010) documented the effect of teacher learning teams on student achievement. They found achievement increased by 41% overall (p. 1).

Gallimore and Ermeling identified five attributes that are important for establishing effective teacher learning teams.

- Job-alike teams of three to seven teachers who teach the same grade level, course, or subject;

- Published protocols that guide team efforts;

- Trained peer facilitators to guide the team over time;

- Stable settings dedicated to improving instruction and learning; and

- Perseverance until there is progress on student performance.

In addition to these five attributes, Gallimore and Ermeling suggested "that school-wide factors, such as organizational capacity and stable building leadership that makes instructional goals a priority, are critical contributors to sustaining productive learning teams" (Gallimore & Ermeling, pp. 1-2).

Implementing a professional learning community in a school, as defined by DuFour et al., is a process that takes time and commitment on the part of the principal

and teachers. It is not an easy journey, but the authors make the case that it is one worth taking to insure all students learn. During this process, dramatic changes take place in the school culture. The authors called these changes *shifts* which can include the following characteristics:

- A shift from a focus on teaching to a focus on collaboration among the educators;

- Viewing assessments in a different way with an emphasis on developing common assessments which are given frequently to inform instruction;

- Monitoring students individually on every essential skill;

- A shift in how teachers react when students do not learn. There is a systematic response that is supportive and provides multiple opportunities for a student to demonstrate learning;

- A change occurs in focus and school culture. The principal plans for short term wins and creates an atmosphere of recognition to celebrate successes; and

- In a school where a professional learning community flourishes, there is an emphasis on everyone learning, adults, and students alike. (pp. 249-251)

The PLC concept is a framework that enables schools to implement change. It defines how the educators in a building interact to foster increased student achievement.

The foundation for a continuous school improvement process to be successful and sustainable is when teachers "relinquish some of the privacy of their individual classrooms to engage in critical dialogue with one another" (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, p. 55). This is fundamental to a professional learning community. The faculty must work together for increased student achievement. Six components combine to form an assessment of the faculty's capacity to work together:

1. Public classroom practice (teachers observe each other and offer suggestions for improvement;

2. Reflective dialogue (teachers engage in critical conversations about improving instruction);

3. Peer collaboration where teachers work together on curriculum and assessment and school improvement activities;

4. Socialization of new teachers (faculty are proactive in supporting new teachers);

5. Collective responsibility for school improvement; and

6. Focus on student learning.

               (Bryk et al., p. 73)

Michal Fullan, in his book *Leading in a Culture of Change* (2001), emphasized the importance of the principal's role as a leader when a school is seeking to implement changes. A principal is instrumental in providing a school climate in which new relationships among teachers are developed "as found in a professional learning community" (p. 65). After further research, that culminated in Fullan's book *The Principal: Three Keys to Maximizing Impact* (2014), he wrote about the role of the principal as a direct influence on teachers as they analyze evidence of student learning and what constitutes best educational practice. He encouraged principals to be "leaders of learning" in their buildings in order to have the maximum impact on student achievement (Fullan, 2014, p. 67). In the current study, Cambridge Elementary School, one of the treatment schools, has a professional learning community framework. Maplewood Elementary School is the control school in the Art in Action grant and it also uses a professional learning community framework. The Art in Action grant is a federal demonstration grant that examined student achievement in reading and math as measured by the PSSA and report card grades.

The Role of Grants to Fund Change

A common vehicle for change and innovation in a school is grants. Grants can be privately funded, state funded, or federally funded. It is attractive for a school district to apply for grant funding to help supplement local dollars, and, at the same time, provide an opportunity to try an innovative instructional technique which might not otherwise be possible. Using grant money as a means to bolster local funding is not a new concept. During the period from 1973 through 1977, the Rand Corporation conducted a study of change-agent programs funded by the federal government in an attempt to understand the process of innovation and to identify the effect of these programs on local education

systems. A series of documents known as the Rand Reports were published to report the findings. Programs from four categories were examined: Elementary and Secondary Act Title III programs, ESEA Title VII Bilingual Education (Summer & Zellman, 1977), Vocational Education Act, 1968, and Part D Exemplary Programs and the Right-to-Read program. In the first phase of the report, covering July 1973 through April 1974, strategies and conditions that promoted successful change in schools were identified. Effective implementation required a competent project director and a supportive school principal. The quality of the working relationships of those involved in the programs affected the progress towards goals and influenced whether the projects continued (Rand Report, Vol. VII).

The second phase of the Rand Report covered May 1975 through April 1977. The focus of this phase was on how innovative projects are continued and spread after federal support ends. The researchers made some assumptions about the state of American education during the 1970s. Their first assumption was that American education should be doing better. Second, educational practices can be improved within the existing educational structure. Third, change can be introduced and sustained by providing seed money to encourage innovations (Rand Report, Vol. IV). These assumptions have relevance to American education in the 21st century and relate to the proposed research question. Regarding the institutional setting, the researchers found high teacher morale, support from the principal, central office administrative support, and teacher willingness to make extra efforts were key factors in the effectiveness of implementation of new programs. These factors relate to school climate. There must be an implementation strategy that promotes mutual adaptation for the innovative program to achieve success and sustainability (Rand Report Vol. IV). "Experience suggests that

innovative projects mutate during implementation; that is they change over time within sites" (Rand Report Vol. IV, p. 5). There is evidence in the proposed study that subtle changes have occurred from the first year of inception of the grant to the third year. A major conclusion from the Rand studies is "an innovation's local institutional setting has the major influence on its prospects for effective implementation" (Rand Report Vol. IV, p. 20). This conclusion relates to a secondary question in the proposed research which is the effect of a professional learning community on the implementation of an arts integration grant in an elementary school. Student achievement in reading and math can be compared using scores on the PSSA and report card grades. This information is archived and available for several years prior to the implementation of the Art in Action grant because of the requirements of the No Child Left Behind Act of 2001.

The Arts in a National and State Context

The No Child Left Behind Act (NCLB) of 2001 emphasizes accountability and high standards in reading and math for students in grades three to eight by including a system to reward success and sanction failure (NCLB, p. 8). Contrary to this position is Dewey, who "believed that arts education was a foundational part of the curriculum because it developed creativity, self-expression, and an appreciation of the expression of others" (as cited in Heilig, Cole, & Aguilar, 2010, p. 136). The pressure to succeed is felt in every elementary classroom in public schools in the nation. "Public education is obsessed with accountability" (Heilig et al., p. 142), but the most effective educational strategy to achieve this goal of increased student achievement varies across school districts and communities. The federal government, through the U.S. Department of Education (ED) and the National Endowment for the Arts, has provided support for arts education through targeted funding of programs. These programs include partnerships

between schools and community organizations, professional development for teachers, teacher artists, and research (Ruppert, 2006). "Arts education in the United States began as a study specifically for the wealthy. As the American economy grew and a middle class emerged, schools changed and arts education entered the curriculum in public schools" (Heilig et al., p. 144). The NCLB Act reaffirms the arts as equal to the core subjects of English, reading, mathematics, science, foreign languages, civics and government, economics, history, and geography (Ruppert, 2006, p. 6).

In 2005, a Harris telephone survey poll was conducted as part of a public service campaign *Art. Ask for More*. The survey revealed the following about public opinion regarding arts education:

- 86 % of Americans agree that an arts' education encourages and assists in the improvement of a children's attitudes toward school;

- 83 % of Americans believe that arts' education helps teach children to communicate effectively with adults and peers;

- 79 % of Americans agree that incorporating arts into education is the first step in adding back what is missing in public education today; and

- 79 % of Americans believe that it is important enough for them to get personally involved in increasing the amount and quality of arts education. (Americans for the Arts, 2014)

In 2009, the U.S. Department of Education, through the National Center for Education Statistics, released results from an Elementary School Arts Education Survey. The survey provides an overview of student access to art education in the United States. Music education was almost universally available in the nation's public schools with

94% of the instruction through music classes. Visual arts' instruction was available in 83% of the schools. Dance and drama were taught in 3% and 4% of the schools, respectively.

Arts' specialists were employed to teach music and visual arts in most of the schools that offered these subjects. Most of the elementary schools that offered this instruction provided it at least once a week in these subjects. Among elementary schools that offered music and art instruction, most reported that their districts had a curriculum guide. The most commonly curriculum-based activity outside of regular school hours were school performances or presentations in the arts and arts' related field trips. Smaller percentages of schools offered individual and small group lessons or team dance opportunities. Forty-two percent of public elementary schools indicated they had partnerships with cultural and community organizations. The survey reflects the varied approaches that schools have to providing arts instruction (Parsad, Spiegelman, & Coopersmith, 2012, pp. 5-8).

Pennsylvania has developed and published *Academic Standards for the Arts and Humanities* in 22 PA Code, Chapter 4, Appendix D. The standards cover dance, music, theater, and the visual arts. Pennsylvania's public schools "shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to know and use the elements and principles of each art form to create works in the arts and humanities" (p. 3). The manner in which this instruction is done is a local decision by each school district. The Standards Aligned System (SAS) is an online resource for teachers incorporating research and good practice to provide a framework to guide their instruction. The Art in Action grant utilizes both of these resources to guide professional practice and lesson planning.

No Child Left Behind has also spurred an interest in science, technology,

engineering, and math in the nation's public schools. An emphasis on 21st century skills' development is an important component of the STEM movement. Arts' educators have developed a 21st Century Skills' curriculum through arts' study. The skills' map includes general themes such as communication, critical thinking, and problem solving, and provides examples of how the arts are used to develop these skills (Robelen, 2011).

Research on the impact of the arts on core subject areas is not limited to the United States. Provocative work in this area is also occurring outside the United States.

Review of Arts' Research

A review of the literature presents a wide variety of approaches to connect students' and teachers' experiences and learning in the arts with academic and social benefits. The research is from around the world. Ling-Yu Liza Lee (2009) studied seven urban children, aged three and four, in a Taiwan kindergarten. The study showed that, through the use of creative music pieces and activities, the children's understanding of music concepts and English ability was improved over a 24-week period.

Patricia Sanderson (2008) conducted a study of 19 mixed secondary schools from five main geographical areas in England to investigate the influence of social class on secondary pupils' aesthetic attitudes to dance. The study used a dance attitudes' survey and content analysis by the researcher of discussions with the students. From these discussions, 70 statements were included in a 5-point scale questionnaire. A factor analysis revealed four attitude scales. The study suggests that policy makers should consider providing dance in schools so all children, no matter their social class, are able to benefit as participants, performers, and informed observers.

ArtsSmarts is a Canadian arts' education initiative that "features artists collaborating with teachers to implement arts instruction in partnership with school

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districts and community arts organizations" (Andrews, 2010, p. 20). Professional artists work with classroom teachers to instruct students in elementary and secondary classrooms. The collaboration involved teaching lessons in dance, drama, film/video, music, and visual arts and arts integration. The researcher used Integrated Inquiry, a mixed method approach to research multiple perspectives. Artists, teachers, project coordinators, and small groups responded to a first-year survey and a follow-up survey. "Because of program interventions by the partners, an emphasis on arts integration across the curriculum and a focus on student exploration of personal creativity were more evident in the follow-up survey" (Andrews, p. 26). The results of the study have application for artists, administrators, and school district personnel as they plan for arts' partnerships.

Bianca Power and Christopher Klopper (2011) examined classroom practice in creative arts' education in primary classrooms in the New South Wales Greater Western Region in Australia. A questionnaire was distributed to teachers in grades K-6 to produce data for analysis to describe their creative arts' education practices. The target population was regular classroom teachers. The results of the survey revealed that a large percentage of primary school, regular classroom teachers are not personally interested in the arts, but are responsible for delivering creative arts, education to the students. These teachers reported that they felt their pre-service education was less than adequate to prepare them for the responsibility of teaching creative arts. The researchers recommended further research into classroom practice of arts' education both in Australia and internationally (p. 22).

The Arab Academic College for Education in Haifa, Israel, has developed a curriculum for pre-service kindergarten teacher training that integrates art, literature, and technology. It is implemented in kindergartens by student teachers during their pre-service training in Arab villages. One of the problems in Israel is a general feeling, by parents, that art is an irrelevant subject of low status. This new curriculum integrates the computer with art and literature. Students prepare a work portfolio that reflects their creativity. Toren, Maiselman, and Inbar (2008) recommended that "art should not be taught as an isolated school subject but should play a significant role in an integrated curriculum" (p. 332).

Karen DeMoss and Terry Morris (2002) designed a research project to investigate students' learning in Chicago Arts Partners in Education (CAPE) arts-integrated units. The researchers wished to advance understanding of students' cognitive processes when engaging in arts-integrated instruction. They wanted to extend knowledge of cognitive processes and habits that are developed through arts-related experiences to determine if these habits translate to the larger picture of student academic and personal development. The arts' integration model has been used since 1992 in Chicago schools using the CAPE model. These partnerships involve teachers and artists who have formed close professional relationships. Some teachers value the arts-integration so much that they design most of their lessons around this model. During arts-integrated units, students experience learning environments that foster cooperation, interest and self-esteem (DeMoss & Morris, 2002). The schools in the study represented a wide variety of socio-economic groups across Chicago. The results of the study support the notion that effective arts' integration can result in increased student learning especially for low-

achieving students. The experience helps these students understand concepts rather than increase factual recollection.

In 2003, the Isabella Stewart Gardner Museum received a three-year federal grant to research elementary students' learning as a result of multiple visits to the art museum. The research questions focused on students' individual critical thinking skills, critical thinking skills within a social context in the museum, and how participation influenced students' performance on standardized tests. Data showed that students who participated in visits were able to say more about the artwork demonstrating higher frequencies of critical thinking skills than the control students. When standardized test scores were analyzed there were no significant differences between treatment and control students (Adams, Foutz, Luke, & Stein, 2007).

Arnold Aprill (2010), an arts educator, argued that there should not be a dichotomy between direct instruction in the arts and arts' integration. He felt that to continue this debate is a pointless squandering of time, money, and resources. "The basic issue underlying and generating this false dichotomy is inequitable and insufficient funding for public education that pits program against program and content area against content area" (p. 6). He cited a 2006 survey by the Center on Education Policy that found 71% of the United States' 15,000 school districts had reduced the hours of instructional time spent on social studies, the arts, science, and other subjects to allow for more time to instruct in reading and math. He felt this environment was a "set-up" for arts' organizations, desperate for funding, to implement poorly conceived programs to solve schools' academic achievement problems (p. 6). He cautioned against schools trying to spread arts' experiences as widely and thinly as possible so that many children

are exposed to the arts experience. He felt a wiser strategy is to develop deep and narrow curricular projects.

Perhaps an example of the kind of instruction that Aprill would support is the CREC Ana Grace Academy of the Arts Elementary Magnet School in Avon, Connecticut. This school uses "research-based teaching and learning practices in reading, mathematics, science, technology and the arts" (p. 1). Students engage in project-based learning and work with professional artists. They participate in live performances and public showcases of their work. They are encouraged to develop creativity, collaborate with peers, and develop leadership skills at a young age.   The National Endowment for the Arts published findings from four longitudinal studies focusing on the arts and achievement in at-risk youth. The analysis covered studies from 1988-2010 and age ranges from five through 27. The report examined the academic and civic behavior of teenagers and young adults who engaged deeply in the arts in or out of school (Catterall, Dumais, & Hampden-Thompson, 2012). The authors arrived at three main conclusions from these large longitudinal databases. First, "socially and economically disadvantaged children and teenagers who have high levels of arts engagement or arts learning show more positive outcomes in a variety of areas than their low-arts-engaged peers" (p. 24). These outcomes include school grades, test scores, honors society membership, graduation rates, college enrollment, volunteering, and engagement in politics. The second conclusion is that "at-risk teenagers or young adults with a history of intensive arts' experiences show achievement levels closer to, and, in some cases, exceeding the levels shown by the general population studied" (p. 24). Finally, "most of the positive relationships between arts involvement and academic

outcomes apply only to at-risk populations. But positive relationships between arts and civic engagement are noted in high socio economic status groups as well" (p. 24). These studies exemplify information about at-risk youth and the arts, and illustrate a need for more research about the arts and rural elementary students as discussed in the current study.

Tatiana Chemi (2014) conducted a research project in Danish schools to document what happens when the arts are integrated into teaching and how schools can encourage effective learning and best practices in teaching by incorporating artistic, aesthetic and creative methods. She designed this "artfulness" study (Chemi, p. 373) to describe what enterprising teachers will do when given the opportunity to integrate arts' projects into the general curriculum. Artfulness is defined as "a cognitive and emotional response to stimuli that individuals experience as situated within artistic or arts-based environments that they share with others" (Chemi, p. 373). The research was based on "qualitative methods of observation, interview, and analysis inspired by ethnography and action research" (p. 373). This study also found that the teachers reported students who were considered weak academically experienced success academically and socially with their arts projects.

Two initiatives illustrate the blending of STEM (an acronym for science, technology, engineering, and mathematics) with the addition of the *A* for the arts, to form STEAM. Momentum appears to be increasing to explore the relationship between the arts and student engagement in science, technology, engineering, and mathematics (Robelen, 2011). In Dayton, Ohio, the Dayton Regional STEM School includes units that integrate the arts with core subject areas. One example is the team teaching of a biology unit on cell structure with watercolor paintings of the cells (Robelen). Another

example is the Philadelphia Arts in Education Partnership which has supported infusion of the arts in mathematics instruction in city elementary schools through a $1.1 million ED grant. Students study fractions and geometric shapes through art-making projects (Robelen). Although there is interest in combining science, technology, engineering, and math with the arts, there is also research that examines the importance of the arts with other disciplines such as media and animation.

Project SMARTArt Grant

Project SMARTArt was a federal demonstration grant sponsored by the United States Department of Education (ED) and the National Endowment for the Arts. It involved a collaborative effort between the Center for Media Literacy, the Music Center Education Division of Los Angeles County, AnimAction, Inc., and the Los Angeles Unified School District's Leo Politi Elementary School. This program explored school media literacy and arts' education (Jolls & Grande, 2005).

In March 2010, Holly Nowak, Program Manager of the Arts in Education initiative at ArtsErie, applied for a federal Arts in Education Model Development and Dissemination Grant. This was a collaborative endeavor between ArtsErie, Cambridge Springs Elementary School in the PENNCREST School District, Second District Elementary School in the Crawford Central School District, and Union City Elementary School in the Union City School District. The name given to this project was Art in Action. Through this partnership, the applicants proposed to

> develop, document and evaluate a model that will enhance both the quality of
> teaching in the classroom as well as student academic achievement and
> engagement in the learning process by integrating the arts into existing
> curriculum, and strengthening in-school art experiences for approximately 900

elementary students living in rural northwestern Pennsylvania and strengthening

quality relationships between teaching artists and classroom teachers.

(Application for Grant, p. 1)

The ED funded the ArtsErie Arts in Education Model Development and

Dissemination Grant for four years at over $1.4 million. The partnership includes the

elementary schools previously mentioned, along with Maplewood Elementary School,

selected as a control school and ArtsErie. Professors from the Edinboro University of

Pennsylvania art department, and the Allegheny College dance department are facilitators

for professional development retreats and instructors of graduate courses. The project

abstract includes four components of the program. First, Art in Action will engage 900

students annually in arts-infused, classroom-based learning through artists in residence.

The artists will be randomly assigned and will work in classrooms with teachers for nine

weeks. The lessons will be designed to "infuse arts-based instruction into the broad

curriculum in ways that boost student achievement and student engagement in the

learning process" (Application for Grant, p. 1).

Second, professional development, in the form of a 3-credit graduate course

offered through Edinboro University of Pennsylvania, titled Language, Movement, and

Music in the Elementary Classroom, will be taught to more than 60 elementary teachers

from the three elementary schools in the project. In addition, teachers and artists will

participate in 3-hour retreats scheduled for the first and last quarters of every school year

of the project. Finally, In-Art trainings, instructed by art specialists representing music,

dance, drama, and visual arts will be presented to the teachers.

The Art in Action project evaluates art integration instruction and teacher-artists'

collaborations and the effect on student academic achievement as measured on PSSA

scores and report card grades. KeyStone Research Corporation of Erie, PA, designed, implemented, and managed the evaluation plan for the grant. Participant feedback was critical in determining project success and areas of improvement. The logic model used by KeyStone Research Corporation "recognized the power of arts-infused instructional methods and artist-teacher collaborations to improve the effectiveness of classroom instruction and student achievement and engagement in the learning process" (Bogatova & Miller, 2015). Information from this project will advance the body of information about the effect of implementing arts' integration instruction and artists in residencies.

Preliminary results from the Art in Action project indicate positive results with increased student achievement on the PSSA and on report card grades. The students report they enjoy interacting with the professional artists. The parents attend performances in large numbers to see the projects. The program appears to be effective. However, questions remain unanswered as to the opinion of educational professionals regarding the Art in Action grant's impact on student learning and the sustainability of these teaching practices. Specifically: (a) What do the participants in the grant have to say about their experiences?, and (b) What effect do the principals' leadership, the school culture, and the implementation of a professional learning community have on the success of the grant as measured by increased student achievement? Two schools in the study have implemented practices of a professional learning community as a way of interacting with one another to make educational decisions about student learning. Does the effect of this way of working together in school make a difference in the success of the Art in Action program? When teachers are given an opportunity to reflect on their experiences with a facilitator outside the scope of the grant, do their opinions change about their experience. In other words, are there any patterns or relationships that emerge

between the proposed research and the Art in Action grant research?

Chapter 3

Methodology

This study examines a federal arts' grant in three rural elementary schools in northwest Pennsylvania using feedback from participants in the grant to determine important characteristics of successful implementation and sustainability. A brief history and general description of Q methodology are provided as well as a rationale for selecting this methodology for the current research. A description of the steps used in the current research is presented.

Q methodology: A Mixed-Methods Approach

Q methodology was developed by William Stephenson, a British physicist and practitioner of psychometrics under the influence of Charles Spearman and Sir Cyril Burt. This methodology made its first appearance in a letter to the journal *Nature* authored by Stephenson (Watts & Stenner, 2012). It is a means to study people's subjectivity or viewpoint on a topic. It has been used to assess patients in a clinical setting as well as in research settings to examine how people think. Q methodology can be described as an inversion of the statistical technique of factor analysis. It is a way to quantify opinions and feelings about a common experience using a small sample size. The Art in Action grant involved a small number of teachers, administrators, and artists in three elementary schools. Q methodology seems to be the most appropriate methodology given the circumstances of this federal art grant.

Q methodology: Why This Design?

In factor analysis, the researcher is studying a group of variables to determine if there are patterns of association. The procedure begins with the inter-correlation of all of the measured variables that results in a variable-by-variable correlation matrix. A

standardized score (*z-score*) is calculated as a mathematical expression of the distance

between an absolute score and the mean average score of the measured sample. R

methodology refers to methods that employ tests or traits as variables using a sample of

persons. It is a system that examines group traits, but does not compare individual

differences. Q methodology attempts to address this concern by inverting the R

methodology and transforming the people as variables. It is a by-person factor analysis

using individual subjects who complete a sorting of statements. This sorting process

permits individuals to rank or scale statements according to their opinions. The ranking

of statements can be enhanced through a forced or prearranged sort distribution known as

a Q sort (Watts & Stenner, 2012).

Q methodology is characterized by two distinct designs. A single-participant

design requires a single person to perform a Q sort on the same set of statements under

different conditions of instruction. In this design the Q sorter is the subject matter of the

study. A multi-participant design uses more than one person performing a Q sort of a

wide range of statements. Each person performs the sort on the same statements using a

forced Q set design or distribution. Q sort statements are derived from a variety of

sources around a research question. The statements may come from the literature review,

a survey, and interviews. These sources are known as the concourse and it is from the

concourse that the final list of Q sort statements is derived. Ideally it is recommended

that the researcher use from 40-80 statements in the Q sort. The number of statements is

not important, but rather, that the statements reflect a variety of opinions on the research

question. According to Watts and Stenner, a good Q sort has "coverage and balance"

exemplified by the statements (2012, p. 67).

Reliability and validity are important considerations in R methodology, but are not applicable to Q methodology. Q methodology provides a variety of viewpoints of the participants, and, by this method, is valid. The participants are asked to sort items and express their individual viewpoints on a concourse or discussion about a topic. This methodology is suited to a specific group providing their viewpoints on a simple research question within a specific institution. It was selected for the current research because it best fits the purpose of determining opinions of the participants in three rural elementary schools of their experiences with the Art in Action grant, a federal demonstration grant.

The Q sort procedure begins with the examination of a research question. All aspects of the question are reviewed and, in the process, a set of statements is generated that forms the concourse or Q set. These statements come from a group of participants who have been involved in a common experience. In the current research, the experience is participation in the Art in Action grant. Next, a facilitator presents participants with cards that contain the statements and asks them to sort the statements on a forced diagram. This requires the participants to make decisions about whether they strongly agree, agree, are neutral, disagree, or strongly disagree with each statement. During this process of sorting, a trained facilitator records any conversation the participant may have as he or she conducts the sort. Once the sort is completed a follow-up interview may yield more insight into the opinions of the participants. Finally, a Q methodological factor analysis is performed using P Q Method (Watts & Stenner, 2012).

Research Questions

The focus of this research is to determine effective characteristics of a successful implementation of a federal arts' demonstration grant in three elementary schools in rural Northwest Pennsylvania. The following questions are the basis of the study.

1. What characteristics of the implementation of the Art in Action grant do participants identify as most important to insure sustainability of change in reading and math instruction?

2. What impact does the Professional Learning Community framework have on the implementation of the Art in Action grant?

3. What effect does the principal's leadership and the overall school culture have on the implementation of the Art in Action grant?

4. What patterns or relationships exist between the proposed research and the Art in Action demonstration grant research?

Developing the Concourse

Using words to express thoughts in a conversation is a discourse (Merriam-Webster, 2014). Stephenson refers to the conversations that occur by a group of participants sharing a similar experience as a concourse (Watts & Stenner, 2012). This shared knowledge, along with research and professional literature on a subject, form the concourse. In the current study, a 22- statement survey using Survey Monkey was designed and administered to teachers and administrators in the three elementary schools participating in the Art in Action grant. A copy of the survey is included in Appendix A. After responding to each question in the survey using a Likert scale response, participants were encouraged to include a written statement to clarify their opinion or to elaborate

upon it. At the end of the survey, participants were asked once again to write their thoughts about participating in the grant.   Many participants chose to express their positive and negative impressions of their experiences. Some of the statements in the survey were included in the concourse, but the participants' written responses enriched the concourse and provided a wide spectrum of positive and negative impressions. The survey statements were analyzed from individual schools and then combined into one group of statements. Each statement retrieved from the survey was written on a note card with a reference to the survey question from which it was derived. The note cards were divided into three categories: positive statements, negative statements, and neutral statements. Three lists of edited statements were compiled. The goal of the editing process was to make the statements uniform, grammatically correct, and free of spelling errors. Every attempt was made to maintain the thought or opinion and keep the statements approximately the same length.

From the concourse, a group of statements, called a Q sample, were developed. The researcher attempted to select an equal number of positive, negative, and neutral statements. Once the statements were identified for inclusion in the Q sample, the researcher edited the statements to ensure they were of similar length, grammatically correct, and bias free. The goal was to provide a group of statements called a Q set that represented the variety of opinions about the Art in Action grant garnered from the survey.   Tables 2, 3, and 4 list the edited statements that comprise the concourse.

Table 2. *Positive Edited Concourse Statements*

Statements
1.   The Art in Action grant was meaningful and fun.
2.   The Art in Action grant encouraged higher order thinking skills.
3.   The Art in Action grant was a nice change for the students.
4.   The Art in Action grant was learning in a hands-on and fun way.
5.   The Art in Action grant was refreshing and valuable.
6.   Infusion of songs, chants and movement engages all students.
7.   Tapping into a child's imagination through the arts enhances his/her experience with reading and math.
8.   A student can participate and feel successful regardless of ability level.
9.   Art instruction infused with core subjects provides students with meaningful connections to classroom instruction.
10. The Art in Action grant helped students develop a love of music and art.
11. The resident artist understood the project and worked with me to make the experience successful for my students.
12. At risk students performed above normal expectations.
13. The project Wiki was helpful.
14. The resident artist was the reason the implementation of the Art in Action grant was successful.
15. The Edinboro University specialists were eager to help in any way.
16. There is a positive relationship between the Art in Action grant and student achievement on the PSSA.
17. The Art in Action grant makes students like school.
18. The Art in Action grant encourages a teacher to reflect on instructional practices.
19. It was beneficial to collaborate with colleagues.
20. The Art in Action grant provided an outlet for students to experience joy in their learning.
21. Working with a resident artist made instructional time more valuable.
22. Students with social challenges experienced success in Art in Action.
23. Learning support students excelled in their art work and experienced a growth in their confidence.

Table 3. *Neutral Edited Concourse Statements*

	Statements
1.	The Art in Action grant provided brain–based activities.
2.	The Art in Action grant provided movement and multi-sensory activities.
3.	Everyone can be an artist and appreciate art.
4.	The Art in Action grant is another form of differentiated instruction.
5.	The graduate class provided innovative ideas that I used in my classroom.
6.	Students use the language of the standards in their productions and products.
7.	Art infused instruction can reach different learning styles.
8.	Customizing learning to a student's strengths and interests is essential for school to be relevant.
9.	Art makes learning more concrete and should be infused in all subjects at all ages.
10.	Infusing art in reading and math instruction allows students to connect material on a personal level.
11.	Some art residencies resonate with students.
12.	The project wiki was better than no information at all.
13.	Sustainability for the Art in Action grant must come from the teachers.
14.	The success of the Art in Action grant will be measured from the participation of all stakeholders.
15.	If students enjoy learning, achievement usually goes up.
16.	It is the teacher and how he/she infuses the arts into lessons that will increase student performance in reading and math.
17.	If students are exposed to Art in Action teaching techniques for more than 1 year it will make a difference on the PSSA.
18.	Efficient use of time drives good instructional practice.
19.	The Art in Action grant has encouraged teachers to work with partners outside the classroom.
20.	The Art in Action grant has increased the use of research based instructional practices.
21.	The Art in Action grant has provided opportunities for collaboration.
22.	The Art in Action grant has initiated a change in instructional practices.
23.	The teacher covers the core curriculum at a slower pace when working with the resident artist.
24.	The teacher and resident artist plan together to cover core curriculum requirements.

Table 4. *Negative Edited Concourse Statements*

Statements
1. I never really analyzed student achievement data over time.
2. The resident artist did not understand the core curriculum.
3. Most teachers are not willing to take the time or effort to infuse the arts in instruction of reading and math.
4. Replacing art instruction with an Art in Action grant has no positive results.
5. Participating in the Art in Action grant was a tremendous amount of work.
6. I don't see much benefit in the Art in Action grant.
7. It would be nice to include the special education teachers more in the Art in Action grant.
8. The Art in Action grant requires too much paperwork.
9. The Art in Action grant materials were expensive.
10. Scheduling time with the resident artist was a problem.
11. The learning support students were not allotted enough time with the artists.
12. The project Wiki became clouded with too much information.
13. I didn't have time to look at the project Wiki.
14. I didn't know how to use the project Wiki.
15. The Edinboro University specialists had little or no effect on the implementation of the Art in Action grant.
16. The focus of the Art in Action grant was on music at the expense of other areas.
17. Too much time was spent on planning and not enough time was allotted for the resident artist to interact with the students.
18. There was little or no relationship between the Art in Action grant and student achievement on the PSSA.
19. It is unrealistic to believe the Art in Action grant will increase student achievement in math and reading.
20. There were too many scheduling interruptions.
21. Scheduling arts integration with core subjects is difficult.
22. The Art in Action grant took away time from core subject instruction.
23. It was difficult to work with some of the resident artists.
24. The professional development embedded in the Art in Action graduate class was terrible.
25. The principal was not familiar with the Art in Action grant.

The researcher selected 40 statements from the concourse to form the Q sort statements. Brown (1980) suggested a nine point (-4 to +4) distribution for Q sets of 40 items or less. Q sets of 60 items and above fit nicely into a 13 point (-6 to +6)

distribution.   These suggested distributions are guidelines and not requirements. Brown

(1980) provided insight into the kurtosis or general shape of the distribution and how it

relates to the expertise of the participants. When a group of participants is unfamiliar

with the topic he recommends using a steeper shape to permit the participants to place

more statements near the middle or neutral section of the distribution. A flattened or

platykurtic distribution is used when participants are knowledgeable about the topic.

They possess a level of expertise that permits them to make subtle distinctions between

the statements. In the current research, a 13 point (-6-+6) distribution with 40 statements

was used to ensure that participants would be forced to make subtle distinctions between

the statements. To enhance their sorting experience and provide additional anecdotal

information, participants were asked if they would consent to be audio taped as they

completed the sort.

Each statement was printed on a separate note card and coded with a

unique identification number. A blank template was provided to force the participants to

make decisions about the placement of the statements from negative to neutral and to

positive. Tables 5, 6, and 7 contain the statements selected by the researcher for the Q

sort exercise.

Table 5. *Selected Positive Statements for Q Sort*

Statements
1. The Art in Action grant was meaningful and fun.
2.   The Art in Action grant encouraged higher order thinking skills.
3. The Art in Action grant was learning in a hands-on and fun way.
4. Tapping into a child's imagination through the arts enhances his/her experience with reading and math.
5. Art instruction infused with core subjects provides students with meaningful connections to classroom instruction.
6. The resident artist was the reason the implementation of the Art in Action grant was successful.

7. The Edinboro University specialists were eager to help in any way.
8. There is a positive relationship between the Art in Action grant and student achievement on the PSSA.
9. The Art in Action grant encourages a teacher to reflect on instructional practices.
10. It was beneficial to collaborate with colleagues.
11. Working with a resident artist made instructional time more valuable.
12. Students with social challenges experienced success in Art in Action.
13. Learning support students excelled in their art work and experienced a growth in their confidence.

Table 6. *Selected Neutral Statements for Q Sort*

Statements
14. The Art in Action grant provided brain-based activities.
15. The Art in Action grant provided movement and multi-sensory activities.
16. The Art in Action grant is another form of differentiated instruction.
17. The graduate class provided innovative ideas that I used in my classroom.
18. Art infused instruction can reach different learning styles.
19. Customizing learning to a student's strengths and interests is essential for school to be relevant.
20. Art makes learning more concrete and should be infused in all subjects at all ages.
21. Infusing art in reading and math instruction allows students to connect material on a personal level.
22. Sustainability for the Art in Action grant must come from the teachers.
23. The success of the Art in Action grant will be measured from the participation of all stakeholders.
24. It is the teacher and how he/she infuses the arts into lessons that will increase student performance in reading and math.
25. If students are exposed to Art in Action teaching techniques for more than 1 year it will make a difference on the PSSA.
26. The Art in Action grant has provided opportunities for collaboration.
27. The Art in Action grant has initiated a change in instructional practices.

Table 7. *Selected Negative Statements for Q Sort*

Statements
28. The resident artist did not understand the core curriculum.
29. Most teachers are not willing to take the time or effort to infuse the arts in instruction of reading and math.
30. Participating in the Art in Action grant was a tremendous amount of work.
31. I don't see much benefit in the Art in Action grant.
32. The Art in Action grant requires too much paperwork.
33. The Art in Action grant materials were expensive.
34. Scheduling time with the resident artist was a problem.
35. The Edinboro University specialists had little or no effect on the implementation of the Art in Action grant.
36. Too much time was spent on planning and not enough time was allotted for the resident artist to interact with the students.
37. There was little or no relationship between the Art in Action grant and student achievement on the PSSA.
38. Scheduling arts integration with core subjects is difficult.
39. The Art in Action grant took away time from core subject instruction.
40. The principal was not familiar with the Art in Action grant.

Twelve participants, four teachers from each school in the Art in Action grant, were randomly selected to complete a sorting of the statements on the template. The researcher conducted a one-hour training session for two facilitators to prepare them to conduct the Q sort exercise with the twelve participants. This procedure was used to ensure that the researcher would not impose any influence or pressure on the participants. Every attempt was made to encourage the participants to share their true feelings about the Q sort exercise.

Site Selection

The Art in Action Grant was administered in three elementary schools in northwest Pennsylvania. The schools were Cambridge Springs Elementary School in PENNCREST School District, First District Elementary School in Crawford Central School District, and Union City Elementary School in Union City School District. The survey was sent electronically to teachers in each of these elementary schools. The Q sort and participant interviews were completed at each school by the trained facilitators during the regular school day.

Sample Selection

For the current study, two sets of participants were used: (1) participants who completed the online survey to develop the concourse, and (2) participants who agreed to perform the Q- sort exercise and be interviewed by a trained facilitator.

Facilitator Training

The researcher used two facilitators to perform the Q sort exercises with the participants in an attempt to be efficient with time and also due to the distances between the three elementary schools. The schools are located in three different school districts with a

distance of about 40 miles between the schools. The facilitators possessed certificates from the Institutional Review Board. They participated in one-hour training by the researcher during which time the Q Sort procedures were modeled. The following points were emphasized:

1. The facilitator will begin the session by explaining the purpose of the activity is to give the individual an opportunity to react to some statements that were made by people from all three elementary schools involved in the Art in Action Grant. The researcher is conducting a study to determine the effect of a Professional Learning Community on the implementation of the Art in Action grant; the impact of school leaders and the leadership style on the grant; the most important characteristics of the Art in Action grant that can be sustained once the grant has ended; and, did the experience change the way the participant teaches?

2. Emphasize that participation in the Q sort is strictly voluntary and anonymous. If the participant feels uncomfortable he/she may stop at any time. There is no risk to the participant.

3. Ask permission to audio record the session. If the participant declines, then the facilitator will take notes during the session.

4. Ask the participant to sign a consent form.

5. Explain the Q sort is done in two steps. First the participant will be asked to sort 40 sentence cards into three piles: agree, disagree and neutral. Each sentence card had a randomly assigned identification number on the reverse side.

6. A distribution template will be placed on the table and the participant will be

asked to begin by placing the "agree" or positive statements on the template. Next the participant will place the "disagree" or negative statements on the template. Finally the neutral statements will be placed on the distribution template.

7. Participants will be encouraged to talk as they conduct the sorting.

Facilitators were provided a packet of materials including 40 randomly numbered sentence cards, labels for the forced distribution, consent forms and distribution templates for recording the completed Q sort sentence numbers. Copies of all forms and materials are included in Appendix B.

Q Sort Process

The facilitators divided the 12 participants into two groups so that each facilitator conducted 6 Q sorts and interviews. They made contacts with the schools to arrange appointments with the participants. In one of the schools the superintendent arranged for a traveling substitute teacher to cover classes so the teachers could be released to participate in the Q sort and interview. Each session lasted approximately one hour. Most sessions were audio recorded. A professional transcriptionist was employed to transcribe the audio recordings. The participants were presented with a $10 Amazon gift card as a token of appreciation for their time.

In the current research twelve teachers agreed to participate in the Q sort and interview process. Audio tapes were made of 10 of the participants as they completed the sort and answered interview questions. The transcriptionist transcribed eight of the audio tapes. Technical difficulties occurred with two of the recordings. The researcher completed a follow-up interview with each of the facilitators to obtain additional information about the interviews

that were unable to be transcribed.

Chapter 4

Analysis of Data

The purpose of this current investigation is to examine perceptions of stakeholders regarding a federal arts' grant in three rural elementary schools in northwest Pennsylvania using feedback from participants in the grant to determine important characteristics of successful implementation and sustainability. The emphasis of the research is to determine effective characteristics of a successful implementation of a federal arts' demonstration grant in three elementary schools in rural northwest Pennsylvania. Four research questions framed the study.

1. What characteristics of the implementation of the Art in Action grant do participants identify as most important to insure sustainability of change in reading and math instruction?

2. What impact does the Professional Learning Community framework have on the implementation of the Art in Action grant?

3. What effect does a principal's leadership and the overall school culture have on the implementation of the Art in Action grant?

4. What patterns or relationships exist between the proposed research and the Art in Action Demonstration grant research?

This chapter provides a description of the factor analysis that was completed following the Q sorting of 40 statements by 12 participants. To enrich the findings of the quantitative portion of the research, audio recordings and traditional note taking were also utilized during each sort by a trained facilitator to provide qualitative data. PQMethod 2.35 for Windows was used to run the statistical analysis. This is a dedicated, Q methodological,

software package that provides numerous output files for analysis. Data in the form of Q sorts are entered in the way it is collected by statement numbers. The program computes intercorrelations among Q sorts, which are then factor-analyzed using the Centroid or Principal Component method. Resulting factors are then rotated analytically or Varimax rotation. The analysis step produces reports on factor loadings, statement factor scores, and consensus statements across factors (Schmolck, 2014).

The PQMethod 2.35 package for Windows was downloaded to a personal computer. The software package is based on FORTRAN-77 code and is maintained by Peter Schmolck. All steps of the analysis are done within the program from entering the statements, entering the sorts, and viewing the results. The general flow and procedure of the program begins with STATES which permits the entering of the Q sort statements in the assigned order in which they were randomly numbered in the study. Next is QENTER, which is the section of the software package used to enter the coded numbers assigned to statements as they appear on the individual Q Sorts completed by the participants. A QPCA, or Principal Components' analysis, produced a correlation matrix between sorts, an unrotated factor matrix, and eigenvalues for eight factors. At this stage in the analysis, there are two options for rotating the factors. QROTATE is a rotation of factors by hand, which requires the researcher to select one pair of factors for rotation each time. QVARIMAX was chosen since it takes an unrotated matrix file and rotates all of the factors. It was determined, after using a four-factor model for Varimax rotation with no convergence, that a three-factor model was preferable. Finally, QANALYZE used the statement file, the raw data file, and the factor loading file to produce a written report in a listing file (Schmolck, 2014).

This chapter is presented in eight sections: (1) Correlation Matrix, (2)

Cumulative Communalities' Matrix, (3) Humphrey's Rule, (4) Q Sort Statements with Corresponding Ranks, (5) Varimax Rotation, (6) Model Sort for Factor 1 and Factor 2, (7) Qualitative Analysis of Participant Perspectives, and (8) Summary.

Correlation Matrix

"Matrix is derived from a Latin root that means *place of growth"* (Watts & Stenner, 2012, p. 97). The correlation matrix is the intercorrelation of each Q sort with every other sort in the study. It represents 100% of the meaning and variability also known as the study –variance. Variance in Q sorts is divided into three types. *Common variance* is the proportion of the meaning and variability in the Q sort that is held in common by the group. *Specific variance* is the variance that is related to specific persons or specific Q sorts. The third variance is *error variance* which is comprised of the imperfections that data gathering introduces (Watts & Stenner). The goal of the correlation matrix is to begin to identify patterns of similarity in the Q sorts, and, hence, in the opinions of the participants. Table 1 (below) provides the correlation matrix between the 12 Q sorts. Participants are coded with a letter and number, such as

- UC for Union City Elementary School in Union City School District;

- CRAW for First District Elementary School in Crawford Central School District; and

- CES for Cambridge Springs Elementary School in the PENNCREST School District

  Each letter code is paired with a number assigned to each participant. In this first look at the Q sorts, UC3 and CRAW3 appear to deviate from the group based on their sorting behavior. This is demonstrated in Table 1, in which all correlation values are multiplied by 100.

Table 1.
Correlation Matrix: Between Sorts

Sorts	1	2	3	4	5	6	7	8	9	10	11	12
1 UC4	100	37	72	43	65	26	51	46	27	67	59	58
2 UC3	**37**	**100**	**39**	**14**	**22**	**-26**	**3**	**24**	**-3**	**31**	**32**	**21**
3 UC2	72	39	100	47	72	21	54	52	-2	52	75	34
4 UC1	43	14	47	100	51	9	10	34	22	33	54	40
5 CRAW4	65	22	72	51	100	28	58	66	33	54	75	60
6 CRAW3	**26**	**-26**	**21**	**9**	**28**	**100**	**28**	**9**	**25**	**31**	**12**	**15**
7 CRAW2	51	3	54	10	58	28	100	50	12	30	57	33
8 CRAW1	46	24	52	34	66	9	50	100	23	44	67	32
9 CSE1	27	-3	-2	22	33	25	12	23	100	36	19	49
10 CSE2	67	31	52	33	54	31	30	44	36	100	61	62
11 CSE3	59	32	75	54	75	12	57	67	19	61	100	49
12 CSE4	58	21	34	40	60	15	33	32	49	62	49	100

The Principal Components' analysis (PCA) makes an assumption that all variance is explained so it will not isolate overlapping variance in participant responses. In Table 1, for example, a correlation of 100 indicates a perfect match, in which a participant's responses are compared to their own responses. This table reveals many moderate-to-high correlations between participants' responses, indicated by values greater than or equal to 30 ($r \geq .30$). The correlation value indicates how well each participant's sort agrees or disagrees with the other participants in the sample. Watts and Stenner (2012) recommended that once a PCA is completed on data, the next logical step is to perform a Centroid Factor Analysis, because it is relatively simple to perform and it mimics the mathematical calculations of the by-hand method of factor rotation (Watts & Stenner). Table 2 (below) reveals eigenvalues ranging from a high of 5.5567 to a low of 0.3294 before factors were rotated. "Eigenvalues show how evenly the variance of the matrix is distributed" (Field, 2009, p.243).

For the current investigation, it was determined that eigenvalues of less than 1 indicated a distinct decrease in factor strength. This information informed the next decision to run a three-factor model Varimax rotation of the data. Watts and Stenner recommended

extracting one factor for every 6-8 participants in a study. Brown suggested one use

experience and the magic number of seven when determining the number of factors to extract

(Brown, 1980). The Kaiser-Guttman criterion suggested that factors with eigenvalues of 1.00

or higher should be extracted. The logic behind avoiding factors with eigenvalues below 1.00

is that this value generally indicates how many items (statements) are captured by that factor.

Ideally, a factor with an eigenvalue at or about 1.0 in value is represented by only one or two

items (statements). These weak factors are not considered to be stable, and therefore are not

recommended for inclusion (Field, 2009).   The PCA run indicated that 68% of variance in

responses can be captured with three factors. After considering the unrotated factor matrix, the

eigenvalues, and, this information, the three-factor model Varimax rotation, was selected as

the best option for the next step in the analysis. The results of the initial rotation are presented

in Table 2.

Table 2.
Unrotated Factor Matrix with Eigenvalues

	1	2	3	4	5	6	7	8
Sorts								
1 UC4	0.83	-0.03	0.05	-0.23	0.19	-0.14	-0.12	-0.35
2 UC3	0.36	-0.64	0.40	-0.37	0.04	0.20	-0.27	0.18
3 UC2	0.81	-0.31	-0.25	-0.01	0.24	-0.02	-0.09	-0.06
4 UC1	0.58	-0.04	0.24	0.65	0.35	-0.03	-0.09	-0.04
5 CRAW4	0.88	0.04	-0.10	0.15	-0.09	-0.03	-0.09	0.19
6 CRAW3	0.30	0.66	-0.38	-0.18	0.42	0.26	-0.10	0.19
7 CRAW2	0.64	0.05	-0.55	-0.16	-0.31	-0.26	-0.14	-0.03
8 CRAW1	0.71	-0.13	-0.17	0.17	-0.41	0.39	0.13	-0.04
9 CES1	0.38	0.63	0.45	0.03	-0.31	0.17	-0.27	-0.14
10 CES2	0.76	0.14	0.24	-0.31	0.15	0.12	0.42	-0.10
11 CES3	0.87	-0.19	-0.10	0.16	-0.07	0.03	0.16	0.09
12 CES4	0.69	0.27	0.42	-0.08	-0.09	-0.39	0.11	0.24
Eigenvalues	5.56	1.48	1.22	0.85	0.80	0.55	0.43	0.33
% expl.Variance	46	12	10	7	7	5	4	3

Cumulative Communalities' Matrix

While eigenvalues show the communality between factors in a Q sort, the Cumulative Communality Matrix indicates how much a particular Q sort holds in common with all of the other Q sorts in the study. "A high communality signals that the Q sort is typical or highly representative of the group as a whole" (Watts & Stenner, 2010, p. 104). Table 3 (below) provides the Cumulative Communalities' Matrix for the study. This can be understood by looking at a specific example: participant responses for UC4. The UC4 respondent indicates 0.6957 on the first factor (or rounded to 70%). This is the percent of the variance of this participant's responses that are considered to be common variance. At the bottom of each column, the average variance for each factor is calculated. For example, factor 1 has a cumulative variance of 46%, as indicated on Table 3.

Table 3.
Cumulative Communalities' Matrix

	1	2	3	4	5	6	7	8
Sorts								
1 UC4	0.70	0.70	0.70	0.75	0.79	0.81	0.82	0.94
2 UC3	0.13	0.54	0.70	0.84	0.84	0.88	0.95	0.98
3 UC2	0.66	0.76	0.82	0.82	0.88	0.88	0.89	0.89
4 UC1	0.34	0.34	0.40	0.82	0.94	0.94	0.95	0.95
5 CRAW4	0.78	0.78	0.79	0.82	0.83	0.83	0.84	0.87
6 CRAW3	0.09	0.52	0.67	0.70	0.87	0.94	0.95	0.99
7 CRAW2	0.40	0.41	0.71	0.74	0.83	0.90	0.92	0.92
8 CRAW1	0.51	0.53	0.56	0.58	0.75	0.90	0.92	0.92
9 CES1	0.14	0.54	0.75	0.75	0.85	0.87	0.94	0.96
10 CES2	0.57	0.59	0.65	0.74	0.77	0.78	0.95	0.96
11 CES3	0.75	0.78	0.79	0.82	0.83	0.83	0.85	0.86
12 CES4	0.48	0.55	0.72	0.73	0.74	0.89	0.90	0.96
Cum expl. Var.	**46**	**59**	**69**	**76**	**83**	**87**	**91**	**94**

Humphrey's Rule

Another parameter that can help determine the appropriate number of factors to consider for examination is Humphrey's Rule. It states that "a factor is significant if the cross-product of its two highest loadings exceeds twice the standard error" (Brown, 1980, p. 223). Table 4 provides the number of defining factors, average reliability coefficient, composite reliability, and the standard error of factor scores.

Table 4.
Humphrey's Rule Test

	Factor 1	Factor 2
No. of Defining Variables	9	2
Average Rel. Coefficient	0.800	0.800
Composite Reliability	0.973	0.889
S.E. of Factor z-scores	0.164	0.333
Differences	0.232	0.471
Standard Error x2	0.328	0.666

Note. Standard Error <.05

Based on the results of the Humphrey's Rule test, Table 5 indicates that there is little

correlation between factors 1 and 2 after the PCA run.

Table 5.
Correlations between Factor Scores

	Factor 1	Factor 2
Factor 1	1.0000	0.0654
Factor 2	0.0654	1.0000

This information narrows the number of factors for consideration for Varimax rotation to two.

Based on guidelines provided by Watts and Stenner, and Brown, the analysis was initially

conducted to isolate three factors using Varimax rotation, however, a two-factor Varimax

rotation was found to present a stable result. These findings are compared to the audio

transcripts and interview notes to determine if any patterns exist in the data.

The PCA rotation output provides data to highlight on which factor each

participant loaded significantly. Table 6 (below) highlights this information by placing an

"X" beside loading for each respondent, indicating the factor that their responses loaded on

most significantly. Notably, is participant CES1. As indicated on Table 6, this individual's

responses do not load significantly on any factor.

Table 6.
Factor Matrix with Defining Sort

Q sort	1	2
1 UC4	0.8173X	0.0328
2 UC3	0.2648	0.4969X
3 UC2	0.7611X	0.3559
4 UC1	0.5015X	0.1333
5 CRAW4	0.8738X	-0.0421
6 CRAW3	0.2412	-0.4567X
7 CRAW2	0.6734X	-0.1260
8 CRAW1	0.6517X	0.0432
9 CES1	**0.3490**	**-0.4096**

10 CES2	0.7464X	-0.0203
11 CES3	0.8293X	0.1948
12 CES4	0.7171X	-0.2044
Expl. Var.	43	7

Note. X indicates significant factor loading

The factor loadings for the responses of participant CES1 indicate that the loadings were

relatively similar on both factors, and, in opposing directions (i.e., positive on factor 1 and

negative on factor 2). A review of the transcript prepared from the interview with CES1

indicates that the individual was in an assignment serving students in K-6, and, by the nature

of this assignment, he/she did not have a strong feeling one way or the other about the Art in

Action grant. He/she stated

> It's difficult for me to place cards in certain places that I don't have enough
>
> knowledge on… I mean some I had a greater opinion and I could choose easy
>
> but some I had difficulty to place due to the fact that it's difficult to place
>
> things if you don't have the knowledge that you feel you need to make it
>
> meaningful.

The interview transcript supports the results observed by the Q sort responses of participant

CES1.

Q Sort Statements with Corresponding Ranks

Another way to look at the data from the PCA is to examine the 40 Q sort

statements with their corresponding ranks. A factor is defined by a selection of persons

loading highly on the factor. This information is valuable when it is compared to the audio

transcripts, interview notes, and, the next step in the PQMethod analysis, the Varimax

rotation. Table 7 shows factor scores for factor 1, which are rotated based on Z-scores.

Table 7.

Factor Scores for Factor 1, For Z-scores Greater than 1.0

No.	Statement	Z-Score
39	Students with social challenges experienced success in Art in Action.	1.69
6	Art infused instruction can reach different learning styles.	1.51
4	Learning support students excelled in their art work and experienced a growth in their confidence.	1.45
15	Customizing learning to a student's strengths and interests is essential for school to be relevant.	1.22
36	Art instruction infused with core subjects provides students with meaningful connections to class	1.14
14	The Art in Action grant provided movement and multi-sensory activities.	1.08
3	The Art in Action grant was meaningful and fun.	1.00
31	The Art in Action grant is another form of differentiated instruction.	0.97
23	Scheduling arts integration with core subjects is difficult.	-0.97
22	The Art in Action grant took away time from core subject instruction.	-1.14
1	The resident artist did not understand the core curriculum.	-1.15
7	Scheduling time with the resident artist was a problem.	-1.20
37	The Art in Action grant requires too much paperwork.	-1.20
33	The Art in Action grant materials were expensive.	-1.30
10	The principal was not familiar with the Art in Action grant.	-1.49
12	Too much time was spent on planning and not enough time was allotted for the resident artist to interact	-1.51
9	I don't see much benefit in the Art in Action grant.	-2.38

The complete results for the information on Table 7 are provided in Appendix D.

Additionally, Table 8 provides factor scores for factor 2.

Table 8.

Factor Scores for Factor 2

No.	Statement	Z-Score
4	Learning support students excelled in their art work and experienced a growth in confidence	2.19
23	Scheduling arts integration with core subjects is difficult.	1.96
9	I don't see much benefit in the Art in Action grant.	1.67
22	The Art in Action grant took away from core subject instruction.	1.24
32	The Art in Action grant was learning in a hands-on and fun way.	1.24
28	Working with a resident artist made instructional time more valuable.	1.09
39	Students with social challenges experienced success in Art in Action.	1.09

14	The Art in Action grant provided movement and multi-sensory activities.	0.86
20	The Art in Action grant has initiated a change in instructional practices.	-1.15
5	The Art in Action grant encourages a teacher to reflect on instructional practices.	-1.21
27	Participating in the Art in Action grant was a tremendous amount of work.	-1.27
1	The resident artist did not understand the core curriculum.	-1.27
15	Customizing learning to a student's strengths and interests is essential for school to be relevant.	-1.47
21	Most teachers are not willing to take the time or effort to infuse the arts in instruction of reading.	-1.53
37	The Art in Action grant requires too much paperwork.	-1.76
6	Art infused instruction can reach different learning styles.	-1.79

The complete results for the information on Table 8 are provided in Appendix E.

A closer examination of the statements and the corresponding differences between factors results in statements which are noteworthy when considering a standard deviation greater than 1.0. Fourteen statements have been identified from the total of 40 Q sort statements and are listed in Table 9 in a descending array of differences between factors 1 and 2.

Table 9.
Descending Array of Differences between Factors

No.	Statement	Factor 1	Factor 2	Diff
6	Art infused instruction can reach different learning styles.	1.51	-1.79	3.29
15	Customizing learning to a student's strengths and interests…	1.22	-1.47	2.69
5	The Art in Action grant encourages a teacher to reflect on …	0.81	-1.21	2.02
13	Tapping into a child's imagination through the arts…	0.96	-0.40	1.37
25	It is the teacher and how he/she infuses the arts into lessons…	0.34	-0.89	1.23
20	The Art in Action grant has initiated a change in instruction…	0.07	-1.15	1.22
21	Most teachers are not willing to take the time or effort to…	-0.31	-1.53	1.22
10	The principal was not familiar with the Art in Action grant.	-1.49	-0.49	-1.00
28	Working with a resident artist made instructional time more…	-0.33	1.09	-1.43
33	The Art in Action grant materials were expensive.	-1.30	0.17	-1.47
7	Scheduling time with the resident artist was a problem.	-1.20	0.37	-1.57
22	The Art in Action grant took away time from core subject…	-1.14	1.24	-2.38
23	Scheduling arts integration with core subjects is difficult…	-0.97	1.96	-2.93
9	I don't see much benefit in the Art in Action grant.	-2.38	1.67	-4.05

Note. Noteworthy difference (>1.0 SD)

Varimax Rotation

"Factor rotation involves the physical movement or rotation of the factors, and their viewpoints, about a central axis point" (Watts & Stenner, p. 122). In PQMethod factor rotation can be done by hand using the QROTATE procedure or by Varimax using the QVARIMAX procedure. Varimax rotation provides the most parsimonious results and was the best choice for factor rotation for this study. A three-factor Varimax rotation was conducted initially, as indicated above, however, the results provided two dominating factors. As indicated in Table 10, the Unrotated Factor Matrix, highlighting the initial three factors with responses at or above .30, is considered to be significant (α at $p<.05$) prior to rotating.

Table 10.
Unrotated Factor Matrix

Sorts	Factor 1	Factor 2	Factor 3
1 UC4	0.84	0.15	0.02
2 UC3	0.27	0.12	0.02
3 UC2	0.78	-0.19	0.03
4 UC1	0.52	0.02	0.00
5 CRAW4	0.90	-0.17	0.03
6 CRAW3	0.25	-0.04	0.00
7 CRAW2	0.57	-0.53	0.49
8 CRAW1	0.67	-0.19	0.03
9 CES1	0.34	0.24	0.06
10 CES2	0.75	0.27	0.08
11 CES3	0.85	-0.14	0.02
12 CES4	0.67	0.45	0.27
Eigenvalues	5.15	0.78	0.32
% expl. Var.	43	6	3

Table 11, Cumulative Communalities' Matrix, depicts the three-factor Varimax

rotation showing how much each of these factors has in common with the other, while

resulting in factors that were clearly discriminate. A high communality signals that the

Q sort is highly representative of the group as a whole. A low communality indicates

that the Q sort is atypical (Watts & Stenner, p. 104).

Table 11.
Cumulative Communalities' Matrix

Sorts	Factor 1	Factor 2	Factor 3
1 UC4	0.70	0.73	0.73
2 UC3	0.07	0.09	0.09
3 UC2	0.61	0.64	0.65
4 UC1	0.27	0.27	0.27
5 CRAW4	0.81	0.83	0.84
6 CRAW3	0.06	0.06	0.06

7 CRAW2	0.32	0.60	0.84
8 CRAW1	0.44	0.48	0.48
9 CES1	0.12	0.18	0.18
10 CES2	0.56	0.64	0.64
11 CES3	0.73	0.75	0.75
12 CES4	0.45	0.65	0.72
Cum% expl.Var	43	49	52

Once the factors were rotated, two factors had defining sorts.   Table 12 (below)

provides the resulting Defining Sorts. While these factors are labeled as factors 1 and

2, these resulted from factor 1 and factor 3 (from Table 11).

Table 12.
Rotated Solution Defining Sorts

	Factor 1	Factor 2
Sorts		
1 UC4	0.55	**0.61X**
2 UC3	0.13	0.26
3 UC2	**0.72X**	0.32
4 UC1	**0.38X**	0.32
5 CRAW4	**0.80X**	0.40
6 CRAW3	0.21	0.12
7 CRAW2	**0.84X**	0.05
8 CRAW1	**0.63X**	0.25
9 CES1	0.12	**0.40X**
10 CES2	0.41	**0.67X**
11 CES3	**0.74X**	0.40
12 CES4	0.27	**0.81X**
% expl. Var.	30.0	19.0

Each "**X**" indicates on which factor the sorter falls significantly. The rotated factors

represent 49% of the variance with factor 1 representing 30% and factor 2 representing

19%. UC3 and CRAW3 did not endorse significantly on either factor. A review of

the audio transcript and an interview with the facilitator provided further insight into

these participants' Q sorts and responses. UC3 asked to have the recorder turned off

during the session in order to speak off the record. He/she was in the process of

interviewing for a different teaching position and appeared to feel conflicted about the

environment in his/her school. The facilitator reported that CRAW3 appeared to take exception to every statement and overanalyzed his/her responses. This participant spent a long period of time completing the sort. While most participants were able to finish the sort in one hour or less, CRAW3 took nearly double that time to complete the process.

An examination of the statements used in the Q sort, along with the resulting factor scores for factor 1 and 2, and the corresponding ranks, provides some insight about which statements the participants felt most strongly, either positively or negatively. Factor Scores with Corresponding Ranks combines information about factors 1 and 2. The full results are provided in Appendix C. Computed correlation between the resulting factor scores was a significant $r = 0.6351$. Watts and Stenner (2012) maintained that significant correlations should be present between factors when you have as few as two factors.

In order to facilitate cross-factor comparisons, the total scores are converted to *z-score*s or

standard scores. The *z-score*s for 13 statements for factor 1 are listed in Table 13.

Table 13.
Factor 1 z-scores

No.	Statement	z-
39	Students with social challenges experienced success in Art in Action.	2.07
4	Learning support students excelled in their art work and experienced	2.03
15	Customizing learning to a student's strengths and interests is	1.58
6	Art infused instruction can reach different learning styles.	1.36
19	Infusing art in reading and math instruction allows students to	1.13
5	The Art in Action grant encourages a teacher to reflect on	1.13
37	The Art in Action grant requires too much paperwork.	-1.02
35	The Edinboro University specialists had little or no effect on the	-1.07
12	Too much time was spent on planning and not enough time was	-1.22
22	The Art in Action grant took away time from core subject instruction.	-1.26
23	Scheduling arts integration with core subjects is difficult.	-1.40
33	The Art in Action grant materials were expensive.	-1.44
9	I don't see much benefit in the Art in Action grant.	-2.37

Table 14 provides the factor 2 *z-score*s for 14 statements from the factor 2 analysis.

Table 14.
Factor 2 z-scores

No.	Statement	z-
36	Art instruction infused with core subjects provides students with	1.68
6	Art infused instruction can reach different learning styles.	1.61
31	The Art in Action grant is another form of differentiated instruction.	1.58
21	Most teachers are not willing to take the time or effort to infuse the	1.52
13	Tapping into a child's imagination through the arts enhances his/her	1.46
14	The Art in Action grant provided movement and multi-sensory	1.28
3	The Art in Action grant was meaningful and fun.	1.19
32	The Art in Action grant was learning in a hands-on and fun way.	1.00
37	The Art in Action grant requires too much paperwork.	-1.04
12	Too much time was spent on planning and not enough time was	-1.20
1	The resident artist did not understand the core curriculum.	-1.56
7	Scheduling time with the resident artist was a problem.	-1.95
10	The principal was not familiar with the Art in Action grant.	-2.00
9	I don't see much benefit in the Art in Action grant.	-2.08

These statements have *z-score*s > 1.0 and, therefore, will be compared to qualitative

information from the participants. The statements on these tables represent the high

positives and high negatives from the participants loading on factors 1 and 2.

Before interpretation of results, it is usual to convert *z-score*s for each item

into a single factor array to make the data conform to the format in which it was originally

collected (Watts & Stenner, p. 140). Table 15 presents the Descending Array of

Differences between factors 1 and 2 and shows 13 statements with the difference between

the z-scores tabulated.

Table 15.

Descending Array of Differences between Factors 1 and 2

No.	Statement	Factor 1	Factor 2	Diff
39	Students with social challenges experienced success in Art in Action.	2.07	0.51	1.56
4	Learning support students excelled in their art work and experienced..	2.03	0.47	1.56
10	The principal was not familiar with the Art in Action grant.	-0.64	-2.00	1.37
7	Scheduling time with the resident artist was a problem.	-0.63	-1.95	1.31
15	Customizing learning to a student's strengths and interests is essential..	1.58	0.44	1.13
25	It is the teacher and how he/she infuses the arts into lessons…	0.67	-0.29	0.95
2	The Art in Action grant encouraged higher order thinking skills…	0.73	-0.18	0.91
33	The Art in Action grant materials were expensive.	-1.44	-0.46	-0.98
29	The success of the Art in Action grant will be measured from …	-0.70	0.30	-1.00
31	The Art in Action grant is another form of differentiated instruction.	0.56	1.58	-1.02
22	The Art in Action grant took away time from core subject instruction.	-1.26	-0.16	-1.10
23	Scheduling arts integration with core subjects is difficult.	-1.39	-0.06	-1.33
21	Most teachers are not willing to take the time or effort to infuse …	-0.88	1.52	-2.39

The Varimax rotation model resulted in one less defining variable than the PCA model.

Table 16 illustrates a best possible estimate of what a perfectly loaded Q sort might look like.

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Table 16.
Factor Characteristics

Characteristic	Factor 1	Factor 2
No. of Defining Variables	6	4
Average Rel. Coef.	0.800	0.800
Composite Reliability	0.960	0.941
S.E. of Factor *z*-Scores	0.200	0.243

Table 17.
Standard Errors for Differences in Factor z-Scores

Factors	1	2
1	0.283	0.314
2	0.314	0.343

Note. Diagonal entries are S.E. within factors

As indicated in Table 16 and Table 17, the standard errors for differences in factor *z-score*s

were 0.283 for factor 1 and 0.343 for factor 2. The reliability estimates for both factor one

and factor two exceed recommended level of α > .75 (Field, 2009).

Model Sort for Factor 1 and Factor 2

Lastly, it is instructive to examine the data through a model Q sort for participants who

loaded significantly on factor 1 and factor 2. Figure 1 illustrates a model Q sort for factor 1

using the *z-score*s attributed to each statement. The extreme positive and negative scores

represent strong beliefs these participants held regarding the Art in Action grant.

Figure 1. Model Sort for Those Participants Who Loaded Significantly on Factor One

Strongly Disagree			Disagree			Neutral			Agree		Strongly Agree	

-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
9	23	12	21	27	38	17	31	13	5	6	4	39
	33	22	37	28	34	30	11	2	36	19	15	
			35	29	18	8	32	3	14			
				1	7	16	20	25				
					10	26	40					
						24						

Figure 2 illustrates a model Q sort for those participants who loaded significantly on factor 2.

Figure 2. Details a Model Sort for Those Participants Who Loaded Significantly on Factor 2

Strongly Disagree	Disagree		Neutral	Agree	Strongly

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Agree

-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6
9	7	12	35	18	25	17	4	19	14	21	6	36
	10	1	24	30	20	40	15	8	3	13	31	
			37	27	33	23	5	39	32			
				26	38	22	29	11				
					28	2	16					
						34						

As indicated above, the z-scores attributed to each statement in the sort were ranked in descending order. This information was used to place the statements in the Q sort forced distribution. The statements that appear in the -6 and -5 columns are those which the participants most strongly disagreed. At the other extreme are statements in columns 5 and 6 which represent the statements with which the participants most agreed.

Qualitative Synthesis of Participants' Perspectives

An exciting portion of the Q methodology design is the analysis of the transcripts of the audio recordings and information from the facilitators that can shed some more insight into what the participants were thinking as they completed their individual sorts. By virtue of the qualitative nature of this information, it is open to interpretation from the researcher and the reader. This section begins with some general points gleaned from the transcripts and interviews with the facilitators. Next, the research questions are addressed with any remarkable information from the Q sort analysis and transcripts. Copies of complete transcripts from audio recordings and facilitator notes are in Appendix F.

The general consensus from the transcripts and from conversations with the facilitators is that the participants felt participation in the Art in Action grant activities was a positive experience for the students, especially students with special needs, such as those with Individual Education Plans for emotional and learning support, and for students receiving extra assistance through the Title I reading program. The teachers felt students

gained confidence and interacted well with their peers during the Art in Action activities with the resident artist. CES3 stated

> The Art in Action grant provided movement and multi-sensory activities and I feel that that's what the whole program is about. Working with the emotional support students and the instructional support students that I do I see the benefits in that and how important it is for them to have those multi-sensory activities so that's why I agreed with statement 14 the most.

Statement 14 was "the Art in Action grant provided movement and multi-sensory activities." Statement 14 ranked in the agree column in the model factor 1 and factor 2 Q sorts. CES4 made the point that "a lot of time kids who don't normally participate will really jump on board with the Art in Action lessons and be outspoken when normally they are pretty reserved."

In the model Q sort for factor 1, statement 39 ranked in the +6 column indicating the strongest agree category. This statement is "students with social challenges experienced success in Art in Action."

> The furthest column on the Q sort, to the left, shows statement 9 in -6 on both the factor 1 and factor 2 distributions. Statement 9 is" I don't see much benefit in the Art in Action grant." The participants felt the opposite about the grant experience. CRAW2 was definitive in his/her comment about the grant, "you can't put a price on it, it's priceless."

UC4 stated

> I think it was a positive experience and I think a lot of it matched my philosophy. I just feel you know like if your hands are on then your mind is on. If you're active and engaged you'll get the comments like oh it's time to go already? It's time to clean-up? Time flies when you're doing fun type

things.

A facilitator reported that teachers in one of the schools expressed some frustration that teaching using the Art in Action model was the way education should be delivered. With the end of the grant, some of the opportunities were also gone.

Research Question 1: What characteristics of the implementation of the Art in Action grant do participants identify as most important to insure sustainability of change in reading and math instruction?

The model Q sort distribution for factor 2 places statement 36 in the +6 space on the grid. This statement reads "art instruction infused with core subjects provides students with meaningful connections to classroom instruction." Factor 1 also places this statement in the agree section of the distribution in column 2. The facilitators reported that participants felt the Art in Action model is the way instruction should be delivered, especially to struggling students. However, not everyone agreed with this perspective. Statement 21 is "most teachers are not willing to take the time or effort to infuse the arts in instruction of reading and math." CES4 stated "I completely agree with that. I think some teachers have been doing the same lessons for years and feel like it's not broke."

Although this participant could see the value in the Art in Action model. He/she said "it's just hard to do every day." Participants who loaded on factor 1 placed statement 22 in the disagree column, which means they felt the core subjects did not suffer loss of instructional time due to the Art in Action activities. The statement reads "the art in action grant took away time from core subject instruction." It seems the teachers are willing to spend the time planning arts infused lessons in the core subjects because they

see the benefit for the struggling students as well as the rest of the class. As CRAW4 said "the students in the Art in Action experienced success. It was amazing."

A challenge for school boards and public school administrators is identifying characteristics that might insure sustainability of innovative teaching once the grant has ended. Some participants in the Art in Action grant appeared to be impacted by their experience in a way that changed their educational practices. They are committed to continue to use what they learned during the grant because of the emotional connection they made. UC1 stated

> When I went to the first two classes I hated it. I didn't want to do it. I didn't like the drums. It was out of my comfort zone. Then they did this thing called I-movie where you take the video camera and you take a movie and bring it back and tinker with it. I don't know what happened but it really clicked with me. It really took off in my world. I now have over 34 videos and I became a Golden Apple winner because of my work with it. This is especially true of my work with autistic kids. I don't know what it is but we'd make a movie, bring it back and watch it and those kids would just get it. It made sense to them. I've now taken what I learned in Art in Action and applied it to my Masters program at Westminster College.

Other teachers felt that infusing the arts in math and reading instruction is the most effective approach and report they have always taught this way. It appeared to align with their philosophy of teaching. UC3 stated "I'm one of those people who thinks that play is important and art should be a core curriculum." UC4 agreed and said "I was already

kind of on board; I was buying into it before it (the grant) started." The participant stated

to the facilitator that the AIA experience was reaffirming. When asked if participation in

the AIA grant affected him/her personally CRAW4 reported "the kids love it so yeah I've

changed a lot."

Another key to sustainability that emerged from the interviews with the

participants was the role the principal played. CES1 stated "I think as principal your

leadership role is important cause you can really make or break the program, any

program, but especially this program if you're not behind it." CRAW2 reported that

"others are motivated because the principal is motivated. Let's just say she leads by

example."

Research Question 2: What impact does the Professional Learning Community

framework have on the implementation of the Art in Action grant?

A Professional Learning Community is characterized by collaboration on a

purposeful level, and reflection on instructional practice. This collaboration and reflection

are an expectation from the administration, and, as such, the master schedule in a school is

written to facilitate that collaboration and reflection on professional practice will occur. In

this study, the following statements make reference to collaboration and reflection of

practice and are important to consider when looking at research question 2.

- Statement 5-The Art in Action grant encourages a teacher to reflect on instructional
  practices.

- Statement 8-It was beneficial to collaborate with colleagues.

- Statement 12-Too much time was spent on planning and not enough time was

allotted for the resident artist to interact with the students.

- Statement 16-The Art in Action grant has provided opportunities for collaboration.

An examination of the model Q sort for factor 1 shows statement 5 falls in column 3,

which represents agreement on reflection on instructional practice. Statements 8 and 16

are placed in column 0 representing neutrality on collaboration. A similar result is present

in the distribution for factor 2. Statement 8 is in column 2 and statements 5 and 16 are

placed in column 1. There is consensus on statement 12. Both models place it in the -4

column representing fairly strong disagreement. In this study, Cambridge Springs

Elementary School has implemented the Professional Learning Community (PLC) model

with an expectation that it will be used in all classrooms and across grade levels. First

District Elementary and Union City Elementary schools do not have a formal PLC model

in place. This might be an explanation for why statements 5, 8, and 16 are placed towards

the neutral center of the distribution. The transcripts reveal some interesting insight on

collaboration. CRAW2 works in a school that does not have a formal PLC model,

however, he/she stated "the collaboration between teachers needed to occur in order for the

grant to work. There was help with substitutes. Classes were allowed to meet together and

one artist was assigned per grade level to facilitate collaboration."

UC4 also works in a school that does not have a formal PLC model and voiced

disagreement with statement 12 by saying "I disagree with that. I think we had a lot of

planning time." In Cambridge Springs Elementary, where PLCs have been in place for

several years and are supposed to be part of their culture, the transcripts reflect the

participants still view the PLC as a program or a thing they do.

CES3 indicated: "I think that a PLC is extremely important." He/she also stated

> I felt like the collaboration varied dependent upon the teacher's personality

and the artist's personality. I think there was a valiant effort put forth

regardless of the situation. I just feel that some people collaborate better

than others. I think it was a personality thing.

When CES2 was asked by the facilitator if the Art in Action was discussed during the

allotted PLC time for his/her grade level, CES2 indicated "well I shouldn't say that it was

not; it was a very small part of our PLCs. It didn't affect my instruction in the classroom

so it wasn't something I had to worry about." CES1 reported "I wasn't involved in any of

those PLCs."

Research Question 3: What effect does a principal's leadership and the overall school

culture have on the implementation of the Art in Action grant?

Four statements in the Q sort touched on the principal's leadership during

the grant period and the culture of the school.

- Statement 10-The principal was not familiar with the Art in Action grant.

- Statement 18-Sustainability for the Art in Action grant must come from the

  teachers.

- Statement 21-Most teachers are not willing to take the time or effort to infuse the

  arts in instruction of reading and math.

- Statement 29-The success of the Art in Action grant will be measured from the

  participation of all stakeholders.

The factor 1 Q sort distribution shows statement 21 in the -3 column indicating

disagreement with the notion that teachers are not willing to put forth effort to infuse the

arts in instruction in reading and math. The other three statements are placed more towards

the center of the distribution indicating no strong feeling one way or the other. The factor

2 Q sort differs in the placement of statement 10 in column -5 indicating strong

disagreement with the fact that the principal was not familiar with the Art in Action Grant. This was reinforced by excerpts from the transcripts. CRAW4 indicated "my principal was supportive and excited to be part of this grant. She will do anything to help kids succeed." CES1 remarked: "the principal was very familiar and very active and involved in grant activities." UC3 commented "my principal attended many of the Art in Action workshops provided by the Edinboro University specialists along with the teachers to show support of the grant."

During the interviews some of the participants were vocal in their opinions about the culture in their schools and how it related to participation in the grant. A facilitator reported that participants in one school felt left out when they were not part of the Art in Action grant. Some of these teachers expressed the fact that their principal was supportive of Art in Action teaching techniques, but, when the grant money was gone, the support from the principal seemed to fade away as well. This appeared to frustrate the teachers. They expressed they believed in the Art in Action techniques and felt this is the way education should be delivered, but, when the grant money went away the support fizzled out as well.

Research Question 4: What patterns or relationships exist between the proposed research and the Art in Action Demonstration grant research?

It is important to consider this study in the context of the Art in Action Demonstration grant research. The purpose of the AIA grant was to improve lesson planning and development of active, engaging styles of teaching by using professional development and partnerships between resident artists and classroom teachers. The demonstration grant logic model examined four areas that overlap with this study. The grant used trained observers to determine if Art in Action improved the quality of

teaching. A second goal of the grant was to improve student achievement in math and reading as measured on the PSSA and student report cards. A third goal was to improve student engagement. Finally, the grant tried to improve key learning habits associated with the arts. The researchers used observations, surveys, student scores on PSSA, and report cards to measure success. Keystone Research Associates of Erie completed the analysis and reported success in these four areas. The current study includes statements in the Q sort that are related to these goals of the AIA grant. An examination of each goal of the AIA grant with statements from the Q sort analysis and interview transcripts provides some more insight into the grant.

Goal 1: Improve Quality of Teaching through Professional Development

Edinboro University specialists provided graduate classes taught at the three elementary schools participating in the Art in Action grant. Teachers could earn graduate credit that often applied to movement across the pay scale at no tuition cost. A second feature of the grant was the opportunity to work with a professional artist assigned to the teacher's classroom for 6-8 weeks. Statements 24, 28, 30, 35, and 40 relate to these experiences.

- Statement 24- The resident artist was the reason the implementation of the Art in Action grant was successful.

- Statement 28-Working with a resident artist made instructional time more valuable.

- Statement 30-The Edinboro University specialists were eager to help in any way.

- Statement 35-The Edinboro University specialists had little or no effect on the implementation of the Art in Action grant.

- Statement 40-The graduate class provided innovative ideas that I used in my classroom.

An examination of the model Q sorts for factors 1 and 2 shows these statements falling in the middle of the distribution which indicates no strong feelings either way. Statement 35 falls in column -3 on the factor 2 sort. Teachers appeared to feel the specialist had some effect on the implementation of the grant. CRAW2 commented that:

> The first year classes from the university were so effective with a lot of moving. I learned a lot that would pertain to the elementary school. The second year was not as much fun and the expectation was deeper thinking. Teachers do get a little tired by the afternoon.

UC4 commented he/she really enjoyed the class. Regarding the resident artist, UC4 indicated "it comes right back to the artist. She really kinda knew what we wanted. She listened to us. The meetings were productive and she went out of her way to make it a good experience for us."

CES2 said "the artist was super flexible with just about everything that we needed and he did a super job communicating with us."

Goal 2: Improve Student Achievement

The Art in Action grant used PSSA scores and student report cards to measure student achievement. Four Q sort statements related to the PSSA. There were no statements that mentioned student report cards, however, statement 25 is a general statement about reading and math performance. Statements 26, 34 and 38 relate directly to the PSSA.

- Statement 25-It is the teacher and how he/she infused the arts into lessons that will increase student performance in reading and math.

- Statement 26-If students are exposed to Art in Action teaching techniques for more than one year, it will make a difference on the PSSA.

- Statement 34-There was little or no relationship between the Art in Action grant

and student achievement on the PSSA.

- Statement 38-There is a positive relationship between the Art in Action grant and student achievement on the PSSA.

The factor 1 Q sort distribution places statement 25 in column 2 which indicates agreement with the notion that infusing the arts into lessons will increase student performance in reading and math. Statements 26, 34, and 38 mention the PSSA directly and fall in the center of the distribution indicating neutrality on the topic of PSSA. The factor 2 distribution shows statement 25 in the -1 column indicating mild disagreement. Statements 26, 34, and 38 fall in the neutral column and in the disagree columns. The transcripts indicate some confusion over performance on the PSSA. Some teachers placed statements in the neutral column because, as CRAW2 indicated "I truly don't know since the grant was mainly occurring in the primary grades K-3 in my school."

UC4 seemed to have difficulty placing all of the statements about the PSSA and stated "I think all the difficulty with me comes with all the PSSA questions. I don't have the hard data that shows if the students did better."

CRAW4 shared "there was a time when there was a little boost in scores with the learning support students, but we don't get to dig deep in the data as much as we would like to."

Perhaps CES4 sums up the frustration with the PSSA statements by saying "some of these PSSA statements, I don't know like I said it's nearly impossible to measure. I'd like to think there is some kind of impact of AIA on the PSSA but backing that up would be nearly impossible."

One facilitator reported from her interviews that teachers struggled to connect the PSSA and participation in the AIA grant because they claim they do not see the data. This is surprising given the amount of time and effort spent in schools on data analysis. It seems

there is a disconnection between what the administrators think is happening and how it translates to the teachers' perceptions about PSSA.

Goal 3: Improve Student Engagement

Perhaps one of the most visible aspects of the Art in Action grant was the excitement it brought to lessons in the classroom. Project-based learning resulted in student showcases that were popular and widely attended by parents. Statements 6, 11, 13, 14, 19, 31, 32, and 36 focus on some of the changes that might occur in a classroom as a result of the AIA grant.

- Statement 6-Art infused instruction can reach different learning styles.

- Statement 11-The Art in Action grant provided brain-based activities.

- Statement 13-Tapping into a child's imagination through the arts enhances his/her experience with reading and math.

- Statement 14-The Art in Action grant provided movement and multi-sensory activities.

- Statement 19-Infusing art in reading and math instruction allows students to connect material on a personal level.

- Statement 31-The Art in Action grant is another form of differentiated instruction.

- Statement 32-The Art in Action grant was learning in a hands-on and fun way.

- Statement 36-Art instruction infused with core subjects provides students with meaningful connections to classroom instruction.

All of these statements fell on the right of the neutral column in both model Q sorts. Statements 6 and 19 were in column 4 on the factor 1 distribution indicating borderline strong agreement. On the factor 2 distribution, statement 6 was in column 6 indicating

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strong agreement that art infused instruction reaches different learning styles. CES4 responded about differentiated instruction by saying "a lot of time kids who don't normally participate will really jump on board with the AIA lessons and be outspoken when normally they are pretty reserved."

CES2 related his/her experience with one of the math units, indicating "it was really just neat seeing the finished product. Students had a lot of different mediums through which to present their finished projects. It tied math all together for the students."

Goal 4- Improve Key Learning Habits Related to the Arts

In the most general sense, this goal is related to the culture of a school and the impact the AIA grant had on the learning environment. Statements 17, 18, 20 and 29 touch on general themes of school culture and instructional change.

- Statement 17-Art makes learning more concrete and should be infused in all subjects at all ages.

- Statement 18-Sustainability for the Art in Action grant must come from the teachers.

- Statement 20-The Art in Action grant has initiated change in instructional practices.

- Statement 29-The success of the Art in Action grant will be measured from the participation of all stakeholders.

These statements fall in the center of the distribution on both model Q sorts. Statement 20 falls in the +1 column on the factor 1 Q sort distribution but falls in the -1 column on the factor 2 Q sort distribution. Neither placement represents a strong opinion one way or the other about changing instructional practices. One facilitator shared that several of the participants reported that participation in the AIA grant changed them personally. The

teachers felt they were more empathetic towards struggling learners. UC4 said about his/her experience with the grant:

It was a good experience. It made me enjoy school but again I think I've always kind of been that way. I don't know if it was really profound but again one of the reasons I volunteered to do it was I thought that sounds neat. I was already buying into it before it started.

UC3 expressed some frustration by saying

It is sad. I've been involved with young children for 20 years. I know there's a way to teach young children and I feel frustration so often when teachers don't get to do what they know is the right thing. There is not enough time in the school day.

Summary

Chapter 4 describes the analysis of data from participants in a federal art grant in three Northwestern Pennsylvania public schools using a mixed methods approach known as Q methodology. Q methodology is an inversion of the statistical technique of factor analysis and was selected as the best approach because it fits the Art in Action grant which involved a small number of teachers, administrators and artists. In this method, the people became the variables because it is a by-person factor analysis. Q methodology explores a variety of viewpoints of the participants and attempts to find commonalities between these viewpoints. By virtue of this method, the study is valid. Brown argues that "the concept of validity has very little status (relative to Q methodology) since there is no outside criterion for a person's own point of view" (1980, pp. 174-175).

The purpose of the current investigation is to examine perceptions of stakeholders regarding a federal arts grant in three rural elementary schools in Northwest

Pennsylvania using feedback from participants in the grant to determine important characteristics of successful implementation and sustainability. PQMethod 2.35, a dedicated Q methodological software package, produced output files for analysis.

A correlation matrix showed the intercorrelation of each Q sort with every other sort in the study. With the exception of 2UC3 and 6CRAW3 there were moderate-to-high correlations between participants' responses indicated by values greater than or equal to 30($r \geq .30$).

Eigenvalues were used to determine how evenly the variance of the matrix was distributed. For the current factor investigation it was determined that eigenvalues of less than 1 indicated a distinct decrease in factor strength.

A three factor varimax rotation was selected as the best option for rotation based upon the unrotated factor matrix, eigenvalues and recommendations of Brown and Kaiser-Guttman criterion. Also considered was information from the Cumulative Communalities Matrix which indicates how much a particular Q sort holds in common with all of the other Q sorts in the study.

Humphrey's Rule states that a factor is significant if the cross-product of its two highest loading exceed twice the standard error. This information narrowed the number of factors for Varimax rotation to two.

In Table 6, *Factor Matrix with Defining Sort* participant 9CES1's responses do not load significantly on any factor. A review of the audio tape transcription provides addition information that the person had difficulty placing cards because he/she did not feel he had enough knowledge.

Fourteen statements had *z-scores* greater than 1 and are considered noteworthy. They are identified in Table 9 showing *Descending Array of Differences*

between Factors.

Factor rotation is the physical movement of the factors and their viewpoints around a central axis point. In PQMethod, this can be done using QROTATE or QVARIMAX. Varimax provides the most parsimonious results and was the best choice for this study. Once the factors were rotated, two factors which were actually factors 1 and 3 had defining sorts. Notable in these results are 2UC3 and 6CRAW3. Once again, a review of the transcripts and interviews with the facilitators provided additional information to support these results.

In order to facilitate cross-factor comparisons, the total scores for statements were converted to *z-scores*. Statements with *z scores*>1.0 were compared to qualitative information from participants. Before interpretation of results, each item was converted into a single factor array to make the data conform to the format in which it was originally collected. The reliability estimates for both factor 1 and 2 exceed the recommended level of $\alpha > .75$ (Field, 2009).

Model Q sorts for factors 1 and 2 in *Figure 1* and Figure *2* shows a forced distribution of statements by number. Participants had to make decisions about how to place each statement in columns on the distribution making subtle distinctions between each ranking. These model Q sorts were compared with audio transcripts and facilitators' notes to determine general themes and patterns.

The results indicated participants felt participation in the Art in Action grant activities was a positive experience for students, especially those with special needs. Teachers in one of the schools expressed frustration when the grant ended because the teaching methods they learned through the Art in Action grant was the way they felt instruction should be delivered. When the grant ended, some of the opportunities to

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support these teaching techniques also ended. When considering sustainability, it appears that principal support and leadership and an emotional connection to the art in action teaching techniques are the two factors that most impact whether the teaching practices endorsed by the AIA grant will continue after grant funds are gone.

Chapter 5

Discussion

The purpose of the current study is to examine a federal arts grant in three rural elementary schools in northwest Pennsylvania using feedback from participants in the grant to determine their perceptions of important characteristics for successful implementation and sustainability of innovative teaching techniques. Cambridge Springs Elementary School, one of the schools participating in the grant, has implemented a Professional Learning Community (PLC) as a way to structure how teachers collaborate to plan for instruction and assessment. The current study also examined if there was any difference in the way the participants interacted during the Art in Action grant if they worked in a PLC school. Principal leadership and climate were examined to see if the participants perceived their principal's endorsement of the grant as important to the success of the project. Patterns and relationships between the Art in Action grant study and the current study were examined. Chapter five summarizes the findings for each research question and briefly discusses each outcome in the context of current research. This chapter also includes conclusions drawn from the results of the current study, lists limitations of the study, and recommendations for future research and implications for professional practice.

Research Question 1: What characteristics of the implementation of the Art in Action grant do participants identify as most important to insure sustainability of change in reading and math instruction?

Interviews with teachers and their responses on the Q sort exercise indicated that many participants perceived the Art in Action experience was beneficial for all students. Students with special needs, such as those on an Individualized Education Plan (IEP), or those receiving Title I Reading instruction, were impacted more than their regular education

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peers. Participants who loaded significantly on Factor 1 in the Q sort placed statement 39, "Students with social challenges experienced success in Art in Action" in column 6 on the forced distribution, indicating strong agreement. Participants who loaded significantly on Factor 2 placed statement 39 in column 2, indicating agreement. They appeared to believe that art infused instruction in the core subjects of reading and math can reach different learning styles. Statement 6, "Art infused instruction can reach different learning styles" ranked in the strongly agree columns on both model Q sorts. This finding is consistent with the findings of DeMoss and Morris (2002) when they investigated students' learning in Chicago Arts Partner in Education arts-integrated units. The results of their study supported the point that effective arts' integration can result in increased student learning especially for low achieving students.

It was important to the teachers that instruction be enjoyable to hold the interests of their students. Statement 3, "The Art in Action grant was meaningful and fun" was placed in the agree columns on both model Q sorts. Although there is some agreement on the benefit of the Art in Action grant for students with special learning needs and the importance of making learning fun for all students, the participants had a variety of opinions of how to insure sustainability of these innovative teaching techniques.

Some teachers expressed their support of the innovative teaching techniques and their desire to continue teaching this way because they felt an emotional connection to art infused instruction. In some cases the individuals believed so strongly in this form of teaching that they felt some frustration when the grant money was gone and it appeared to them that the emphasis in their school had shifted away from art infused instruction. CES4 stated "Well I think at the teacher level it's possible to sustain but the funding, ah, that's a good point." When the principal was supportive and engaged in activities, the teachers saw the value of

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these instructional techniques and followed along. CES3 stated "I think that if you don't have administrative support then it makes the teacher and the artist in residence both feel like it's not being valued and then I think it's not sustainable."

Others expressed the notion that their experience with the Art in Action grant had changed their teaching practices and they would continue using these practices in their instruction. UC1 was asked, by the facilitator, if the Art in Action grant has initiated change in instructional practices. He/she responded "Yes, in my world it has." However, not everyone was so convinced the Art in Action teaching techniques were sustainable. CES4 responded to statement 13, "Tapping into a child's imagination through the arts enhances his/her experience with reading and math" by saying "I definitely agree with that but it's just hard to do every day." CES4 loaded significantly on Factor One, placing statement 13 in column 2, agree.

Some participants in the current study identified that, when their principal showed support for the Art in Action grant, it translated to them that the initiative was a priority and they were willing to place a priority on it as well. Another viewpoint was that the innovative teaching of art infused instruction was the proper way to instruct students resulting in more engagement in the educational process. These teachers were aligned philosophically with this form of teaching and said they were likely to continue using these techniques after the grant ended.

Overall, the participants expressed satisfaction with their experience with the Art in Action grant. They were especially pleased with the way their students were engaged with the arts infused lessons and expressed joy as they worked on the special arts infused projects. This is consistent with a report from January 2015 from The President's Committee on the Arts and Humanities. The results of its Turnaround Arts' initiative, "a program that seeks to

reform schools by implementing art-infused education" are impressive. In schools that participated in this initiative, the students' math scores increased by 22.5% (Art-Infused Education Empowers Educators and Schools, 2015, p.1). When teachers see positive results from their students, both in engagement and academic achievement, they are likely to continue using the teaching strategies.

Research Question 2: What impact does the Professional Learning Community framework have on the implementation of the Art in Action grant?

A Professional Learning Community (PLC) is "an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for students they serve" (DuFour, DuFour, Eaker, & Many, 2010, p.11). In the Art in Action grant study, Maplewood Elementary School in the PENNCREST School District was the control school, and, is a Professional Learning Community School. For the purpose of the current study, Cambridge Springs Elementary School also located in PENNCREST School District is the only school that has a formal PLC process in place. Teachers and the administrators in Cambridge Springs Elementary School have been through extensive training on the PLC process. This training included teams of teachers attending national summits, as well as recognized experts on PLCs providing on-sight, professional development for staff. In addition, the master schedule of Cambridge Springs Elementary School is designed to provide formal collaboration time each day so teachers can work together in their PLC teams. Substantial time and resources have been devoted to this training, so it is important to determine if the PLC process had any impact on the Art in Action grant as perceived by the participants.

Several statements that were included in the survey related to characteristics of the PLC process. Some statements mentioned collaboration, common planning time, and the

importance of reflection of educational practices. Another key component of a PLC is collective reflection on instructional practices. Teachers identify what is working well in instruction, and, what is not, and make adjustments to insure that all children are progressing academically. Participants who loaded significantly on Factor 1 placed statement 5, "The Art in Action grant encourages a teacher to reflect on instructional practices" in column 3, indicating agreement with this statement. Both model Q sorts place statement 12, "Too much time was spent on planning and not enough time was allotted for the resident artist to interact with the students" in column -4, indicating strong disagreement. The teachers appeared to value the collective planning time they were given to discuss Art in Action activities. Statement 8, "It was beneficial to collaborate with colleagues" and statement 16, "The Art in Action grant has provided opportunities for collaboration" mention collaboration, however, for those participants falling significantly on Factor 1, these statements are in the neutral column. Participants falling significantly on Factor 2 rank these statements higher, placing them in the agree column on the distribution.

Voelkel (2011) used a mixed methods' study to examine collective efficacy and PLCs in Sunnyvale School District in Central Valley, California. His findings indicated that more effective PLC teams had collective efficacy (p. 74). Despite the exposure to training on the PLC process, an examination of the audio transcripts and facilitators' notes about PLCs indicates that some teachers in Cambridge Springs Elementary School still view the Professional Learning Community as something they are required to do during a meeting, and not an ongoing process that defines how they interact with one another to make decisions about instruction. It appeared they failed to make a connection between collaborating on Art in Action projects and the other tasks before them in a PLC planning time. When asked if his/her PLC ever discussed Art in Action during their PLC meetings CES4 stated:

I don't remember exactly collaborating on AIA but I just put it (the statement) there (on the distribution) cause it's always beneficial to collaborate even if it's three teachers who don't know what they're doing but I don't remember specifically collaborating on AIA.

CES3 made the connection between collaboration and sustainability by saying "I think it's that collaboration that's going to sustain all of this and then you take the ideas and use them in your classroom."

Union City Elementary School and First District Elementary School do not have a formal PLC process in place, yet their teachers appear to value the importance of collaboration and common planning time as related to the Art in Action grant. CRAW2 stated "The collaboration between teachers needed to occur in order for the grant to work." UC4 stated, "I think we had a lot of planning time." The fact that two of the three schools did not have a formal PLC process provides a possible explanation for the placement of statements referencing collaboration in the neutral and agree columns on the forced distribution. These teachers appear to see some value in collaboration, but when forced to make choices of where to place statements on the distribution, they chose to rank statements that mentioned students and instruction in the strongly agree and agree columns.

The Q sort analysis is a combination of all three schools in the Art in Action grant so, therefore, the impact of the Professional Learning Community process is minimized. In addition the participants from Cambridge Springs Elementary school demonstrated some confusion about the PLC process in their school. They did not associate discussions about Art in Action as something that would or should occur during regular PLC time.

Research Question 3: What effect does a principal's leadership and the overall school culture have on the implementation of the Art in Action grant?

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An effective principal is the instructional leader of the school and the keeper of the vision. Fullan (2014) proposed that for a principal to assume the role of lead learner he/she "must make both teacher learning and his or her own learning a priority," (p. 58). In the Art in Action grant, the participants were provided ongoing professional development in the form of graduate courses taught by educational experts from Edinboro University. The teachers received graduate credits at no cost, and in many cases, were able to use those credits to move to higher pay levels on their compensation scales. There was no comparable incentive for principals, yet several of them participated in the courses and AIA activities. This participation was not lost on the teachers. CRAW4 stated "that was something she was fantastic at (support from administrator) because she started it with us, followed it all the way through, took the class, followed it all the way through so she was a big supporter and still is." The teachers in Cambridge Springs Elementary School had two principals during the Art in Action grant period, but that did not seem to affect grant participation. CES1 commented:

> I worked with two principals during this time and they both believed in it and they both are very supportive and they both put a lot of work in to making it successful. They both understood it was a beneficial program that could help school environment school culture.

UC3 stated "My principal attended many of the Art in Action workshops provided by the Edinboro University specialists along with the teachers to show support of the grant." When a principal is present and active, the message that translates to the teachers is that this activity is important and of value. It is a priority for the principal, and, by default, becomes a priority for the teacher. CES2 stated:

> The fact that (the principal) was supportive of it you know would probably say that

was the biggest thing right there. It was something that she sees value in it also and so I think if it was something a principal didn't see value in it would be very easy to put a stop to it. So I guess she continues to make sure that it is the thing that happens in our building.

Not everyone was willing to follow the lead learner and support the Art in Action grant. Some participants expressed an opposing view. The issue of time to complete grant activities and a reluctance to change were expressed by several participants during their interviews with the facilitators. CES1 stated:

I think time's an issue any time you put more work on a teacher's plate they become nervous. I don't know if there's any way to get any teacher behind anything. Whenever there's a change it's always very difficult. This was a change you know Just from hearing teachers talk it sounded like a lot of work.

Some teachers are willing to listen politely and then ignore the wishes of the principal when they return to their classroom. When asked to discuss leadership, and if it would be possible for a teacher to take the role of leader in his/her grade level, CES4 expressed some reluctance and concern about change when he/she stated:

Um I'd love to say that a teacher like me could step up and rally the troops and get everyone on board and I feel like administration could do the same thing but I really don't think that they can. I still think that ah they're (the teachers) gonna go in there and nod their heads and say they're on board and come back to school and nothing will change. I don't know if its stubbornness or people just set in their ways but a lot of people are afraid of change.

During the Art in Action grant period there was an increased emphasis on preparation for the PSSA tests. Teachers were asked to manage their time during the school day to

include academic preparation for the PSSA along with the Art in Action activities. At times, these two initiatives appeared to compete for the teachers' time and attention. Three statements in the Q sort mentioned the PSSA tests. These statements were included in an attempt to discern if the participants felt student achievement in reading and math on the PSSA was affected by their participation in Art in Action grant activities. The statements are:

- Statement 26-If students are exposed to Art in Action teaching techniques for more than one year it will make a difference on the PSSA.

- Statement 34-There was little or no relationship between the Art in Action grant and student achievement on the PSSA.

- Statement 38-There is a positive relationship between the Art in Action grant and student achievement on the PSSA.

The statements fell in the middle of the distribution on both the Factor 1 and Factor 2 model forced distributions indicating neutral or slight disagreement. Perhaps, what is more interesting are the comments from the participants from the audio transcripts and facilitators' interviews. Some teachers were confused about PSSA results and data analysis, despite the fact that administrators spend much time reviewing these results with teams of teachers. CRAW4 stated, "I think there was a time when there was a little boost with the learning support after they went through one year of it. I think I recall that but and again I don't see enough of the data to know." CES4 stated, "It's really hard to measure the effect of Art in Action on PSSA scores. It's impossible to measure." UC1 was even more direct when he/she stated: "The Art in Action increased scores on the PSSA. I can't answer that."

During the interviews, some participants expressed their concern over the pressure to increase student achievement on the PSSA. A representative comment is from CES1 when

he/she stated:

> I hate to say it but there's so much stress on the PSSA and now they are tied to our evaluations. My personal view is it is what it is. I try my best then they tie it in and it goes the way it goes. I have students who won't even take the test because they're angry. I feel from what I hear that to involve the arts or to have to plan for this we're taking away from instruction to test because we gotta teach these tests get these in there's no time to do this art stuff.

UC4 expressed a more cynical viewpoint about the PSSA when he/she stated:

> It brings us back to the big question. Does the Art in Action help the PSSA scores? Our PSSA scores are never very good so I don't but again is that important? Who says it's important? I have a whole political agenda why we take a test and it's to make us look bad so we can cut funding and break a teacher.

Consistent with Fullan (2014), the current investigation revealed that the principal's active endorsement of the grant made an impression on the participants. Participants were also concerned about time to fit everything in to a busy school day, the pressures of increasing student achievement on the PSSA, and a reluctance to change.

Research Question 4: What patterns or relationships exist between the proposed research and the Art in Action Demonstration grant?

The Art in Action project was a partnership between the Erie Arts and Culture, formerly known as ArtsErie, three northwestern Pennsylvania elementary schools, and Edinboro University of Pennsylvania. It was a four-year project, (2010-2014), that integrated dance, music, visual arts, and drama into the regular math and reading curriculum. Funding for the grant was provided from the U.S. Department of Education in the form of a demonstration grant. The goals of the project were (1) to improve the ability of teachers to

implement a model of arts' integration in their classroom instruction as a result of engaging in professional development and collaboration, and (2) to improve student achievement in reading and math, improve student engagement in the learning process, and improve student learning habits (U.S. Department of Education Grant Performance Report ED 524B Executive Summary).

It is important to consider the current study in the context of the Art in Action demonstration grant project. In order to address research question 4, a brief review of the final report from Keystone Research Corporation is provided with identified patterns and relationships to the current study detailed in seven areas.

Quality of teaching.

The Art in Action grant used trained observers to evaluate classroom practices and lesson planning. One of the greatest changes occurred in opportunities for students, artists, and teachers to collaborate. The following statements in the current study referenced the artists in residence and their impact on the grant experience for the teachers and students.

- Statement 1-The resident artist did not understand the core curriculum.

- Statement 7-Scheduling time with the resident artist was a problem.

- Statement 12-Too much time was spent on planning and not enough time was allotted for the resident artist to interact with the students.

- Statement 24-The resident artist was the reason the implementation of the Art in Action grant was successful.

- Statement 28-Working with a resident artist made instructional time more valuable.

- Statement 29-The success of the Art in Action grant will be measured from the participation of all stakeholders.

Participants who loaded significantly on Factor One placed these statements in the neutral or disagree columns on the model sort. The exception was statement 12, which was placed in column -4, indicating strong disagreement. Participants appeared to value the time spent planning and collaborating with the resident artist. Participants who loaded significantly on Factor Two expressed stronger opinions about statements 1, 7, 12, 24, and 28 by placing them in disagree and strongly disagree columns. The audio transcripts and facilitators' notes support the positive relationships that developed between some of the participants and the artists. UC1 stated "I had the hula hoop and drum lady. The artists were really into what they were doing. As a result I now use the hula hoop in my lessons." UC4 said:

It comes right back to the artist. She really kinda knew what we wanted. She listened to us. The meetings were productive and she came up with great plans. I had a really, really good artist who went out of her way to make it a good experience.

Another positive outcome of the Art in Action grant was the use of multiple ways to convey a lesson including questioning, illustration, demonstration, and modeling. The following statements in the current study relate to the Art in Action grant and instructional practices.

- Statement 2-The Art in Action grant encouraged higher order thinking skills.

- Statement 6-Art infused instruction can reach different learning styles.

- Statement 11-The Art in Action grant provided brain-based activities.

- Statement 13-Tapping into a child's imagination through the arts enhances his/her experience with reading and math.

- Statement 14-The Art in Action grant provided movement and multi-sensory activities.

- Statement 15-Customizing learning to a student's strengths and interests is essential for school to be relevant.

- Statement 19-Infusing art in reading and math instruction allows students to connect material on a personal level.

- Statement 31-The Art in Action grant is another form of differentiated instruction.

- Statement 32-The Art in Action grant was learning in a hands-on and fun way.

On both model Q sorts, participants placed these statements in the agree and strongly agree columns. The exception is statement 2. The Factor One model sort shows this statement in column 2, agree, while it is placed on column 0, neutral, on the Factor One model sort. Participants' responses to the Q sort and their comments during the interviews appear to support the conclusions of the Art in Action grant in the area of quality of teaching.

Student engagement.

The Art in Action grant resulted in increased student engagement during arts infused lessons with the most dramatic improvement in the areas of creativity, performance, witnessing, and reflection on arts expression. Students exhibited increased decision-making and problem-solving skills. The grant analysis did not make a distinction between regular education students and students with special needs or special programming. The current study included two statements that related to students with special needs.

- Statement 4-Learning support students excelled in their art work and experienced a growth in their confidence.

- Statement 39-Students with social challenges experienced success in Art in Action.

Participants who loaded significantly on Factor One placed these statements in the strongly agree columns. Participants who loaded significantly on Factor Two placed these statements in the agree columns. While placing statement 4 in the strongly agree column, CRAW2 stated "You could see these students shine and they really felt like they were part of

something." She shared a story about a female student who was on an IEP, who "shocked everyone with the art she did." After participating in the Art in Action activities, the student gained confidence and became a school safety patrol member. The placement of statements 4 and 39 on the model Q sorts, and the transcripts and interview notes, indicate participants felt participation in the Art in Action grant had a dramatic effect on students with special needs and special programming. These students gained confidence and acceptance by their peers.

Graduate course.

The Art in Action grant included a graduate course taught by Edinboro University professors. The original requirement of the grant was, in order for a teacher to have a resident artist, he/she must take the graduate class. In the first year of the grant, this requirement was relaxed. After careful reflection, the grant advisory team realized that the teachers needed the foundational knowledge imparted in the graduate class in order to be part of a successful teacher/artist collaborative. The requirement was reinstated and the rigor of the course increased. Three statements in the current study relate to the graduate course.

- Statement 30-The Edinboro University specialists were eager to help in any way.
- Statement 35-The Edinboro University specialists had little or no effect on the implementation of the Art in Action grant.
- Statement 40-The graduate class provided innovative ideas that I used in my classroom.

Participants who loaded significantly on Factor One placed statement 30 in the 0 column, indicating neutrality. Participants who loaded significantly on Factor Two were more vocal in their disagreement, placing the statement in column -2. Both groups of participants agreed

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in the placement of statement 35 in the -3 column, indicating they disagreed that the Edinboro University specialists had little or no effect on the implementation of the grant. While they felt the specialists had an impact on the grant implementation, it appears, from the placement of statement 40, that they were less enthusiastic about the value of the ideas they took away from the graduate class. Statement 40 was placed in the neutral columns on both model Q sorts. The audio transcripts provide some more insight into the feelings of some of the participants about the graduate courses. CRAW2 stated:

> The first year was so effective-a lot of moving and I learned a lot that would pertain to the elementary school. The second year was not as much fun and the expectation was deeper thinking. Teachers do get a little tired by the afternoon.

UC4 stated "I enjoyed it. The class was very good." CES4 felt the graduate course provided innovative ideas in the area of technology. He/she stated, "I use the iPad a lot for doing videos and projects. When I think of the Art in Action I think of iPad apps." It appears from the Q sort analysis and the interview notes that the change in the graduate class requirements affected some of the participants' feelings about the graduate course.

Artist residency.

The Art in Action grant reported a high level of satisfaction from artists and teachers with the art residency experience. In the current study, statements 24 and 28 relate to the resident artist.

- Statement 24- The resident artist was the reason the implementation of the Art in Action grant was successful.

- Statement 28- Working with a resident artist made instructional time more valuable.

Those participants who loaded significantly on Factor One placed statement 24 in the 0,

neutral column, and statement 28 in the -2, disagree column, indicating they disagreed with the impact the resident artist had on instructional time. Those participants who loaded significantly on Factor Two placed statement 24 in the -3, disagree column, and statement 28 in the -1 neutral column. They expressed a stronger opinion about the value of the resident artist with regard to implementation of the grant. These less-than-enthusiastic endorsements of the resident artist might be attributed to the forced distribution. Participants were forced to make decisions between statements on a variety of aspects of the grant. A second factor to consider, when comparing these results, is whether a teacher and resident artist were able to forge a personal connection in their working relationship. It may come down to this chemistry, and whether it exists, when the teacher is asked to make a determination of the importance of the resident artist. Perhaps CES3 captured this idea when he/she stated:

> I felt like that the collaboration varied dependent upon the teacher's personality and the artist's personality. I think there was valiant effort put forth regardless of the situation I just feel that some people collaborate better than others-I think it was a personality thing.

Although the Art in Action grant reported a high level of satisfaction with the resident artists, the results of the current study indicate the participants were less enthusiastic about the resident artists. Their responses were affected by the personal relationships that were or were not established between the participant and the artist.

PSSA.

The target for the Art in Action grant project was that 70% of the participating students would be proficient in math and reading as measured by PSSA test scores. During three of the four years of the grant, proficiency levels in math ranged from 75.4% and 80%, which exceeded the target. The target for math was not reached during the 2011-2012 school

year. The target was not achieved in reading in any year of the grant. The proficiency levels in reading ranged from 59.8% to 66.7% (Research Brief Art Infusion: What Every Parent and Teacher Should Know, pp.3-4).

Since increasing achievement on the PSSA was one of the goals of the Art in Action grant, the current study included statements about the PSSA and the participant's perception of the effect the grant might have on the students' performance on the test. Statements 26, 34, and 38 reference the PSSA.

- Statement 26-If students are exposed to Art in Action teaching techniques for more than one year, it will make a difference on the PSSA.

- Statement 34-There was little or no relationship between the Art in Action grant and student achievement on the PSSA.

- Statement 38-There is a positive relationship between the Art in Action grant and student achievement on the PSSA.

Participants who loaded significantly on Factor One placed statement 26 in the neutral column on the model Q sort. Participants who loaded significantly on Factor Two placed statement 26 in the -2 column, indicating disagree. Statements 34 and 38 are the opposite of one another and perhaps might fall in opposite columns on the Q sorts. Participants who loaded significantly on Factor One placed these statements in the same column, -1. This was just to the left of neutral and bordering on disagree. Participants who loaded significantly on Factor 2 placed statement 34 in the 0, neutral column, and statement 38 in the -1 column, again, just to the left of neutral, bordering on disagree. The placement of these statements about the PSSA are in the middle of the distribution for both model Q sorts and, therefore, do not reflect strong opinions about the PSSA and its relationship if any to the Art in Action

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grant. A review of the audio transcripts and facilitators' notes supports the idea that some of the participants struggled with the PSSA questions. One explanation for the placement of these statements is reflected by UC1 when he/she stated, "Some of these don't pertain to me, so they are neutral, like the PSSAs. I don't do PSSAs." CRAW4 said, "The PSSA ones and how they perform I guess I really don't know much." CES4 was able to provide a reason for placement of statement 26 when he/she said, "I feel like I can't agree or disagree. I want to agree but I don't have any concrete evidence." When asked to identify statements with which he/she struggled to place on the Q sort distribution, UC3 said

> Uh, yeah. A few probably the ones I put in the neutral pile mostly in reference to
> PSSA outcomes. PSSA scores. I don't have all of the data at my fingertips you know
> I've talked to people but it's been a while since I've had conversation about the
> results. I don't feel comfortable saying yes there was a positive difference
> relationship between the grant and student achievement on the PSSA. The other thing
> is I don't teach in a PSSA grade.

The current study shows some participants were unwilling to move the PSSA statements beyond the center of the Q sort distribution because they wanted more information about test results, or they felt they were not part of the PSSA testing and, therefore, held no strong opinion one way or the other about the PSSA.

Time commitment.

One of the biggest challenges that teachers participating in the Art in Action grant reported to the grant evaluators was the time commitment required to participate in the program. As was mentioned, one of the requirements to participate and host a resident artist was attendance at the graduate course. There was additional planning required to collaborate with colleagues and the artists. There was some extra paperwork to complete, posting on a

WIKI page, and extra presentations to parents and peers.

Three statements in the current study referenced time commitment to participate in the Art in Action grant. These were statements 22, 27, and 37.

- Statement 22-The Art in Action grant took away time from core subject instruction.

- Statement 27-Participating in the Art in Action grant was a tremendous amount of work.

- Statement 37-The Art in Action grant requires too much paperwork.

Participants who loaded significantly on Factor One placed statement 22 in the -4 column, indicating disagree, bordering on strongly disagree. Participants who loaded significantly on Factor Two placed this statement in the 0 column, indicating neutrality. This shows a differing opinion on whether the Art in Action grant took away time from core subject instruction. An interesting finding was that participants in both model factor sorts agreed on the placement of statements 27 and 37. Statement 27 was placed in column -2, disagree, and statement 37 was placed in column -3, disagree, on both model distributions.

Based on participant responses in the current study, they did not feel the paperwork requirements or amount of work was overbearing. A review of the audio transcripts and facilitators' notes provides some more insight into the concept of time commitment. CES1 said "I think time's an issue any time you put more work on a teacher's plate they become nervous." UC3 said "Yeah there's not enough time during the school day. I would keep my kids longer if I could." CRAW4 agreed that completing paperwork was a challenge when he/she said "It did have a lot of paperwork."

The results of the current study and the final report for the Art in Action grant tend to agree that finding enough time in the school day to get everything done is a challenge for

teachers. It seems some of the participants were willing to devote the time to the Art in Action projects despite the time commitment. Perhaps the teachers were willing to find the time for the Art in Action projects because they observed the engagement of their students in the activities.

Leadership challenge.

The commitment of the schools in the Art in Action grant presented a challenge for the Advisory Team. Leadership in the schools was cited as a factor that was inconsistent in the three school districts. The team reported that leadership in one of the schools was very supportive, but that was not the case in the other two schools. The Advisory Team does not identify the schools nor whether the leadership is the principal or at the central office level. This is an interesting difference from the perceptions of the participants in the current study.

One statement in the Q sort related to the principal and his/her participation in the Art in Action grant. This was statement 10.

- Statement 10-The principal was not familiar with the Art in Action grant. Participants who loaded significantly on Factor One placed this statement in the -1 column indicating disagree, bordering on neutral. Participants who loaded significantly on Factor Two indicated stronger feelings about statement 10. They placed the statement in the -5 column indicating strongly disagree.

As indicated above, the participants value the example set by their principal. If the principal places value on an activity, then most teachers are likely to follow that lead and make the initiative a priority. Participants in all three elementary schools expressed that their respective principals were supportive of the Art in Action grant. While some participants were enthusiastic, others were more reserved in their opinion of the support of leadership. CRAW2 said "She was very supportive and excited to be part of this grant. She will do

anything to help kids succeed." UC4 said "I will say I felt supported if I needed things I could go to her for materials so I would say I felt supported in that way but she really didn't come in and bang drums with the kids." CES1 said

> I think a principal's role needs to be hand on, part of the team, positive, able to reflect quickly on what's going on, able to step in and say hey we need to change this. Be able to work with all parties you know artist in residence, teachers, all staff that are involved. I think without leadership and guidance the program probably would have fallen apart.

The participants valued their principal's presence and interest in the Art in Action activities, and noticed the level of involvement each principal had with the students and teachers.

Limitations

The current study was designed to identify characteristics of the successful implementation of a federal arts demonstration grant in three rural northwest Pennsylvania schools in an effort to aide future grant applicants to meet the challenge of sustainability. A secondary focus was to examine the impact of a Professional Learning Community framework on the implementation of the grant. The current study was examined within the context of the results of the Art in Action grant. As with any research study, there are limitations to the findings in the current study.

The sample size for the current study was small. Fifty-six surveys were completed from the three elementary schools. Twelve participants, four from each school, were randomly selected to complete the Q sort exercise. The results of the current study are reflective of the opinions and perspective of this group, but may not apply to the faculty of these schools as a whole. However, the initial survey of the broader faculty provided an opportunity to draw a representative perspective from the larger population.

The Art in Action demonstration grant was located in three rural elementary schools in northwestern Pennsylvania. Results of the study may not be the same if it was replicated in a more affluent suburban or urban elementary school in another region of Pennsylvania or in another state.

The Q sort statements were selected from the discourse that was generated through the survey, and from comments that were provided by the respondents to the survey. An attempt was made to provide a variety of statements, positive, neutral, and negative, on several aspects of the Art in Action grant implementation in an effort to provide a broad representation of the population's perspectives. Not all of the statements generated by the survey were used in the Q sort. There was a judgment call on the part of the doctoral candidate in the selection of the statements in the Q sort.

There are some interesting opinions about the Professional Learning Community process that emerge from the participant interviews, but only four of the 12 participants actually worked in a PLC school. It is difficult to generalize from such a small sample of participants about the Professional Learning Community.

The doctoral candidate was the superintendent in one of the school districts that hosted the grant, and had been a teacher in one of the other school districts. This fact may have influenced participants to respond differently than they might have, had they not known the researcher. However, the superintendent was not involved in the Q sort process and interviews. Additionally, the research assistants (facilitators) were consulted on an as-needed basis. For example, research assistants were asked to provide information about the demeanor of the participants as they completed the Q sort, especially regarding the statements related to PSSA and the principals' involvement in the grant activities. They were able to provide clarification and verification about what interpretation was taken from the

transcripts.

Conclusions

The purpose of the current study is to examine a federal arts grant in three rural elementary schools in northwest Pennsylvania using feedback from participants in the grant to determine their perceptions of important characteristics for successful implementation and sustainability of innovative teaching techniques. The conclusions from the study are listed below.

(1) Participants reported that the Art in Action experience was beneficial for their students. Art infused lessons made learning fun and helped students make connections in their math and reading that were unique. Participants reported the most dramatic successes seemed to occur for students with special learning needs and students on IEPs.

(2) Sustainability of the Art in Action program appears to be dependent upon principal support of the initiative and a philosophical or emotional connection made by the teacher to these practices.

(3) Participants valued collaboration time with colleagues and felt they had this time during the grant period. There was no significant difference in this opinion between the formal Professional Learning Community school (Cambridge Springs Elementary School) and the other schools in the study. In fact, participants from Cambridge Springs Elementary viewed the PLC as a thing or time and not as a process despite the additional training they have had on the PLC model.

(4) Participants were aware of their principal's involvement in the Art in Action grant and were influenced by that participation. If the principal valued the grant activities, many of the teachers followed their lead and participated.

(5) Change is difficult for some people. There is resistance to trying new things. This was evidenced in the interviews when some participants admitted they observed colleagues who were not enthusiastic about the Art in Action grant.

(6) Time is a challenge. Some participants expressed the frustration of not having enough time to do all of the things they are being asked to do with students within the confines of the school day. Communication is a key factor with this issue. Before a grant or new initiative is started in a school it is imperative to present a realistic picture of the time commitment involved for both teachers and administrators. Once this groundwork is in place hopefully the stakeholders take ownership of the grant process and realize the sacrifice of time is worth the outcome for the students.

(7) Some participants felt a conflict between devoting classroom time to Art in Action art infused lessons and preparation for the PSSA test. The pressure to increase student achievement appeared to be the catalyst for this conflict.

(8) There are some patterns and relationships that exist between the current study and the Art in Action grant results. There are similar results around quality of teaching, student engagement, the graduate course, the artist residency, the PSSA, and time commitment. There is a difference of perceptions about the effectiveness and support for the grant by the leadership in the respective schools. The participants in the current study felt their principals supported the grant activities, while the Art in Action Advisory team recognized one school out of the three had full support from leadership.

Recommendations for Future Research

The current study provided results that are relevant for the three elementary schools

in northwest Pennsylvania that participated in the Art in Action grant. There are some implications for further research and professional practice. More research is needed in the area of sustainability of innovative instructional techniques once demonstration grant funds are depleted. This is often a challenge for school districts and can be a deterrent to applying for grant funds in the first place. Additional research is warranted in art infused instruction and the effect of this teaching technique on student achievement on the PSSA and other state tests. It would be most important to conduct this research over an extended time period to observe the results. Another area of additional research is needed in teachers' perceptions of the Professional Learning Community process and how that compares to administrators' perceptions. Both groups need to be on the same page for the Professional Learning Community to be successful and achieve increased student achievement. More research is needed related to the principals' attitudes and behavior, and how this affects the acceptance or rejection of new initiatives in a school.

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Art In Action and the Professional Learning Community

Read the following statements and select the response that most closely fits your opinion or reaction to the concept described in the statement. You may write additional comments about the statement if you desire.

22. The master schedule in my school provides daily common planning time for teachers in my grade level or subject area.

○ Strongly agree

○ Agree

○ Neutral

○ Disagree

○ Strongly disagree

Comment

22. The teachers in my grade level/subject area have established clear commitments or norms describing how we will work together for a common purpose.

○ Strongly agree

○ Agree

○ Neutral

○ Disagree

○ Strongly disagree

Comment

22. The teachers in my grade level/subject area focus decisions about professional practice on student learning.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment ⌷

22. The key to improved learning for students is continuous job-embedded learning for teachers.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment ⌷

22. A collaborative culture in a school will result in increased student achievement.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment ⌷

22. I feel confident in my ability to examine student data and make informed decisions about effective instruction for my students.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

22. The principal in my school demonstrates educational leadership and a commitment to collaboration.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

22. It is important to examine instructional strategies based upon student achievement.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

22. Teacher ownership of and commitment to the curriculum their students will be expected to master plays an important role in the quality of student learning.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment

22. My principal has articulated clear goals for our school.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment

11. The PLC process takes away valuable instruction time.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment

12. My principal demonstrates support for integration of the arts in reading and math.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text field]

13. The Art in Action grant has provided meaningful professional development opportunities for me.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text field]

14. Infusion of the arts with core subject areas helps students improve their social skills.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text field]

15. It is a challenge to work with a resident artist and cover core curriculum requirements.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [   ]

16. The Art in Action grant takes away valuable instruction time.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [   ]

17. As a result of my experiences with the Art in Action grant, I have changed some of my teaching techniques.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [   ]

18. The Art in Action grant has provided opportunities for me to collaborate with colleagues.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

19. The Art in Action grant has increased my instructional skills based on research of effective practices.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

20. The Art in Action grant has encouraged me to work with partners outside my classroom.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text box]

21. The master schedule in my school supports the arts integration process.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text field]

22. My experience with the Art in Action grant has encouraged me to reflect on my instructional practices.
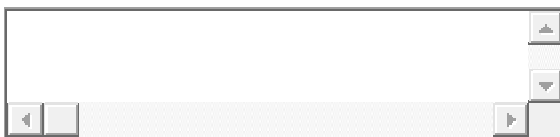
☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

☐ Strongly disagree

Comment [text field]

* 23. What are some phrases or statements that you think of when you consider art instruction infused with the core subjects of reading and math- the focus of the Art in Action grant?

[text field]

* 24. What are some phrases or statements you think of when you consider the concept of a Professional Learning Community?

[text field]

100% of survey complete.

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Appendix B

Q Sort Facilitator Instructions

1. Explain that the purpose of this activity is to give the individual an opportunity to react to some statements that were made by people from all three of the elementary schools involved in the Art in Action Grant. The researcher is conducting a study to determine:
   - The effect of a Professional Learning Community on the implementation of the Art in Action grant.
   - The impact of school leaders and their leadership on the grant.
   - What are the most important characteristics of the Art in Action grant that can be sustained now that the grant is over? Did this experience change the way you teach?

2. Participation in the Q Sorting activities is strictly voluntary and anonymous. If the participant feels uncomfortable he/she may stop at any time. There is no risk to the participant.

3. Ask about permission to audio record the session. If not, then take notes.

4. Sign the IRB form- check the audio record or not box.

5. Explain that a Q sort is a two-step process.

Step 1: First the participant will be given a stack of 40 cards with statements related to the research question and be asked to sort them in three groups or provisional rankings: (1) statements they feel positive about or agree with, (2) statements they feel negative about or disagree with and, (3) statements they feel indifferent about or neutral.

There is no right or wrong answer and no requirement to make the groups equal in number.

Participants are encouraged to talk about their thought process as they complete this step.

Step 2: Place the cards in the distribution. Emphasize that this is a continuum with cards on the far right, the ones they most agree with or feel positive about, and cards on the far left, the ones they may still agree with, but to a lesser degree. A negative ranking may not indicate disagreement. Cards placed in a column are of equal value. There is no relevance to where they are placed in that column. Begin with the stack of positive or agree with statements. Spread these cards out in front on the table and begin placing them in the forced distribution. (When the participant finishes this sort, draw a line on the distribution chart to indicate where the positive statements were grouped).
Next ask the participants to look at the stack of negative or disagree with statements. Place them on the distribution. (Draw a line on the distribution chart).

Finally, place the remaining cards on the distribution.

Check to see that the appropriate number of cards is in each column. The participant is free to make any changes at this time.

Once the sort is complete, turn the cards over and record the numbers on the distribution chart.

Conduct the interview.

During the sorting process, try to get the participant to talk out loud about their thought process as they sort. Why did they place a card in a certain column?

At the conclusion ask "Were there any cards that were difficult to place? Why?"

Try to get them to talk about Professional Learning Communities and their opinions about them. Same with principal leadership style and the Art in Action grant experience.

Hopefully all of this will be recorded. If not, try to take good notes.

−6	−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5	+6

(1)   (1)

(2)   (2)   (2)   (2)

(3)   (3)

(4)   (4)

(5)   (5)

(6)

Appendix C

Factor Scores with Corresponding Ranks

No.	Statement	Factor 1	Rank	Factor 2	Rank
1	The resident artist did not understand the core curriculum.	-0.83	32	-1.56	37
2	The Art in Action grant encouraged higher order thinking skills.	0.73	10	-0.18	22
3	The Art in Action grant was meaningful and fun.	0.68	11	1.19	7
4	Learning support students excelled in their art work and experienced..	2.03	2	0.47	13
5	The Art in Action grant encourages a teacher to reflect on instructional…	1.13	6	0.43	15
6	Art infused instruction can reach different learning styles.	1.36	4	1.61	2
7	Scheduling time with the resident artist was a problem.	-0.63	27	-1.95	38
8	It was beneficial to collaborate with colleagues.	0.07	20	0.70	10
9	I don't see much benefit in the Art in Action grant.	-2.37	40	-2.08	40
10	The principal was not familiar with the Art in Action grant.	-0.63	28	-2.00	39
11	The Art in Action grant provided brain-based activities.	0.53	14	0.49	12
12	Too much time was spent on planning and not enough time was allotted..	-1.22	36	-1.20	36
13	Tapping into a child's imagination through the arts enhances his/her exp…	0.74	9	1.46	5
14	The Art in Action grant provided movement and multi-sensory activities.	0.81	8	1.28	6
15	Customizing learning to a student's strengths and interests is essential for ..	1.58	3	0.44	14
16	The Art in Action grant has provided opportunities for collaboration.	0.06	21	0.22	17
17	Art makes learning more concrete and should be infused in all subjects at …	0.25	18	0.22	18
18	Sustainability for the Art in Action grant must come from the teachers.	-0.55	26	-0.52	29
19	Infusing art in reading and math instruction allows students to connect…	1.13	5	0.85	9
20	The Art in Action grant has initiated a	0.29	16	-0.40	25

	change in instructional practices.				
21	Most teachers are not willing to take the time or effort to infuse the arts in…	-0.87	33	1.52	4
22	The Art in Action grant took away time from core subject instruction.	-1.26	37	-0.16	21
23	Scheduling arts integration with core subjects is difficult.	-1.39	38	-0.06	20
24	The resident artist was the reason the implementation of the Art in Action..	-0.22	23	-0.66	34
25	It is the teacher and how he/she infuses the arts into lessons that will…	0.67	12	-0.29	24
26	If students are exposed to art in action teaching techniques for more than…	-0.08	22	-0.57	32
27	Participating in the Art in Action grant was a tremendous amount of work.	-0.67	29	-0.55	31
28	Working with a resident artist made instructional time more valuable.	-0.68	30	-0.49	28
29	The success of the Art in Action grant will be measured from the …	-0.70	31	0.30	16
30	The Edinboro University specialists were eager to help in any way.	0.13	19	-0.54	30
31	The Art in Action grant is another form of differentiated instruction.	0.56	13	1.58	3
32	The Art in Action grant was learning in a hands-on and fun way.	0.50	15	1.00	8
33	The Art in Action grant materials were expensive.	-1.44	39	-0.46	26
34	There was little or no relationship between the Art in Action grant and…	-0.48	25	-0.23	23
35	The Edinboro University specialists had little or no effect on the imple…	-1.07	35	-0.62	33
36	Art instruction infused with core subjects provides students with mean…	0.87	7	1.68	1
37	The Art in Action grant requires too much paperwork.	-1.02	34	-1.05	35
38	There is a positive relationship between the Art in Action grant and…	-0.34	24	-0.47	27
39	Students with social challenges experienced success in Art in Action.	2.07	1	0.51	11
40	The graduate class provided innovative ideas that I used in my classroom.	0.26	17	0.07	19

Appendix D

Factor Scores for Factor 1

No.	Statement	Z-Scores
39	Students with social challenges experienced success in Art in Action	1.69
6	Art infused instruction can reach different learning styles.	1.51
4	Learning support students excelled in their art work and experienced	1.45
15	Customizing learning to a student's strengths and interests	1.22
36	Art instruction infused with core subjects provides students with	1.14
14	The Art in Action grant provided movement and multi-sensory	1.08
3	The Art in Action grant was meaningful and fun.	1.00
31	The Art in Action grant is another form of differentiated instruction.	0.97
13	Tapping into a child's imagination through the arts enhances his/her exper	0.96
32	The Art in Action grant was learning in a hands-on and fun way.	0.87
19	Infusing art in reading and math instruction allows students to connect	0.86
5	The Art in Action grant encourages a teacher to reflect on instructional	0.81
2	Art in Action grant encouraged higher order thinking skills.	0.68
17	Art makes learning more concrete and should be infused in all subjects	0.67
11	The Art in Action grant provided brain-based activities.	0.51
40	The graduate class provided innovative ideas that I used in my classroom.	0.47
8	It was beneficial to collaborate with colleagues.	0.42
25	It is the teacher and how he/she infused the arts into lessons that will	0.34
16	The Art in Action grant has provided opportunities for collaboration.	0.30
20	The Art in Action grant has initiated a change in instructional practices.	0.07
30	The Edinboro University specialists were eager to help in any way.	0.03
24	The resident artist was the reason the implementation of the Art in Action	-0.25
29	The success of the Art in Action grant will be measured from the partici	-0.30
21	Most teachers are not willing to take the time or effort to infuse the arts	-0.31
26	If students are exposed to Art in Action teaching techniques for more than	-0.32
28	Working with a resident artist made instructional time more valuable.	-0.33
38	There is a positive relationship between the Art in Action grant and student	-0.38
34	There was little or no relationship between the Art in Action grant and	-0.57
18	Sustainability for the Art in Action grant must come from the teachers.	-0.57
27	Participating in the Art in Action grant was a tremendous amount of work.	-0.77
35	The Edinboro University specialists had little or no effect on the implement	-0.92
23	Scheduling arts integration with core subjects is difficult.	-0.97
22	The Art in Action grant took away time from core subject instruction.	-1.14
1	The resident artist did not understand the core curriculum.	-1.15
7	Scheduling time with the resident artist was a problem.	-1.20
37	The Art in Action grant requires too much paperwork.	-1.20
33	The Art in Action grant materials were expensive.	-1.30
10	The principal was not familiar with the Art in Action grant.	-1.50
12	Too much time was spent on planning and not enough time was allotted	-1.51
9	I don't see much benefit in the Art in Action grant.	-2.38

Appendix E

Factor Scores for Factor 2

No.	Statement	Z-Scores
4	Learning support students excelled in their art work and experienced	2.19
23	Scheduling arts integration with core subjects is difficult.	1.96
9	I don't see much benefit in the Art in Action grant.	1.67
22	The Art in Action grant took away time from core subject instruction.	1.24
32	The Art in Action grant was learning in a hands-on and fun way.	1.24
28	Working with a resident artist made instructional time more valuable.	1.09
39	Students with social challenges experienced success in Art in Action.	1.09
14	The Art in Action grant provided movement and multi-sensory activities.	0.86
11	The Art in Action grant provided brain-based activities.	0.72
19	Infusing art in reading and math instruction allows students to connect	0.61
2	The Art in Action grant encouraged higher order thinking skills.	0.52
36	Art instruction infused with core subjects provides students with meaningful	0.49
16	The Art in Action grant has provided opportunities for collaboration.	0.46
3	The Art in Action grant was meaningful and fun.	0.46
7	Scheduling time with the resident artist was a problem.	0.37
38	There is a positive relationship between the Art in Action grant and student	0.20
33	The Art in Action grant materials were expensive.	0.17
31	The Art in Action grant is another form of differentiated instruction.	0.14
24	The resident artist was the reason the implementation of the Art in Action	0.14
30	The Edinboro University specialists were eager to help in any way.	0.03
17	Art makes learning more concrete and should be infused in all subjects	0.03
29	The success of the Art in Action grant will be measured from the participa	-0.00
40	The graduate class provided innovative ideas that I used in my classroom.	-0.00
26	If students are exposed to Art in Action teaching techniques for more than	-0.03
18	Sustainability for the Art in Action grant must come from the teachers.	-0.23
8	It was beneficial to collaborate with colleagues.	-0.37
13	Tapping into a child's imagination through the arts enhances his/her	-0.40
35	The Edinboro University specialists had little or no effect on the implementa	-0.49
10	The principal was not familiar with the Art in Action grant.	-0.49
34	There was little or no relationship between the Art in Action grant and	-0.63
12	Too much time was spent on planning and not enough time was allotted	-0.72
25	It is the teacher and how he/she infused the arts into lessons that will increase	-0.89
20	The Art in Action grant has initiated a change in instructional practices.	-1.15
5	The Art in Action grant encourages a teacher to reflect on instructional	-1.21
27	Participating in the Art in Action grant was a tremendous amount of work.	-1.27
1	The resident artist did not understand the core curriculum.	-1.27
15	Customizing learning to a student's strengths and interests is essential	-1.47
21	Most teachers are not willing to take the time or effort to infuse the arts	-1.53
37	The Art in Action grant requires too much paperwork.	-1.76
6	Art infused instruction can reach different learning styles.	-1.77

Appendix F
Transcripts and Facilitator's Notes
CES 1

This is CES 1 participant has just finished the card sort for the Likert scale and is going over some of his thinking on the neutral statements.

My neutral statements were based off of the activities I was not a part of or had no understanding of for instance the Art in Action grant requires too much paper work I had no involvement in any of that I did have a few students who participated in classrooms who did have an artist in residency um..i got to see a little bit but I was not involved in any day to day planning because I do k-6 I was not able to participate with one individual grade level I was not able to see any of the planning nothing that goes into it none of the collaboration another example would be about the invo university specialists were eager to help in any way I can't answer questions like that because I was not involved in any of that I don't know how eager they really were some other things I was thinking like it was beneficial to collaborate with colleagues um working with the resident artist made the instructional time more valuable un the AIA grant has provided opportunities for collaboration um I have to be neutral in all of those because I have no understanding of it

Can you explain that one you put in strongly disagree cause I think that's an important point that you made on that one about the Principal?

Well it says that the Principal was not familiar with the AIA grant but the Principal was very familiar was very active was involved in all activity um was for the grant um great great participation during school hours during grade levels during collaboration and also after school activities um that the AIA grant brought to the table and I believe I had two different Principals at that time um one Principal started it one Principal picked up and came in board and I will say both Principals were very active and very supportive in the process in what the arts bring to education.

OK. Is there anything you would like to say about the statements you agreed with?

UUUmmm, I think customized learning to a student's strength and interest is as essential for school to be relevant I work with students everyday that if I do not customize their learning and if I do your basic cookie cutter activities learning worksheets this and that um it's not relevant to them and it's not very successful. So we really have to differentiate in instruction um I think art-infused instruction can reach different learning styles I believe that I believe the arts are wonderful I think if you correctly and train correctly and if you have an understanding of it which I'm not sure that I have that great great understanding but just the basics that ah yes it can touch all learning styles especially my situation I see many different students with many different learning styles I understand it's all grade levels but mine in particular different learning styles I have to be creative and collaborate more and work with many teachers and staff to make it meaningful and make gains.

Do you think it would have been beneficial if you had been more a part of the processes AIA?

I do. I think it would have been beneficial but with my scheduling and with doing K-6 depending on my case load I was not left out of the process on purpose I was offered the graduate class I did not take it um that's just a small part I know my situation in the way my program is set up I was not left out on purpose but sometimes behaviors do not sometimes behaviors happen all the time. So I was not able to participate in a lot but not on purpose I did get to see a little bit I did get to see some of my students a few that were a part of the I did see

a couple sixth graders I can remember this was a few years back but I can remember social problems that they had they were excited and they were involved in some stop-timing photography or whatever it's called they made a movie about a theme that they were learning in the 6th grade um they were very motivated um that's one of the times I saw them work with other students being social and they did benefit

Oh that's interesting

From the arts being infused into the learning

That's really interesting that it impacted their social skills, that says something.

Well for the time being yes I did see some collaboration with other classmates and with the instructor and the teacher that ah made me very happy

So let me ask you this. Did you need physical feats placing these cards in certain places?

Yes. It's very difficult for me to place cards in certain places that I don't have enough knowledge on I see about maybe 10 cards here because of my participation in this we talked about the scheduling and my needs all across settings and fulfilling IEP needs and stuff like that and meetings and everything it was difficult I mean some I had a greater opinion and I could choose easy but some I had difficulty to place due to the fact the it's difficult to place things if you don't have the knowledge that you feel you need to make it meaningful. And some of these I just don't have the knowledge to understand what went on behind the scenes or in the classroom or even in the collaborating process, I don't have that knowledge not on purpose it's just the way things are.

OK. And speaking of the collaboration process what are your thoughts about the PLC in the Special ED communities?

Um, I do take part in the Special ED PLC over the last few years I've had the opportunity to take part in some PLCs my only steady one is the Special ED PLC every now and then I'm called on to sit on some other PLCs but once again because of scheduling and where I need to be and what I need to be doing and behaviors never stop it's very inconsistent for me to be in places at certain times. What I know from the PLCs, I remember when they started at Cambridge Elementary 4 to 5 years back when they first started what I learned there and what I see happening um I do see some good planning for instruction and where we need to go and what we lack in um I was involved much more at the beginning than I am now. For instance the PLC the Special ED PLC you know we talked about a lot of things lot of data lot of what we need switching students and schedules around with different teachers and who can meet the need of this student better, I think if done the right way they're beneficial; once again I don't have, I have the basic knowledge in PLC I understand concept, I see what goes on I've never been to one of the trainings um I don't think I've ever sat in a training at an in-service. I don't believe so, maybe a quick one but I, so my knowledge is not great but what it's supposed to do.

Any good benefits if implemented correctly?

Well I think anything implemented correctly you know the way it's supposed to be, the creators of it I understand you tweak things to your school your setting and I understand that's with everything you do but I do believe that if implemented correctly you can get teachers on board teachers are sometimes difficult to uh collaborate or want to work together or if we have an ego and we need to be the best, I just think in my mind what I do daily and I know everybody doesn't feel this way but whoever steps into this school is an adult; it doesn't matter what your title is we're there for one reason, the students for success to make gains to make them comfortable to build their self-esteem there's many things, that doesn't always happen, I know that firsthand but if implemented correctly, PLCs could be a wonderful, wonderful team and if there was enough time allotted um

Yes. That's another good point.

Yes. It seems like we're so, so, so busy and I understand that they put time but, sometimes I feel like there's not enough time.

Right that's a great point. So but AIA time you don't recall being in a PLC discussing AIA? No. I was not involved in any of those PLCs.

Ok so then the next thing, just a really quick question about Principal leadership style. When it comes to the Principal leadership style in AIA what do you think about that?

Do I think about my Principal directly or do I think about what a Principal's role should be?

Well why don't we do both? I don't know if we want to do your Principal specifically

I won't do. I've had two Principals during this like I stated I think a Principal's role needs to be hands on part of the team positive able to reflect quickly on what's going on able to step in and say Hey we need to change this way but be able to work with all parties you know artist in residence teachers all staff that are involved I think without that leadership and guidance the program probably would have fallen apart um

Now that's a good point. Why do you say that?

Well I think sometimes when teachers are not guided and haves somebody that believes in something I can tell you if you just throw some program to some teachers and say do this it might get done might not get done; teachers are pretty set in their ways and if it does get done it won't get done the appropriate way so I think as Principal your leadership role is important cause you can really make or break the program any program but especially this program if you're not behind it but if you don't believe in it I know we got the grant so there was really no choice if you didn't believe in it you believe that you believe in it I don't see how you couldn't believe in it this program to infuse into the classroom like I said I worked with two Principals during this time and they both believed in it and they both are very supportive and they both put a lot of work in to make it successful because they both understood that it was a beneficial program that could help school environment school culture um PSSA scores overall scores overall growth

So do you think the Principals could have made this more of the part of the professional learning communities or is that up to the teachers? I don't know if there's an answer to that question I just threw that one in there to get your opinion.

I think to an extent they could but really the PLC teachers have to…

Make the decision?

I can't be sure that all teachers were behind this program

I'm sure

Or agree with this program

Do you think if they had more training and more of a collaborative atmosphere that would have been different or do you think it was philosophy?

I think it's philosophy I think it's where we're at I think time's an issue any time you put more work on a teacher's plate they become nervous I don't know if there's any way to get any teacher behind anything whenever there's a change it's always very difficult this was a change you know just from hearing teachers talk sounded like a lot of work a lot of change to work you know I think the Principal can drive some of the PLCs they get teachers on board you can't force them you can't demand them they're professionals you would hope you could do some things to bring them on board as far as that I don't have enough knowledge to know if teachers – I hear things so I know what teachers buy and what teachers don't what teachers like so I hear that but as far as in the PLCs if the teachers really bought in I don't have enough knowledge to know or to see that

Anything else you'd like to share about AIA and the leadership?

I'm just a big fan of the arts all arts I like the arts I think they're beneficial I think they bring out different learning styles I think they bring students out who have social difficulties I don't know if we have enough training and I hate to say it but there's so much stress on the PSSA and now they are tied into our evaluations my personal view is it is what it is – I try my best then they tie it in and it goes the way it goes I have students who won't even take the test because they're angry and that's cause it's just the way it is so I'm not going to put too much value on that I know teachers do and it's a big thing. I feel from what I hear that to involve the arts or to have to plan for this we're taking away from instruction to test because we gotta teach these tests we gotta get these in there's no time to do this art stuff. As far as infusing it into the learning I don't know if there's enough knowledge that we would actually have to go out and seek that or paid trainings and I don't know I just think I know that teachers need to be held accountable and I understand that and I think they go about it creates a lot of stress and hurts teaching where kids aren't growing the way they need to grow.

So do you think there's a misunderstanding in the fact that if they were to implement or integrate the arts it would actually impact the test scores in a positive way?

I think you would have to show a lot of data and a lot of research that would convince them of that and then I also think that um if they did understand that where are they going to get the resources or understanding to infuse that into the classroom – I mean I think if you show anybody hey this works just like we're doing the SCHWEBS (?) right now other schools or districts have started that it's working there's tons of research that shows it works we're at a point now I'm on this SCHWEB (?) team where we're trying to convince the staff that it's gonna be a little more work we're gonna provide a lot of things for you such as lesson plans and such but you need to – we need them to buy in so the same with this if I can show the SCHWEB (?) team that this is going to help school culture and behaviors just like this hey is this art really going to reflect my students overall especially my PSSA scores because that's what the State is looking for – my scores need to show growth or I'm going to be penalized.

Anything else you'd like to share? We end our session.

Now? Thank you.

Thank you very much.

CES 2

So like I wasn't the teacher that was doing the AIA in my room so can I go neutral?

Um hmm

Cause I don't disagree with that but I would say that is neutral cause the actual stuff was taking place during math class.

OK. This would be the actual graduate class. Did you get a number for the actual graduate class?

Oh no, no ,no, no, no.

Ok this would be for the actual class.

Got ya. Like if they're asking like data questions like this can I just put those in neutral? Cause I have no idea. I'm not going to say agree or disagree cause I…

Well, so you can't approve it

Well I don't know correlation between…

It would be hard to do that…
So if it didn't take me a lot of work but I know it took a lot of work would I agree with that?

Um huh, you did agree

So I didn't work with those specialists so that just goes in neutral

Ok. Now that they're like this there wasn't anything you wanted to switch around?

No.

The next thing is like a Likert scale so how this works is you're going to take these cards again and you're going to resort them in how strongly you agree to how much you don't agree so these green numbers tell you how many can go underneath this column so you can switch so if you put one here and later on you think ichk

Later on I think it's one I strongly agree with more?

Yes, ok so we're going to start with the comments you agreed with

Ok

So most likely they'll be placed around here…
Ok . And I can only place the green number?

They can go anywhere because maybe you changed your mind and you were like yah maybe I disagree with this. Do you know what I'm saying?

Ok so they can theoretically go anywhere?

Exactly. The next group – I don't know if there's anything you want to switch now? If you feel comfortable with everything? Ok the next group is the comments –

That I disagree with?

Um huh and then place these wherever they fit

Ok

Oh good. The last group is neutral…

I'm trying to find someplace for them to fit…

Ok. So we're going to discuss the placement of your cards. Were there any that like tricked you any of them that you thought about..

Well

Maybe more than others…

Some of them I guess I had to look at through the lenses of a teacher – I don't want to say not participating – but that was not the primary teacher in the classroom so what I'm looking at like how much paper it is – I don't know honestly how much paper it was and how much there was filling out paper work so I feel kinda bad. I'm disagreeing with that cause maybe there was a ton of paperwork but I'm sure it wasn't to the point that it was overbearing so things like that I think there was some of the inner-working stuff that I just wasn't but as far as just based on my experience with the AIA and just talking with the kids about it you know collect the artifacts they needed just to complete the projects and stuff like that and seeing it from that aspect and then seeing the finished product all put together sometimes it may have looked like it was organized chaos but then you see it altogether at the end and you're kinda impressed – the work that they did –

Ok so if we were to look at the ones you put in the strongly disagree and the strongly agree what are your thoughts on those two specifically?

I know Jude was super flexible with just about everything that we needed um and he did a great job communicating as far as we had a field trip that was actually cancelled cause we had

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a snow day and he was actually great about keeping in contact and arranging for a time, you know everybody was in the process but I know Jude was particularly open about scheduling time and things like that

Ok so that's why you disagree with the one that says scheduling

Was a problem

Ok so it was not a problem and then what about this one?

Um I guess that I'd – at the end when you saw the finished product and what the students were able to accomplish you could see the value in the work that they had completed and you could see how everything tied together at the end.

Right. so let me ask you about this – yah you were at Cambridge cause you were saying so ok – PLCs was this something that just happened – did you discuss AIA in your PLCs did you;

This is not typically required in our PLCs

Ok so what about the collaborative piece about all of this?

There were – well I shouldn't say that it was not – it was a very small part of our PLCs – when it did come up because obviously we had to when we were doing our planning and stuff had to talk about components and stuff but we did not sit down and like our PLC meetings about AIA because it was mostly Mary Ann who is at the forefront of that so it didn't affect my instruction in the classroom so it wasn't something I had to worry about

So when you say this – what does that mean that she was in charge –

She did- all the AIA stuff happened during math class it was all tied into math standards it was all based on the –

On purpose?

Math curriculum. Yeah. Cause I wasn't here for the AIA training-

Oh ok-

So that all happened before I was here – like Joe Sinicki (?) and I think even Patty may have done it the first year I was here cause there was four of us and they had all done the AIA training and they'd gone through it and done all of that and I was kinda like Oh cool that's what you guys do here – that's alright –

So it seemed like it was a meaningful process for the students. Um ok let me ask you another question. Principal leadership style - do you feel that AIA was or was not successful due to the style of the leadership of the Principal at all – is there any connection there?

Other than the fact that Jen was supportive of it you know I would probably say that was the biggest thing right there it was something that she sees the value in it also and so I think if it was something a P didn't see the value in it would be very easy to put a stop to it so I guess she continues to make sure that it is the thing that happens in our building

Even after the grant?

That I don't know-

I'm just throwing that question out there-let me see if there's anything else – is there anything else you want to add?

No it was really just neat seeing the finished product at the end um it and you know the students had a lot of different mediums through which to present their finished products and they all had like you know an individual component you know the classes did a giant tree that had elapsed time moments on it so you could see like one student's mom at age 11 and then you saw that student at age 11 and it was kinda like a whole tribute to her mom- really cool stuff like that kinda had a personal touch to it and it tied math together in a kinda really neat way that maybe you wouldn't think was a student's mathematics' project-
So do you think that doing all those kinds of things are carrying through are you still seeing things like that happening?

Yes I would agree – I think it's a little trickier with PSSAs and everything you know you kinda have to you know you only have a designated amount of time to get stuff in and I think that's probably one of the things that's more impressive to try to get everything that's going to be on the PSSA test that they still take time to do something like this that may not be as test-driven like other types of instruction to prepare students so I think it's good that there's an understanding of how it fits into the curriculum –the importance of it for students

Alright before I actually write down all of this is there anything you want to change?

No

You're comfortable

Yep

Is there anything else you'd like to share?

No other than I think it's a great program

CES 3

Ok so when doing this sort here were there any that were questionable any that you looked at that were kinda like um not quite sure where to put it?

I think I had a difficult time whether it was meaningful whether it was the teacher who initiates and sustains it or if it's the artist in residence. I wasn't in a classroom that used the program, I was an outsider and I attended the classes and did things like that, so those were the ones I had a hard time with because I feel like they are important but I didn't know exactly where to put them on the scale…

Umm that's good sense. For the ones you put in strongly agree and ones you put in strongly disagree can you share a little bit of your thinking in both of those?

With the strongly agree I said that the AIA grant provided movement and multi-sensory activities and I feel that that's what the whole program is about and working with the emotional support students and the instructional support students that I do I see the benefits in that and how important it is for them to have those multi-sensory activities so that's why I agreed with that one the most and on the complete flip side what I strongly disagree with is I don't see much benefit to the AIA grant because I think that it is extremely important just for the reasons I stated regarding the multi-sensory activities.

Makes good sense too. Let me ask you since well you need to get here professional learning communities. Were you part of a professional learning community that brought in this AIA discussion that collaboration even if it was a PLC?

Yes

Ok, can you share a little bit of that thought?

I was involved in some of the planning stages with a first grade class and a sixth grade class and just talking with them and it seemed the different planning stages from the beginning when they were just introducing it all the way to the execution of the big celebration performed at the end.
Ok, so what did you learn from that experience? How did you feel about that collaboration with it – helpful – good?

I felt like that the collaboration varied dependent upon the teacher's personality and the artist's personality. I think there was valiant effort put forth regardless of the situation I just feel that some people collaborate better than others – I think it was a personality thing.

That makes perfect sense too. Now I'm just going to throw this out – professional learning communities in general, what are your thoughts on those? In general, even without the art in general – in general your point on collaboration

I think that a PLC is extremely important, I was privileged enough to work in a district in another state 10 years ago that had PLCs up and running already at that time. They weren't called PLCs we called them team and grade level meetings, we had them on a weekly basis where we would get together, we wrote lesson plans together – your lesson plan and my lesson plan would be completely integrated together so you're teaching the exact same skills at the exact same time to our students to continuity between the grade levels; our Librarian was involved in every meeting our technology person was involved in every meeting our principal was involved in every meeting and then we had the sheets we had to fill out with all of our goals for that week and went to the art teacher, the music teacher and the PE teacher and then they were integrated into the arts the music and the PE whatever skills we were teaching so I think that that collaboration when I started was a little bit weak because I was new and other people were new so we didn't have all those skills but at the end you could see where our data had skewed before that one person was completely high and one person was completely low and the 3rd teacher was left somewhere in the middle…everything balanced out and everybody was pretty much and all of our students were pretty much on the same level by the end.

Do you think now with AIA – it's no longer right – the grant

No

Had this become part of a PLC what you're talking about I know here it's a little bit different do you think it would have sustained longer? Maybe not the grant but the ideas or so you think the ideas are still there?

I think that the ideas are still there but I think that in order to sustain it there needs to be a way to communicate what skills and ideas you're doing in your classroom with the art teacher, the music teacher, the PE teacher in order for them to get involved – I mean it's very easy for them – 1 thing we did in kindergarten was we did our unit on apples so the art teacher would always do apple-stamping with the students so that was a way to do patterns – we knew that when she did apple-stamping for our apple unit that we also needed to be doing patterns because we'd teach them the a b c pattern so I think it's that collaboration that's going to sustain all of this and then you can take the ideas and use them in your classroom.

And do you think that's happening now in your opinion?

In my opinion I don't only because our specials' teachers are left out of so much of the PLC because they're the ones covering the classrooms so the regular teachers can meet and there's never a time for the special teachers to meet in a building let alone with the grade level teachers or within their particular subject area – we don't have a time where all art teachers can get together or all the music teachers so I think it's just disjointed.

Right, ok that makes good sense. Now because you have a background in administration the 1st question I'm going to ask you is about whenever you were implementing this and about the principal leadership. How is that important? How is the style of a Principal or a leader within a school district important when it comes to implementing things like that? And maybe specifically AIA and then broader than that?

I think that if you don't have administrative support then it make the teacher and the artist in residence both feel like it's not being valued and then I think it's not sustainable. I think that if you see it's not valued or the Principal doesn't agree with what you're doing or the superintendent doesn't like it then it's one less thing that I have to do and I can do it half way – I don't have to put forth a whole lot of effort because there's someone else coming into my classroom that's going to do it all so I can step back as where if there's an importance placed on it I think the sustainability is going to be there. I think that the more a district or school leader gets involved and is in the classroom to see what's going on the more chances for funding there could be and to pick up where the grant has left off. I know everything is a budget crunch these days but I think within your building budget you could allot some money for some new water colors in the classroom because they did this fabulous water color thing during the AIA and now we're gonna buy all those classrooms new water colors. I think it could be simple things like that that make this program sustain.

Is there anything you would like to add to what we talked about, anything you're thinking you want to share?

When it comes to AIA leadership

No

And we're comfortable with the layout here?

Yes

CES 4

OK is there anything you want to share with your sorting here?

I don't see much benefit in the AIA grant, that's probably one I disagreed with the most.
Honest I'm trying to think if the resident artist was the guy that I'm thinking of that ran the
whole – this was last year with the list this year –

It would have been in the past because the grant is over now

In the past like 2013 or 2014 school year? You're not allowed to tell me?

I don't know. That's a good question I mean the thing is that I think everybody had different
residents artists because I did hear another name mentioned

You mean one per building?

Well there was a few I think per building
Ok

So it's very possible that –

It fits the guy that I'm thinking of and I think it is I remember he had like a workshop and it
was voluntary after school and I went – was it after school – I can't remember but I mean there
were maybe 3 or 4 teachers that were there so scheduling wasn't an issue – I didn't have to
fight to get a hold of them too much paper work I honestly don't remember, I remember filling
out a lot of paper work and I would say working with the resident artist like I said I hope it's
the guy I'm thinking of but he was very knowledgeable, very helpful, very friendly. And I
don't remember Edinboro University specialist and it's really hard to measure the effect of
AIA on PSSA scores it's impossible to measure.   Here's another PSSA Students are exposed
to AIA teaching techniques for more than one year will make a difference on the PSSA I feel

like I can't agree or disagree I want to agree but I don't have any concrete evidence. Another PSSA question on this one part of the reason it's hard to say it was the only reason sustainability for the AIA grant must come from the teachers I mean I agree with that but it has to be more than that –more than just teachers and I wasn't sure if ah that meant that the teachers should fund the AIA activities from here on in that's why I put it in neutral. AIA materials were expensive I have no idea cause I didn't pay for any of them. It is the teacher and how he/she will infuse arts into lessons that will increase student performance in reading and math I think are very important to infuse those but I don't know how effective that will be I just don't have data it seems like that is what is important – to agree or disagree with some of these statements. Collaboration – I don't remember collaborating – about AIA things – scheduling arts integration of core subjects is difficult it can be that's why I put it in neutral sometimes it's easy sometimes it's not so easy. Art makes learning more concrete they should be infused in all subjects at all ages it just seems like too broad of a statement to say yes I mean I'd like to say yes absolutely but I don't know how realistic that is. Students with social challenges experience success I AIA – I have no idea- I don't know if they did or not- they probably did – but I just don't know enough about it to make that statement

Sure

The graduate class provided innovative ideas ah the iPad I use a lot for doing videos and projects like that and that's like I said when I think back to AIA I think of iPad apps and things like that

So a lot of technology

Yes

Hmm

Um . the AIA took away time from core subjects- I think I'm pretty sure it did like I said I don't remember doing any of the AIA stuff this year – I think about doing it this year- I'm trying to remember –like I said I know I went to a workshop and I've had workshops with

someone and I don't remember if it was something I had to sub-coverage for or if it was something I did during my plan time or something after school – I can't remember. Most teachers are not willing to take the time or effort to infuse arts in instruction of reading and math – I completely agree with that- I think some teachers have been doing the same lessons for years and feel like it's not broke – yeah. Infusing arts in reading and math allows students to keep material on a personal level – I definitely see that and I feel like some of those lessons that I did at the end of the year when I ask kids what were your favorite things we did this year a lot of times that what came up- meaningful and fun – reflecting on instructional practices – tapping into a child's imagination through the arts enhances his/her experiences in reading and math – I definitely agree with that-but it's just hard to do everyday

Right that's a good point

The AIA grant is another form of differentiated instruction – absolutely is – a lot of times kids who don't normally participate will really you know jump on board with the AIA lessons and be outspoken when normally they're pretty reserved. Learning excelled students experienced a growth in their confidence – I definitely think that that can be – ah yeah – a carryover –art in other subjects; art-infused instruction can reach different learning styles-absolutely

Ok thank you for sharing your thinking

You're welcome

Next is – what's the next sort I have to think about – that's the right way ok?

Um hm

Ok so this is kinda like a Likert scale going by what you strongly disagree with to what you strongly agree with

Ok so what this is called is a forced distribution so we're kinda distributing the other cards to like I said how much you agree with them to how much you disagree. Now what's important is

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to notice the numbers underneath so that's how many cards can go underneath each- and you can move things around so if you decide differently

Adjust it – got it

So we're gonna start with the cards you agreed with and like I said you can certainly talk through the process or if you want to talk after that's fine too

Is that on all the time?

Yes it is

For my strongly disagree the strongest one I put I don't see much benefit in the AIA grant – there's a huge potential for benefits in the AIA and I don't think we've seen all of them

What are your thoughts on sustainability of a grant that's no longer in place? Just wondered what you're thinking on that?

Well I think at the teacher level it's possible to sustain it but the funding ah

Ah – that's a good point

And I put somewhere that I wasn't sure who fund it – if that would fall on the teachers- that would be a problem. Some of these I feel like I already talked about-scheduling time with the resident artist was not an issue at all
Right. Ok are you still ok on the positive or…

The one that I most agree with is most teachers are not willing to take the time or effort to infuse the arts in instruction in reading and math. I see a lot of that and I feel like some teachers are just sort of set in their ways and change is something to be feared so I feel like that's a big wall to get through

How would you overcome that? Could you overcome it?

I don't know if you could I don't know if it would mean creating an incentive for teachers to infuse but I think even if you do that obviously I don't think it's something you can make mandatory but even if teachers were teachers who fall into that category –teachers who are not willing to take the time or effort to infuse the arts – even if there was a training I feel like they would um kinda roll their eyes through it and maybe shake nod their heads and say I'm gonna do this and then walk out of the training and not address anything that was talked about

And do you think it's because they don't see benefits?

No I think it's just

Stuck in their ways?

Yep. Change is something to fear.

That's a good point

And I feel like they a lot of teachers feel like what they're doing is sufficient and adequate and does not need to be tinkered with in any way

Right
But they reflect on how they were educated in school and I'm sure a lot of them – and I didn't have a lot of arts either and they say look how I turned out. I turned out fine –I didn't have arts so- why add arts now?

Right. So do you think a lot of this has to do with experience, age?

Yeah

Ok. I mean that's

Not exclusively but I think that's a factor for sure

Sure. Anything else you want to share with the agree?

Um this art-infused instruction can reach different levels of – see I don't – I think one of the obstacles is I don't see my class in art class. I'm sure there are students who –are become more of a leader in art class than they are in regular education classroom and without art they wouldn't have that opportunity to really rise and shine. Um AIA grant is another form of differentiated instruction- think that's definitely true. Tapping into a child's imagination through the arts-enhances his/her experiences with reading and math-I don't have data but I can see the logic there

Why?

Actually the only lesson this year that I did in math class that probably sticks out and one that kids still talk about was I had someone from the EU come down and we did a whole class small group activity and they really loved it I mean it involved getting up and moving around and creating a huge poster board connecting percentages and decimals and fractions and they really, really liked doing that and I think part of it is because it's not the typical math class-they –every once in a while they'll still ask if we can do something like that again. Um I don't know- it was beneficial to collaborate with colleagues it's always beneficial to collaborate especially for me as a first second year – um – any time I get to collaborate is valuable for me – a lot of times I feel like I don't – it's not a 2 way street cause teachers I'm learning from I don't really feel like they're learning from me – because I just don't have experience.

Let's go to the neutral; yep last group. Is there anything on there?

Um a couple of them stuck out. The AIA grant requires too much paper work –I don't remember – I mean I would have put this further down- so when I think of AIA I don't think of more paper work. The EU specialists were eager to help in any way – I don't remember EU

specialists –um – some of these PSSA ones –there's a positive relationship between the AIA and student achievement on the PSSA- I don't know- like I said before it's nearly impossible to measure I'd like to think there is some kind of impact of AIA on the PSSA but backing that up it seems to me would be nearly impossible unless you had 1 student take the PSSA twice and if students are exposed to AIA teaching techniques for more than 1 year it will make a difference on the PSSA –I don't know how you could measure that. There is little or no relationship between the AIA and the student achievement on the PSSA- I just don't know. Sustainability for the AIA must come from the teachers – I agree with that but it shouldn't only be the teachers – it's a team effort from everyone maybe even parents. The AIA grant materials were expensive- I did not buy these so I have no idea- I didn't pay for it. Students with social challenges experienced success in AIA- I don't know that for a fact but I could see that happening. I know there are kids in my class that have social challenges and I've seen um art open them up a little bit –creates a little bit more confidence that they can express themselves

Would you consider writing an art?

Writing?

As a method of expression?

Yeah sure

You just got me thinking

Yeah I never thought about that but maybe not informational writing but- even though you are creating a piece of art – I was thinking more of

Art?

Fantasy pieces or

Sure

When I think of art I always think of pictures so when you think of art in this case with AIA what do you think of?

I was thinking of iPad stuff

There's an art to using that

I don't know – I was thinking of things – like bringing stories to life like kids do- creating stories and animating them and really bringing them to life adding a different dimension to books – not that books are boring

I have some questions here

Go ahead

Well one of them you said about collaboration so did you PLCs- did you guys talk about AIA during PLC time?

Never

Ok so what type of PLC collaboration do you mean? Specifically to AIA

I don't remember exactly collaborating on AIA but I just put it there cause it's always beneficial to collaborate even if it's 3 teachers who don't know what they're doing but I don't remember specifically collaborating on AIA

Even though there was a – how about scheduling things – did you guys have to talk about that?

What do you mean?

Like to get the artist to come in – did you ever have the artist just visit your classroom?

I think he did come in but I don't remember any scheduling

Anything like that

Scheduling problems – no

I'm just gonna take us away from our sort just to talk for just a minute about professional learning communities or thoughts on those further than the AIA lines? How do feel that PLCs have helped or not helped?

They've helped me a great deal and I feel like I've benefitted more from PLCs than a lot of the teachers just because I am a fairly new teacher and like I said any time I have to collaborate whether looking at a pacing guide or just talking about what we're doing what we're teaching in intervention where we are in math class trying to keep everybody on the same page –I feel it's very valuable to me but I can feel why some teachers feel it's a waste of time and they don't get anything out of it

Ok explain that to me know – that's really interesting..

There are teachers who feel that any time out of their classroom is a waste of time and they'd be with their students all day every day and I get that feeling too sometimes but I feel the PLC meetings are valuable and I get something out of them but I've seen teachers in PLC meetings who have the look on their face like they don't want to be there and they're not getting anything out of it no benefits out of it and even if they are they ignore it but I don't get a lot of opportunities to meet with my colleagues and I mean my fellow 5th grade teachers have a lot more experience than I do and any time I have to ask them about that cause it's so new to me it's valuable to me but I don't feel like I said before that it's a two-way street I feel like the teachers don't get a whole lot out of me

Do you think that you come with fresh ideas because of the face that you are new or you don't

have anything holding you back? Like new approaches?

Yeah I don't know I just seen that more last year than this year

And last year was a different graded level

Yeah different grade level and I feel like the teachers were maybe just a little bit more interested in hearing a new idea?

Ok that's fair

I think this year I just don't feel as comfortable as I did last year and not brave enough I guess to go out on a limb and suggest changing something that the other teachers have been doing for decades

That's a great point though. Let's move into this one here cause you were talking about most teachers are not willing to take time or effort to infuse the arts into instruction of reading and math-this is one you've strongly agreed with and you explained that you feel it's not the teachers it's a team effort right isn't this the one?

No

Oh

That was this one. Oh no, no wait was it this one? No that wasn't team effort

Ok well then I gotta re-think my thinking. I think this one here was about change, wasn't it? Remind me – ok this one was about change

Yeah absolutely – I feel like a lot of teachers know what they're doing every year and they have a routine a schedule a pacing guide and any change to it is gonna be a monkey wrench that will throw off the whole system and they don't want to take that leap and like I said they

will go to trainings and things and nod their heads and take notes but once they walk out the training room

Everything changes

Yeah
Ok I wanna talk about leadership here –because I think that that's an important piece to the AIA as well, maybe I shouldn't say that I'll leave it up to you if that's important or not. But how does leadership fit into making this worthwhile. Does it?

Leadership from...?

Well it could be leadership within your own grade level or leadership within a building and maybe we could talk about both

Um I'd love to say that a teacher like me could step up and rally the troops and get everyone on board and I feel like administration could do the same thing but I really don't think that they can – I still think that ah they're gonna go in there and nod their heads and say they're on board and come back in the school and nothing will change. I don't know if it's stubbornness or people just set in their ways but a lot of people are afraid of change

Yeah I agree. But do you think that if a leader in the building has expectations of a certain kind that will not impact those teachers or would it in some way? Where does the leadership in that building stand? Like where's there – it doesn't have to be primarily about this but just the overall in general and what does leadership bring to a building? And can it make something like this sustain or be successful? What are your thoughts?

I don't know – I don't have – I'm not sure I mean I'd love to say that ah –I don't know – I don't blame it on the leadership at all I have a feeling they could bring George Washington back to life and be here and do a huge AIA presentation and be fired up and a lot of people'd be on board with it and utilize the information and I still think there are teachers that will still

Not

Say – yeah say they'll do it and won't and I don't think it has anything to do with leadership

Ok so let's talk about this –principal leadership. How is that important – what type of style do you feel is important in order to help teachers to be successful in whatever it is they're trying to do?

I guess being open to the way of teaching teachers teach –I mean I – there are lots of different teaching styles and we have them all

They have to differentiate their own style

Yeah

Of leadership

Yeah they have to differentiate their own style of leadership but they're not gonna please everyone

That's true – ok is there anything else you would like to share? Anything that got you thinking- were any of these tricky to place?

I felt like some of the ones down here I really had to pay attention at the numbers underneath cause those some of those I would have put higher if I could but by default they were just put

In the strongly disagree

In different places yeah

Anything else?

I don't think so

CRAW 2
Facilitator's notes from Q sort session
First Sort
- "Resident did not understand curriculum"--- some didn't
- All of the PSSA cards were neutral because only grades K, 1, 2 and 3 participated in the grant
- "Too much paperwork"---It does require a lot of paperwork but I know why it does

After the sort
Prompt-Are there any that you would like to discuss?
- Arts in Action motivated the students…especially the lower students. They would dress up and have fun.
- I love Arts in Action
- Talked about the neutral cards again explaining that the upper grades did not participate in the grant.

Second sort
- Strongly agree card "Learning Support students excelled n their art work and experienced a growth in their confidence."
- "You could see these students shine and they really felt like they were part of something."
- Shared a story about a little girl that shocked everyone with the art that she did. This was a title student that never really "stood out" until the arts began being infused. The student is now learning support but because of the arts and the confidence that experience gave her, she is also now in safety patrol.
- There is just a calming effect through music and all arts.

Prompt-In your opinion, did everyone involved feel a sense of community?
- "Yes! There were some non-believers until they saw what the kids could do."
- Having an art infused school is so powerful. I went on a trip funded by the grant to South Carolina to the Ashley River School that was amazing. In South Carolina, they test higher level thinking instead of just math and reading.

Leadership
- Delta was very supportive and excited to be part of this grant. She will do anything to help kids succeed.
- The naysayers began to change their thinking because they noticed that the benefits of the arts for the kids outweighed the "negatives."

Disagree discussion

- Strongly disagree statement "Don't see much benefit in Arts in Action"---I see a lot of benefit!
- "Makes learning more concrete (a disagree card)---I disagree because I don't think it makes learning more concrete but it makes it more abstract.
- Materials being expensive (a disagree card)---it was a grant.
- Stakeholders (a disagree card) the kids should be the main stakeholders---they should matter most… "Their voices need to be heard."

The benefits of arts in action (prompt)
- It opens learning up-helps kids be more insightful.
- Much more acceptance of one another.
- Deeper appreciation for things around you.

Neutral
- PSSA (neutral card)-I truly don't know since the grant was mainly occurring in the primary grades K-3

PLC
- Partners in education was discussed for after the participant retires---Crawford Central and Allegheny College work together on incorporating learning opportunities for Crawford Central
- No PLC's within in school
- Common planning time
Helped with subs
Allowed classes to get together
One artist per grade level
Collaboration between teachers needed to occur in order for this to work
Participant was the liaison for this grant between the University and the school and would attend monthly meetings---something extremely beneficial about these meetings was being able to hear what the other schools were doing.
Talked about the Brig Niagara trip
Classes at the University
- The first year was so effective-a lot of moving and learned a lot that would pertain to the elementary school.
- The second year was not as much fun and the expectation was deeper thinking. Teachers do get a little tired by the afternoon. (she smiled)

Leadership continued
- Principal was instrumental-she went to the classes and tried to also go to the monthly meetings-she really tries to do what is most beneficial for the students and to help increase student achievement.
- One great thing that Delta did was say—everyone try it, if you do not like it then you can stop. I really admired this approach.

- The principal is an amazing woman—very committed.

Sustainability and principal leadership
- I do think that sometimes the principal needs to take a step back and let the teachers take ownership.

Motivation (prompt)
- Others are motivated because she (the principal) was motivated
- The principal went through the process so she was experiencing the same thing as the teachers. She even did her homework!
- Let's just say she leads by example.

Participant was soooo enthusiastic about arts in action and continuously said it had so much benefit and lit up the students.
She shared a project the school did with the grant that revolved around "Where the Wild Things Are" where students dressed up and paraded the school and created a video which was presented at "The Movies" where lots of people came to see the students' premiere.
Jude was the artist most mentioned as was his trainer-couldn't remember the trainer's name.
Her comment about the arts and the impact
"You can't put a price on it..it was priceless"

CRAW4

The students in AIA experienced success I had a student that was basically mute and we had one of our artists and he was into the theater and she just blossomed –talked blossomed students were coming up to her for help and it was amazing

Exciting wow

Yeah. The AIA was meaningful and fun – we had one of the residents he was kinda – he wasn't great at working with children and so but the other ones we had were so I guess it kinda depends on the resident that you have so yeah here's another example learning support students experience excelling we had the gifted children in the classroom and the learning support students and one of the learning support students excelled in that where the gifted student kinda struggled so the gifted had to go to the learning support student for help

And what a great experience for

Yes yeah. The PSSA ones and how they perform I guess I really don't know much

And they've changed

Yeah yeah. It did have a lot of paperwork.

Ok so you have a lot of agrees

Umhm

Anything you struggled with

I don't think the scheduling was a problem but then again I'm primary and I don't have the upper grades have so much that they have to get into to get ready for the test unfortunately-we were more flexible down in the primary area so-

You teach what grade?

Second

Ok. So now the next part of this is what we're going to do is a forced distribution so we're going to lay out a continuum and take each of these piles and sort of ask you it's a ranking of sorts and we'll start with the agrees. So when you lay these down you'll notice the numbers underneath that tells you how many of the cards are allowed to go under these numbers so that's where the whole forced concept comes in. and you're allowed to change your opinion-sometimes what is happens is that people will rank these comments and even though they may have put them in the agree pile they find oh maybe not so much this time so they can go anywhere on the continuum

This is how I feel?

These are the ones you agree or are positive about –this would be very positive and negative

and these would be the neutral.

Yes. Once I lay them down and I come across –can I switch it

Oh absolutely you can switch it anytime during this whole thing.

Now we're going to do the same thing with the disagree cards. Are there any you want to change? Just because I have them down here doesn't mean. Are you satisfied with everything?

Yeah I think I am yeah
Are there any you had a particularly hard time with? Difficult for you to place?

Again it was the PSSA ones and I was kinda uhnnn but I think I recall going to cause there was a time –we have meetings and all of the data is up and we can see and I think there was a time when there was a little boost with the learning support after they went through one year of it I think I recall that but and again I don't see enough of the data to

Which is unfortunate in a way

Yeah like we do see some but we have our own data –we're split so we don't get to dig deep in it as much as we would like to

Yeah um was there anything – one of the things we want to find out about is the professional learning community did you feel that that was developed or enhanced

I think it was enhanced some of the time after some of the teachers had went through it we were able to present and be able to tell the positive things and outcomes that we actually experienced cause you know there're some that uhnn but we actually went through it so we could see it but there were some of teachers that were no we're not buying into it

The ones that didn't participate?

Yes. Yes.

But then we did say it and sometimes we were I keep saying we –it's my other 2nd grade team we would be the ones saying no we don't want to try that –something new but we did it and it brought some other teachers on board and they did it so I think it did help some

Do you see that as sustaining? Does that continue?
No unfortunately no but it's primary some of the things we did –we changed a lot of things that we do and so we like kinda beg for an artist and we do get to have one next year if there was a special grant that they were coming and they're going to work with the whole school but the primary focus will be 2nd grade. I think if we had the funds to sustain it there would be more teachers that would – but we just don't have

But they're more open to it now

That's right I think so

How about you personally? Do you find that this experience changed you?

Definitely I always do so much I'm always searching the Internet to find ways I can incorporate music and find different things that –one of the artists that we had I said he was in the theater and the vocabulary that we learned from him I now incorporate it with the vocabulary words that we have – we critique things and I tell them about critiquing and we never did that before – but the kids love it so yeah I've changed a lot

So even at second grade

They're able to do that-they are. In the past I'd say we can't handle that but –so I've learned a lot from them

Oh that's great would you like to see this program again or

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I would and like I said it depends on the artist because some of them are good –very good at what they do I'm sure they wouldn't be the artists if they didn't but just how they connect- some of them are able to connect

Now what did you have –did you have theater?

We had –what did Mr. Sehoo(?) say he did with us –we had Mr. Sehoo and Tom and it was like art- bring in the visual arts drawings – connecting with storytelling and things like that and we had Mr. Jude and we made a movie with him so it was like – we did a lot with the computer with iPads and I can't remember what his art was called what Mr. Jude did but we made a movie we did a green screen and videotaped and we took our Charlie and the Chocolate Factory and the children acted out characters- we wrote screenplays we wrote scripts then he taught them how to videotape and we did that and then we had the theater – I think –yeah we had 3 of them

Um as far as the children that participated do you have any idea how they have fared since –

Like I said the one little learner support girl has really flourished

And it's continued

I think it's continued

Yes because she struggled and she just found something – it built her confidence and I think she's doing fantastic

That's very cool other teachers have reported things like that – and with that type of child maybe that's a little bit more –

Right and the kids just don't forget the experience –they don't forget it so

And they still talk about it?

They do and they connect it – there was one of the teachers –we were learning some shape song with these big shapes and when they started that section in their math she started singing the songs and that brought back-yeah triggered it

That's very cool. Let me try and think what else we have here. I think that's about everything she wants –how about support as far as support from administration?

That was something she was fantastic at because she started it with us followed it all the way through took the class – followed it all the way through so she was a big supporter and still is –she likes to see when you incorporate that

Oh that's neat

Yeah she does

Some of the schools didn't have that same experience and they reported differently

Yeah but she's a big supporter of it and if we say that we want something she tries her best to find money to get it for us and

Nice to know

Yes that's great

I think that's pretty much all there is. Is there anything else that kind of stands out about the whole experience –either this or participating in the AIA grant?

Well like I said I liked it- I think the kids benefit from it

I wish they'd do more of this stuff

They need it I know they need it

Yeah there's so many different ways to learn

UC 1

Brian 3rd grade, PE at Union City.
Has become golden apple winner because of use of video cameras learned during Art in Action
graduate class. .

Initial Stack Sort: Agree, Disagree, Neutral – (@ are cards commented on)

@ Resident artist was reason implementation was successful
> B:I had the Hula hoop and drum lady. The artists were really into what they were doing. As a
> result I now use the hula hoop in my lesson.
> The drum lady brought in a basketball and you drop it and it made sound. I now use this also
> in my lessons

@ Customizing learning is important
> B;Not every kid liked drum or hula hoop There were some kids, especially girls that really got
> to shine. Some kids didn't understand all the directions.

@I don't see benefit in AA
> B:When I first heard of this I signed up because it was free. I was going to get college credit
> and it was free. Some of my buddies were doing it too. When I went to the first two classes I
> hated it, I hated it. I didn't want to do it. I didn't like the drums I was out of my comfort zone.
> Then they did this thing called I movie where you take the video camera and you take a movie
> and bring it back and tinker with it…I don't know what happened but it really clicked with me.
> It really took off in my world. I now have over 34 videos and I became a golden apple winner
> because of my work with it. This is especially true of my work with autistic kids. I don't know
> what it is but we'd make a movie, bring it back and watch it and those kids would just get it. It
> made sense to them. I've now taken what I learned in Art in action and applied it to my
> Masters program at Westminster and instead of term papers they have now allowed me to
> make movies!

@ It is the teacher and how she infuses the lesson in art that will increase performance in reading or
math.
> B;The artists were artists. They weren't teachers. So sometimes it was hard for them to add
> math or English into their art.

@ Most teachers are not willing to take the time to add art into their plan.
> I agree. Teachers have their set plan of how they do it. They do what they want to do . Then
> you bring someone else in and they want to take some of your time away and now you have a
> problem. The teachers are evaluated on how well their test scores are. So, if we are doing
> hula hoops instead of doing math then they might say I don't want to do this next year, its
> taking away too much valuable time.
@ Principal was familiar with A inA

Yes she was – she took the course first.

@The resident artist did not understand the core curriculum.
  Again the resident artist was an artist – not a teacher. They were experts in what they knew, i.e. their field.

@ A in A requires too much paperwork
  Everything requires paperwork. It wasn't more than anything else…it was what was needed.

@The EUP faculty had little or no effect on the implementation of AA
  They had a lot of influence that's what they did!
@Participating in AA was work
  No t for me – when they came in they took over the class. I let them do their thing.

@ Sustainability must come form teachers.
   I agree if teacher say we don't want t do this they wont show up again. Specials teachers would benefit more but I understand why they are going to the regular classrooms.
@ If student are expose d to AA it will make a difference in the PSSA
  Its not going to hurt – anything that gets the kids motivated will help. We had greater classroom attendance and participation because of AA because the kids didn't want to miss stuff.

@ It was beneficial to collaborate with collegues
   Yes, again with specials it was beneficial to go to the music teacher and incorporate music or go to the art teacher and say we are going to decorate hula hoops today and ask for colors and they would talk about primary or secondary colors.
Pamela: So, would you say then that collaboration increased?
  B: Yes and also the teacher whose class the AA artist was in would say "hey we are doing the civil war today so in your PE class try to incorporate that into it."
Pamela: So that's the *professional learning community* you are talking about
  B: Yes. Now, it wasn't always positive. like sometimes Id hear teachers say "we arent getting anything accomplished." But y'know, its how much you are willing to put into it.

@The AAis another form of dif instruction.
  Yes.
@The aa provides brain based insruction
      Yes. Now with the I movie I made a movie with the kids called the 12 days of gym class which is on I movie right now. On the first day of gym class my teacher gave to me…. On the first day (I cant remember) on the third day three tricycles, on the fouth day …. Hula hoops or something and on the 12th day my gym teacher gave me 12 drummer drumming and that class had the drum lady, so we had the kids incorporate drumming with basketballs.

@The AA increased scores on PSSA
  I cant answer that

@The EUP specialists were eager to help in any way.

   Yes, but again they are artists and they have their own ways. Im an artist, not a teacher.

@There is apostivie relationship between AA and achievement on PSSA

   Idk

@Sceduleing arts integration with core subject is difficult.

   No – you just have to be creative and you have o be adaptable.

   Yo have to be able to add things and water things down till it works

@LS students excelled in their art work and experienced a growth in their confidence.

   IDK if they understood what was taking place other than what they saw – Oh today we have a new teacher – other than that im not sure they understood. But again – it didn't hurt!

   Like we videotaped the autistic kids doing the obstacle course, we videotaped them jumping over the ropes …. they LOVED seeing themselves jumping over that thing and then seeing themselves on the screen doing it. So now all of a sudden, when they came to PE they were Movie Stars! They loved seeing themselves and their confidence grew because of it.

@ AA infused instruction can reach different learning styles

   Yes.

@The grad class provided innovative ideas that I use in my class.

   Yes everyone knows I do videos.

@AA required higher order thinking skills.

   Yes both on the teachers part and the students part. I watched how the artist had a plan and it would have to change sometimes . We had a plan but we also had to be flexible and creative and think of new ways . sometimes the students didn't get it and then they were challenged and had to figure stuff out.

@Scheduleing time with the resident artist was a problem

   No but what I saw was that I had the same class for 6 weeks of hula hoop. So when other kids were doing skiing ind wiffle ball… this class did 6 weeks of hula hoop and that wasn't really funa after while. Maybe 2 weeks of this and that. Now the artist would say that s not enough but just give them a taste instead of immersing. I took a little of this and that and incoraporated into my toolbox –

   Including the Hula hoop! I learned something about how to discipline from her. What the hula hoop lady did is if you misbehaved and needed to be disciplined…you didn't get to sit out – cuz some kids would like that y'know? Instead you still had to participate – but you participated with an invisible hula hoop. You lost the privilege of your hula hoop.

   So I use that now - you don't lose basketball, you don't lose jump rope – but you do lose the equipment! Now because of your behavior or what you did you have to use the invisible basketball or the invisible jump rope – And that works a lot better! Now they are really bummed out. "The other kids are doing this and using the real basketball or real jump rope…I still have to do it – I still have to participate, but I don't get to use the stuff, and that's not as much fun." So as a teacher I've gained knowledge.

@Art makes learning more concrete and should be infused in all subjects at all ages ?

   ABSOLUTELY, ALBSOLUTELY!! I think the problem in todays society is they are pulling PE out, art out, music out…and the kids are becoming robots. Yknow now its come to school do this do this don't fool around, don't move around learn this don't talk don't run around, take the test, move on. You know it used to be gym art music chorus, the Xmas musicals, talents shows all that was part of school and it was important and it was fun…now school is like a mini job for these kids and it's sad. That's not how it should be.

Pam: I doesn't even make sense from an evolutionary p.o.v. because we evolved by moving

   B:Exactly but now its do this and this so your scores go up so we can get more funding.

@Tapping into a childs imagination with art enhances his experience in reading and math

Yes! If yo can teach a kid without him knowing he is learning that the best. You know we do a game where there are bowling pins and you and a partner get 6 kicks and however many you times knock down bowling pin and whatever number of times it falls you have that # on top of the six – so they are learning fractions like one out of six or 1/6 without even knowing it. Or we do the magic basketball number and instead of telling the number we say you got this many baskets and the answer is this…so what is the magic number? Like you had 3 baskets and the answer is 12 so, lets give the magic number a name…well call it X! so what is X? and they will say 4!...now you've got the kids doing algebra!

@Working with resident artis made instructional time more valuable.

 IN PE I let them run the show. If they needed me I was there…but sometimes I was more of a hindrance so I would be there for discipline and I could just watch..it was nice getting a break and being able to just observe.

@the aa grant was fun.

 YES.

 @The AA grant provided opportunities for collaboration

YES. "Hey Mr Patton we are doing something in class I am going to video tape it can you edit it.

They may not know me well, they only know I'm the video guy, but afterward they see how into this I am with them and – I've formed some good professional friendships – and that's all from this Grant. S o it continues.

@Students with difficulties in social interaction experience success in AA?

 Yes. IF AA connected with some students I couldn't connect with – great. Something/ someone is connecting with them

@AA forces teachers to reflect on all instructional practice.

Yes it makes the teacher think and reflect on how to use the art and the artist. It also helps fill the teachers toolbox if the teacher wants it too. Not all teachers took full advantage of it. Some teachers have said " Never again." But, its only going to work if there is a willingness to let it work.

@AA has initiated a change in instructional practices?

Yes – in my world it has.

RANK SCORING - CONTINUUM

<u>Comments - Agrees</u>

P; Were there some cards that were a struggle to place?

B: yes

P: which ones would those be?

B: like AA is another form of differentiated instruction. Well it is… but that's like saying a basketball is round. So what? What about it? I had to use that ' strongly agree' space but I'd rather put something else there.

B: It is beneficial to collaborate with colleagues.

Yeah its beneficial to collaborate but I didn't feel it was one of the big strengths - but I do agree.

P:Not many disagress.
        B:I'm a pretty positive guy.

        B: Some of these don't pertain to me – so they are neutrals…
        Like the PSSA's. I don't do PSSA's.

DISCUSSION QUESTIONS

 P: Which ones did you find particulalrly hard to place?
         B: the PSSA ones
P Because of relevancy?
         B;Yes
         B:Another is the time one – because it was scheduled for me.
        B: I would like to see a pile of NA – not applicable you know?
P: That's a good point. We are trying to get a broad view, a broad perspective… that being said, not
everything may be applicable to each person. That is worth noting.
        B: Yeah and how are you going to differentiate and score them all…it could be difficult.
        But - For Brian Patton, PE teacher, it was very beneficial.
 P: It sounds like you took a lot from it.
         B;Yes absolutely. Not only in the class but also learning from the Resident Artist. I would hate
        to see this not being done any longer.

P: Well that is one of the questions – What can be done to sustain this, to continue or expand
interest? Would you like to see things changed or done differently?
        B: I don't know what I would change… I would like to see/ experience a taste of all the artists.
        Rather than just being assigned one artist for 6 weeks. Maybe 2 weeks of this 2 weeks of that.
        The artist might say I cant teach in 2 weeks – But we just want a taste … and then maybe we
        can collaborate later on in the year.

 P: Now, that's very interesting. I am hearing something similar from another school as well. But they
had an opportunity of experiencing two or three different things. What was the process of
determining which 'art' you got? Did you have input into selection of the resident artist or art form?
        B: No I was easy going and I said I will take, whatever I can take, whenever I can take it…so
        whatever artist the teacher had – when it came time for PE then I just worked with that artist.
 P: Oh! So you did team teaching/sharing with the artist?
        B: Yes I didn't have an artist with me all day every day. I shared the artist that came with the
        class. So the artist was with that class – and then with the class in PE as well.
P; Okay and it was a third grade right?
        B: yeah and they don't switch classes. But I know some other classes had a puppet guy – Now
        that could have been fun – incorporating puppetry into gym class.
P: So the Imovie was something you learned in your graduate class when you were taking the AA class
. But there wasn't a resident artist here who did that?
        B: Correct. That was something I learned and then I brought it to the school. Like, I was not
        clicking at all with AA. I was out of my comfort zone completely…Then when they introduce
        the Imovie something clicked and I was all in.

It was neat because at the end of the class they gave out a camera and a tripod and I received that! And they showed one of my movies to the AA higher ups.
(small talk about his videos….)

P: How do I access them? Id love to see your videos?
B: Yeah!! You Tube Corry Soccer
Underneath it will say by Brian Patton. Click on that and then all the vidoes will show up.
Right now I am working with an autistic class and I'm working with one of the teachers – and she is awesome. …
And there you have that Learning Community we talked about.
So there it is! Thats from the Art in Action graduate class.
P: That's awesome! I'm really looking forward to seeing the videos.

P: So, lets talk about leadership…. What about the leadership? How was the principals buy in?
B: She was very supportive. She was the first to do it and introduced it to us. At first, with me, she was "Why is the gym teacher going? How is he going to use AA? But I think since she has seen how I've used AA in the class and also how I've used Imovie she is "Alright. Now I get it!" Ive even made videos for her. We did Read Around The School, where kids sit in the hall and we video tape them reading. Things are much more visual now and the kids not only learn but they see it … and kids do what they see. So we do videos on behavior, cafeteria expectations and everything.

P: How about some of the teachers? You said some of them were negative? Was this mostly because of the loss of curriculum time?
B: No. It was mostly because they are negative. (laughs)
P: Well, yes, you do get those…maybe because it was new or different?
B: Well yeah – but, really, they are just negative. It could be anything.
You could give them $100 and they would say "Oh sure, $100…What's a hundred gonna do for me? Why not $120."
Some are stuck in their ways… Some, not willing to accept there are other ways beyond just their ways.
One teacher felt she was there to watch me and my class, while I watched the artist watching my class!… I mean, she could have used that time in much better ways. I don't need her to watch me watch my class. She just complained. It was supposed to be partnership but she wasn't able to do that, Not with the artist and not with me. So, y'know, she lost a lot of time that she really could have benefitted from.

P: Some others have said that some of the artists weren't particularly good with kids or …
B: Well yeah ,but maybe that's why they are artists – Teaching's not their thing.
We could turn that around - The artists could have said the same thing…"Some of the teachers weren't particularly good with art!" Well, yes, that's not their thing!
That's why it was a partnership, a collaboration. I'm not sure everyone understood that.

Me though? I have only great things to say about Art in Action. I highly endorse this program. It changed me, it changed the way I do things, it help me grow professionally. I hope it doesn't go away. I'd be really sad if it did.

UC3

It's the 11th? No 10th

Ok I'm bad with dates! So what you're gonna be doing is

So; I'm sorry are you the (?) doing it or –

No someone

Oh ok I understand sorry

I'm just kinds in between jobs so I said yes I'll do this

So what we're gonna do is initially a group survey was done and a bunch of comments were made by the group so they gleaned 40 comments that teachers have made and what we'd like you to do then is take these comments and first it'll be a 2 part thing. The first thing we're gonna have you do is sort these into piles whether you feel you agree you disagree or you feel neutral about and um yeah you don't have to worry about it being equal or anything and while you're doing this, this is where you know you make comments you know why this might be difficult. It's probably helpful to read the comment out loud so that we can record which one it is, ok so we can start there and then I'll tell you the next cards we're gonna do.

I don't see much benefit in the AIA grant; learning supports students excelled in their art work and experienced growth in their confidence; scheduling time with the resident artist was a problem; the AIA was meaningful and fun; the AIA encouraged higher order thinking skills; art-infused instruction can reach different learning styles; it was beneficial to collaborate with colleagues; the resident artist did not understand the core curriculum; the AIA encourages the teacher to reflect on instructional practices; too much time was spent on planning and not enough time was allotted for the resident artist to interact with the students; the AIA provided brain-based activities; tapping into a child's imagination through the arts enhances his/her experience with reading and math; art makes learning more concrete and should be infused in all subjects at all ages; infusion art in reading and math instruction allows students to connect material on a personal level; the AIA provided movement and multisensory activities; the principal was not familiar with the AIA grant; the AIA grant has provided opportunities for collaboration; sustainability for the AIA grant must come from the teachers; customizing learning to a student strengths and interests is essential for school to be relevant; the success of the AIA grant will be measured from the participation of all stakeholders; the AIA grant has initiated a change in instructional practices; it is the teacher and how he/she uses the arts in the lessons that will increase student performance in reading and math; most teachers are not willing to take the time and effort to infuse the arts in the instruction of reading and math; participating in the AIA grant was a tremendous amount of work; the AIA grant took away time from core subject instruction; scheduling arts integration into core subjects is difficult; the resident artist was the reason the implementation of the AIA grant was successful; working with the resident artist made instructional time more valuable; if students are exposed to AIA teaching techniques for more than one year it will make a difference on the PSSA; art instruction infused in core subjects provides students with meaningful connection to classroom instruction; the EU specialists were eager to help in any way; there was little or no relationship between the AIA and student achievement on the PSSA; the AIA grant requires too much paperwork; the AIA grant was learning in a hands-on and fun way; the AIA materials were expensive; students with social challenges experienced success in AIA; there's a positive relationship between the AIA grant and student achievement on the PSSA; the EU specialists have little or no effect on the implementation of the AIA grant; the AIA grant is another form

of differentiated instruction; the graduate class provided innovative ideas that I used in my classroom.

Ok alright were there any that you struggled with?

Uh yeah - a few probably the ones I put in the neutral pile mostly in reference to PSSA outcomes PSSA scores. I don't have all of the data at my fingertips you know I've talked to people but it's been a while since I've had conversation about the results so I don't feel comfortable saying yes there was a positive – you know there was a positive difference relationship between the grant and student achievement on the PSSA. The other thing is I don't teach in a PSSA grade and I was not teaching a PSSA grade when I had artist in residence, so

What grade do you teach?

Second grade

Oh ok

And they start in 3rd

Ok

So I just – I'm just not sure maybe at one point I was but the last time I had meaningful conversation about the connections between our grant and PSSA results was you know quite a while back

Right ok and you guys did this last year – is that correct?

It's been 2 years

Alright 2 years

So 3 years ago I had residence artist for the last time. Um I've had 2 artists in residence in I believe they were back to back years –it's been a while

Ok and did you have the same artist throughout. Ok you had several throughout the year- was it a yearlong project right?

No it wasn't quite a year long I believe it was maybe the second –let me think – yeah the second go-around was when I had Jude Schengel(?) he was my second artist in residence and my final artist in residence. That year I also took part in the EU course that was offered so that probably – that may be wrong –the time reference cause it's been a while –I would say that 2nd year because the course that I took part in probably took more of the year to complete but um but my time with both artists it wasn't a year long. It was –I don't remember now-it was a good chunk of the year but not the entire year

And your artists – what medium were they-

First time through we had a puppeteer a professional puppeteer he was awesome –second time through artists –graphic arts we did a lot of work with stop motioning he's a professional animator he's a professional graphic artist storyteller, they were both fun for the kids and the thing that I was left with was the most impactful to me was the impact on my students with learning needs with special concerns

Ok

I usually have students in my classroom who come from either the Autistic classroom that we have here at school or the life skills classroom that we have at school so it just seems that each year I get some of those students and they mainstream into my room and it was so impactful on those kids. Those are the students you know that the confidence level in general classrooms are usually quite a bit lower than the general ed population coupled with the fact that they're not with me all day long so I made sure and my artists made sure to work our schedules so that those kids when they're with me in my room that the artists would be there so as not to miss you know I didn't want those students that population to miss the artist experience and the artists –they were in agreement with wanting to work with those kids they were pushed into my room. And I remember the year that we had the puppeteer the students made their own puppets the students wrote their own script for the puppet show –that was the culminating activity. You know they assumed the character of their puppet and for many reasons I'm guessing there were probably many reasons there was one child in particular among the few I had from the learning skills class that beamed confidence and the ability to be right on target with everything that was going on –the way he was interacting with his classmates the conversations he was having it was like he was able to be himself

Ok great

And then it had let down the barriers of confidence and at the culminating event we did a puppet show up at the high school and it was in the auditorium and it was a packed house - and this particular student you know for the puppet show you're hidden –he was the shining star of the show and it wasn't in a oh how cute type of fashion –it was wow this kid he started to ad lib a little bit he started to go off script just a little bit but like I said everything was so on target –he propelled the story forward better than general ed students-so yeah it was just a neat thing – that was – no- well yeah I guess learning from the artists especially the second time around when I had the animator –I've used the skills that he actually taught me- the tech skills you know in my own classroom experiences subsequent to having –you know I guess he was just able to offer technological expertise that I needed and he was able to give me and we've done a lot of activities in the classroom –well less now a days – but in the year or two since I was with Jude we did some motion things on our own without the artist in residence you know we did a lot with photography –I love photography- and Jude did too and we kinda hit it off that way – so I've been able to use a lot of the things –especially the 2nd time through

That's really – so it changed the way you teach

Sure – yes it has

That's terrific that's really great. Ok we're gonna keep on the conversation this is great this is exactly the type of information we're looking for and I'm going to show you the next phase of this – what we're gonna do is we're gonna put these cards on a continuum and it's gonna be kind of a forced choice type of thing. I have to put quick notes on everything because the last time I did this I did it backwards –and it was awkward for the person doing it. Did you see a change do you think as far as –is there a professional community developed with the teachers during this and has it sustained at all do you feel?

Yes I did see a change –the 2nd time through I did this with a teaching partner another 2nd grade teacher and he and I took part in it together – that was also the year we had our course at EU so that's just a natural way to build community –I built community with teachers from other schools in Cambridge and (?) Springs and other local schools and it's always good to get into a class and share ideas with colleagues – ah the 1st year I was probably more on my own you know I didn't do this with a teaching partner but I do feel like I developed a community with my artists and among the kids –and even the other teachers that took on an artist in residence but you know the 1st year you have growing pains so there was probably little more confusion for all parties the 1st time doing anything in the schools –I wish that the environment of education hadn't changed so rapidly since the last time I had an artist the way things are right now in our district we have been asked to implement several new ways of teaching and I'm not gonna say that the training for this implementation what it – to be. We've got a lot of new programs going on in Union City but we're just being pulled in so many different directions and this has been a slow burn this move you know and it's probably to align common core the new –no Study Island is software that we use to get kids ready I just – you know as a teacher in the general ed classroom my ability to teach to teach effectively has been taken from me a bit and I think I was an effective teacher when I was using more art in the classroom –more hands-on things more concrete lessons and that's been taken away from us-so it feels like the 2 years I had an artist in residence I felt I was at the top of my game I was excited to implement these things further and then this polar change occurred well I guess it's slowly been coming –we know it was coming – this year especially has been a very difficult year –it almost feels like our school district has given us like 10 different things to juggle at one time

And they're all new

Well yeah- not all new – just 10 different –you know that-the bowling balls to juggle and guess what? Things are falling to the ground I'm not catching everything – there's already a backup in the air – things are falling to the ground so in that case it's like a fight to retain a little bit of your teaching artistry while getting kids ready for the PSSA. You know that's what it's all about it's about following your common core
And getting kids ready for the PSSA

That's very sad –

It is sad
I've been involved with young children for many, many, well probably like 20 years now so that saddens me, I know there's a way to teach young children and I feel that frustration so often when teachers don't get to do what they know is the right thing

Yeah there's not enough time during the school day I would keep my kids longer if I could – there's not enough time to impart everything we need to impart so it feels like by the end of the day it's a sprint and you can't teach 2nd graders sprinting you know – I've heard a lot of my colleagues use the phrase we're teaching a mile long, a mile wide but an inch deep so we're not really giving the children the deep

Right the understanding in those skills

Yes it's very shallow
That saddens me – so here's what we're gonna do with these –now these are your agree cards and what I want you to do is put them on the continuum eventually all the cards are gonna be on here so they can go anywhere now here's the thing you'll notice that these numbers – 6 cards can go under this line three cards can go here and all –there're all equal value =you know just cause it was first doesn't mean it was more – than that one – they're all the same

So I can have 6 her 5 here 4 here but not 5 here

No
Ok

Eventually all 40 of these cards are gonna be on here
Alright do you want me to read them aloud again

Yeah and comment – the comments are just as important as

The graduate class provided innovative ideas I used in my classroom. The AIA is another form of differentiated instruction. Students with social challenges experience success in AIA. Now I really wanna give this the highest strongly agree but I'm only allowed one –you make it tough on me. I feel very strongly about – and I can re-think things too?

Oh yes this isn't set in stone even at the very end and there's gonna be more discussion and you know –get up and move around

The AIA was learning a hands-on and fun way. The EU specialists were eager to help in any way. Art instruction infused in core subjects provided students with meaningful connections to classroom instruction. If students are exposed to AIA teaching techniques for more than one year it will make a difference on PSSA. Scheduling arts integration with core subjects is difficult so I'm guessing this a statement I would apply to my experience right now? This year? You know things have changed since –

Right

Looking at the word is I think it should be was

I think it's open to interpretation

Ok

I believe that these were taken probably last year?

I mean as things are in our school district right now I'd say yes so I may move some things around

But that's a good thing to note

Learning supports students excelled in their art work and experienced a growth –I probably feel more strongly because of the words learning supports to give that one the highest and then going back to this one – the AIA grant was learning in a meaningful and hands-on way. Alright

Alright are there any of them you want to change? You can use this whole thing. There might be some of these that you may feel more negative about and that's ok to move them not to keep them where you originally. Alright now we're gonna do the same thing with these cards and you show you disagree with-let's see how you feel about these.
Setting pretty good do you want to change anything?

No I'm happy with everything I have – yeah there were a handful that I wanted to move around
Alright now the next thing we're gonna do in this last phase is place the neutral answers and maybe just for my own if there could be a space a little bit so I know what the new ones are

Sure

Each time I do this I'll get better

You get a little better?
Yeah
I'll make sure I do that. Ok so I pulled this one from earlier should I put it in the lower?
No let's just put it where you want
Ok
In the neutrals ok?

I'm going to put this in the among the strongly disagree columns only because going back to our conversation of how things have changed and it has um initially there was a change in instructional practices I think in the school among the people who took part in the program –in the grant however because of this it's just on the high stakes assessment the changes that were made are not as impactful anymore. It doesn't mean it's not gonna get back to that but right now

Is there one of these then that you-

Oooh I do need a-

Yeah ok so the principal was –

And I mean I disagree that she was not – she was familiar with it in fact in the 2nd year she

180

took the course with us at EU so that was fun to have her with us- oh wait –no she didn't –she did not take the course- the first year she went to a lot of the –there were some workshops I believe in Cambridge Springs – if my memory serves right there were a few a handful of times where she was there with us outside of the normal school day at some kind of an AIA event whether it was at the art museum or Cambridge Springs or even her you know I think we had a few her – I guess uh I was wrong in thinking she took the course with us –she did not take the course with us –when I took it at least now I don't know about subsequent years but I do this I disagree I mean she was familiar with the AIA-she was very familiar with it so I guess yeah I feel comfortable with where I –

Ok. Do you think leadership involvement impacted the success of the grant or how well it was expected?
I think that always impacts a grant like AIA where you have you know people from outside the school coming in the school and joining the school community and making changes the collaborative changes when teachers you know the administrator is that hinge that allows it – it's a big part of the way the program plays out –it's a huge part in the way the program plays out- so yes I do think – and I do think our administrator our principal initially –well she's I guess she's gone up and down a little bit with her enthusiasm for the project. I've always felt she's been an advocate for the program you know she's got a lot of responsibilities on her plate –she's always been an advocate in my mind however –if there was a time when I approached her about something concerning the grant it may have been met with enthusiasm that day or it may have met with a little bit less enthusiasm depending on what she had on her plate –so you know she's got a lot – she has those – she's juggling more than I'm juggling

Yeah, yeah that's hard to –ok I'm trying to think ok I better copy that down while I'm thinking about it – how about you as a person? Did it change any of your beliefs or feelings?

Yeah it did – it you know just getting the opportunity to experience a different way of teaching was impactful to me – you know – I love art that's probably why I was excited about this but actually working with art was something I had never had a chance to do this before and it was nice to see and observe and even collaborate on the process more so than just the end point you know and that's something I think that a lot of educators you know probably struggle with you know we have to focus on the end product so much and increasingly it's getting more difficult – we're getting less time to prepare kids – that processing time has been minimalized minimized I should say so it was impactful for me to experience process-based learning you know

And especially with young children
Yeah and it goes back to really the youngest students involved – I would hypothesize it was probably the youngest students that would benefit the most concrete you know multidisciplinary exposure like that's getting up moving around using their bodies to express themselves when they're necessarily at the ready you know using their art work their visual arts when they're not ready to do it with writing they would use the more visual arts opposed to a verbal or a written language so that was neat to be around I really enjoyed that aspect I just wish it was like that still
I completely understand
You know I think we need more time – I don't disagree with the common core I don't disagree

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with having a common core I don't even disagree with having high stakes testing I don't agree with rigor in the classroom I completely agree and am a proponent of all those things I completely agree that we need to have those things however something has to give you know um and I don't know how popular I would be with my teachers saying this I would be I am a proponent of year round schooling maybe more instructional time you know we when you look at other countries we in the states don't spend nearly as much time

And there's some –over this summer especially with learning supports students and then you spend all that time bringing them back

Bringing them back

And by that time we have a vacation it's just yeah

It's just not enough consistency in our year in our teaching –maybe it goes back to the agrarian need to have warm bodies on the farm during the nice weather and times have changed and I think education educators are taking a look at the model yeah I would be fine because I'm a teacher because I wanna be a teacher I'm not a teacher because of June July and August but you know those-

You're in it for the art as much as much as the science I know of teaching I know that

I am and it's frustrating when the science of it overwhelms your desire to infuse your artistry as a teacher. You can have rigor we need rigor um you hear the terms rigor and relevance together all the time but I've always thought it was funny at least in my experiences in my district rigor and relevance and artistry are not interchangeable because we don't give the children a chance to find relevance –we're rigorous and the work is relevant that they're doing so it's relevant to what some adult says is relevant but we don't give the students an opportunity to make it relevant selves

Personal realm

Yes

To really absorb all the understanding

So I'm teaching this stuff a 100 miles an hour with my 7 and 8 year olds and I think I'm doing them a disservice because I haven't given them enough background I haven't given them enough
Purpose – sometimes I forget to review before I start a new word study lesson and that bothers me you know that's our spelling –word studies –because we're under the crunch of time

Yeah that's too bad – I'm one of those people who think that play is important –I think you can learn a lot through play through art –art should be a core curriculum
And I don't know that we'll ever see that
It's always bothered me that it's called a special
It's necessary

Absolutely

I'm actually oh I'll wait until the thing's off I just wanted to talk about myself for a second

Ok.

UC4

What did you already teach?

You just did it the one year?

Mary Knauff (?) and I she was a musician. Yes. I only worked in this building 3 years

Oh

This is my 15th year of teaching in

Oh wow

Public schools but only my third year here

Were there any that were kinda difficult to place that you found?

Yeah. And I think all the difficulty with me comes with all the PSSA questions and again I don't have the hard data that shows you know if they did better did they do worse to compare to-saying they did better is beneficial I'm guessing and then even just philosophically do you think it would help-I don't know – do I think it would make school a better experience –yes-do I think it's gonna make reading more enjoyable –yes- but at the same time do I think it's necessarily going to enhance the skill – the answer to that is I don't know or is it going to improve the scores and the answer is I don't know and the reason is the reason I think like that is- I train to race and things like that and there are marathons and half-marathons and there are specific ways I have to do to get the best results –ok it's just the nature of the beast ok – so I have to put my times in- I have to do like speed work after my long runs I have to do my tempo runs so it's like a formula you know- certain types of things I have to do to yield the best

results- now there's cross training methods that I like better like lifting my weights and riding my bicycle and things like that but it's not necessarily going to yield a better result for me in that race and it's the same thing I think there's gonna be specific skills that you need to be successful in the PSSAs and I don't even necessarily – I'm not saying I agree that those skills are important cause you know being able to express yourself through art or motion you know there's different ways to be intelligent like Howard Gardner says I think – nine ways to be intelligent – the point is there's lot of different ways we can be intelligent and different ways we can carve our niche – the test only measures one way that you can carve your niche

And so if we're talking about this test

Right so I'm not sure if it helps

Right

But do I think it makes a better child a better experience better well-rounded? Yes! Sure but can we measure that on this test? I don't know

We don't know and then we really don't have any posttest either

Right

Ok so what I'm gonna do now is just gather these up into their groups and the next step then is to put these on a continuum

Ok- you want me to gather these up also?

Sure. Now when you had the Mary you said the drummer did you select her- did the teachers have a choice?

I had no input into who we had but again that was my first year here and I was – I don't know if those decisions were made before I got here

I see

You know because I think we were 2 or 3 years into the grant and the principal came and asked would I be interested and I said yes so I kinda came in near the end

Ok

So I can't answer that question
Did you take the grad class?

Yes

Was that by choice?

Yeah. That was by choice

Ok so I guess some people had the experience that they were told they were kind of gonna take that

I enjoyed it – the class it was very good

Yeah sounds like it was very cool

Yeah

That would definitely be a different experience if you didn't have a lot of input in that too

Yeah

You can get up and move around as much as you want with these when you do these and I give you these cards and I'll show you how we're gonna do this- we're gonna take each one of those

stacks and put them along this continuum –the only restraints are that you'll notice the little numbers underneath

That's how many you could have?

That's how many in each one

So I'm assuming there's that many cards?

Yep and eventually

So you have to have one in each column?

Yep we're gonna have all 40 on here-we're gonna start with these you said agree just because you said agree now doesn't mean

We can't move them?

Yeah. You might decide to disagree

If the Spirit moves me

Exactly-you're exactly right

That's for sure at this point and then I could always move it. Alright

Ok is there anything you want to move around there?

No I think they're good

Ok now the next thing I want to do is take these disagrees and do the same thing- I'm gonna move these up a little bit and if you could leave some space so I can tell where the new ones are

going

Now is this the same rule?

Yep all the way across- you put these any where you want to

So I'd have to move these after?

Yes

Did I leave enough space?

That's the first one you put there? Yes that's fine

Ok

Alright and now we're going to put the neutrals –and again you can move anything

Ok so this would probably be the part you move stuff cause it's neutral

Ok we have 2 here - There're are 2 cards – do they look right to you I only have one written

Yeah I disagree with that statement

Yeah this is where it gets tough- the forced choice here.

So I've got one spot left and 1 card. Alright we're done

Too much planning time was spent? I disagree with that- I think we had a lot of planning time

So tell me about the ones you struggled with this time-

Well-and again it's just like the- it's just varying degrees with how much you agree with a comment and sometimes by default in the continuum you know I had to move things down- if I didn't have the restraints of these numbers there would probably be more on the agree side

Yeah it did seem like in the initial search you did have a lot on the agree side-overall it was a positive experience for you

Yeah sure

And you would do that again so you think you would participate in something like that?

Yeah it was good

How do you think you're students benefitted?

And again I think it was a positive experience and I think a lot of it matched my philosophy –I just feel you know like if your hands are on then your mind is on if you're active you're engaged you'll get the comments like oh it's time to go already? It's time to clean up? And wow yes it is time you know time flies when you're having fun type thing so you know even today we had a we have the two groups I teach a morning group ELA and an afternoon ELA and we did readers' theaters you know where we perform and made the props and all the stuff went into it so it took us a week today was kinda the performance – it was really neat you know- so I personally philosophically agree with this stuff. I think it's a better way to have school I think it's a better –makes a better person- I don't remember learning math or how to read - makes a better experience to learn to read or write or do math you kinda just learn it over school and I didn't have to take the PSSA test but I remember Charlie Brown Christmas when we did the play I remember a lot of the things that we made the things that we did the field trips we took those are the things I remember so that's why I say that philosophically I really agree with this so that just brings it back to the big question does that help with PSSA scores –our PSSA scores are never very good so I don't but again is that important who says it's important? I have a whole political agenda why we take a test and it's to make us look bad so we can cut funding and break a teacher. But I mean maybe that's just my thought my skewed vision that's

how we measure you but who's to say that's important? Cause again I never took that test so I did graduate from college and I teach math

How did you incorporate – did you teach language arts? How did you incorporate the drumming into

The time our artist was here we were self contained so I had a math class in the fourth grade and we incorporated it to like the beats the beats per measure fractions

That'd be perfect

Yeah it really was

And again it comes right back to the artist she really kinda knew what we wanted she listened to us the meetings were productive she came up with great plans –she was great she really was. I think maybe too that was a good experience I had a really, really good artist who went out of her way to make it a good experience for us

And she blended in well with the students?

Oh yeah, yeah

Cause sometimes it's more difficult with someone who's more arts oriented to come into a school system- it could be a little culture shock

Yeah she was good but you could tell though too it wasn't the first time she'd ever been in schools she works in schools quite a bit

Tell me about as a learning community with your other colleagues that were a part of that how was that for you?

And I think that comes back to the grad class and it's been 2 years that we've had the class and

over time things kinda fade like one of the teachers I worked with she isn't a teacher anymore she moved to Virginia you know and time kinda marches on things kinda march on my room was kinda down there more we were in the same area and you know what I mean things just kinda change so we don't have that collaboration that we used to –we would kinda car pool to the school together and go out for dinner you know it was just kinda a good experience you know we just talked about a lot of stuff

Especially with that being your first year and everything. How many classes- was there just one 5th grade class?

There's 2. There's 4 total and 2 of us were involved

I know there were 3rd grade and 2nd grade involved- were you all together – no the 2nd and 3rd grade teachers probably took the grad classes earlier

Yeah. They took it earlier. I was in the grad class with Patty Lee the autistic support teacher Bryan Patton the gym teacher myself and there's Denise the 5th grade teacher that left. I don't know if there was another one or not might just have been the 4 of us. Marlene (?) she was the math lady. Yeah there was the 5 of us that's what I thought.

How about the leadership and the involvement of the principal? Again –I didn't tell you this – this is confidential- I have a code so I'm the only one hearing this – like principal involvement leadership how did you feel? Did you feel supported?

I will say I felt supported if I needed things I could go to Mary for materials so I would say I felt supported that way

That's good

And was she like a visible part of your program?

Well, no- she didn't really come in and bang drums with the kids but I would say she gave

support in other ways

Um what are your ideas as far as how to sustain a program like this or keep something like this going?

And again I think a lot of it has to do with personality matching ok- I agree with the philosophy ok- so I need to be on a team or partner with somebody who agrees we can do-whether it be cross grade projects or inter-grade projects because you know I think there has to be buy in if it's going to be successful and so then I don't know if you like survey the teachers if you know how many would be interested in teaching this way or how many wouldn't be interested in teaching – kinda put a survey out there – get information and that way you can make decisions on who you can partner and compare with and again I think that comes back to the collaboration piece the PLC meetings – things like that

Tell me of your experience who may have been in learning support or emotional support classrooms? The ones with learning differences?

That was another thing philosophically –that is what I loved about the whole project was –and I'll say this all the time –in elementary school it's not- they're not trying to get into Harvard next year we're trying to develop the whole person you know? And I think sometimes we get lost in that too- you're advanced but next year we gotta make you a little more advanced. It's just that academic push, push, push, where you lose track of the human aspect of it-learning how to interact with peers or being compassionate when you're together or strategies how to use our words to communicate with each other, and this process with Mary and the drums if you didn't know which students had IEPs you wouldn't know which students had IEPs.

And did you see the students felt that also?
Yeah!

Did you see them coming out?

I think they came out a lot and I think there was a lot of support where they might not have been

viewed as oh they go to that room for whatever – it's just they're one of us –we're all drummers.

That's cool. How did it change you?

It was a good experience. It made me enjoy school but again I think I've always kind of been that way so you know –I don't know if it was really profound but again one of the reasons I volunteered to do it was I thought that sounds neat – those are things I like to do-so I was already kind of on board I was already buying into it before I started

Ok so for you it was reaffirming?

Yeah reaffirming is good –gathering information oh that's a cool idea let me put that in my toolbox and remember to do that

So did you see it going from-cause you talk about Howard Gardner you talked about something more theoretical to the actual application of it?

Yeah. Again too maybe it validated that it's ok to teach this way you know?

Are you able to still continue on – I mean obviously you're not drumming –

Right but I try to do as many readers' theaters as I can and role play or posters –that type of stuff so I really try and put it in when we can

Have you seen the bridge the bridging to other –when you were doing this with students were you able to see them bridge this to other concepts

Yeah. I think so. And again to me it comes back as we don't need to specialize in elementary school we need to educate the whole child and give strategies that will make them successful so again we try to give them strategies and I think some thrive and take to it others are a little more resistant. Some are good but I think that comes back to –but I think it was a really good

experience

Do the kids still talk about it? Do you see that? They're probably gone

They're out of this school

That'd be such a neat experience for kids to have something like that that they would have. Was there anything that surprised you in the –anything that surprised you in your answers? I mean was there anything when you were putting things out that surprised you like oh-

No I mean I think everything was kind of clear like this obviously goes over here, this obviously goes over here I feel strongly about this I disagree with this so at that point it was just a matter of trying to fit the pattern

And this is where there's always going to be a point of ambiguity

Right. Exactly. Some of these could very easily be over here

Is there any other thoughts or comments that you'd like to make about the whole experience I know you had just the one that was very positive.

It was positive and I was glad I could be a part of it

Things have changed now? Are things different in the school now since then?

Yeah. Maybe cause again with test scores and we're not alone with this category but we're not knocking it out of the park per se I just feel like there's a lot more pressure like you got to do this you got to do this you got to do this and I don't know

On teachers and students? More teachers?

I think both but I'm not a student so I can't speak for them

Well you could see the effects- the trickledown effect

And again too – I don't know- I'm just sometimes I think there's a culture and climate like a black cloud you know

Um hm yeah I'm not a big test proponent-pretty much anti-test

I just don't see the value in them I think they're just there to sabotage, I really do

Yes and they test a very narrow specific learning type of learning today often this is where we are today

Are we teaching kids how to problem solve are we teaching kids how to think critically? No well this is a distraction here this word never so I know I can eliminate this one. You know we're teaching them test-taking strategies and so here's the thing too and I'll give the district credit they've given us resources like we have the study island and we can put on the smart board and we can take the test together and they're very true to life of questions and with that being said they are very difficult – you know I think the questions are written with the intention to trick because it'll say pick the best answer and there'll be one that's ridiculous 2 that are medium and –I believe I know what the right answer is- so I'm like pick that one but we miss that one so – you know what I mean so I don't know I'm just – I'm not a proponent or a big fan of it either. Here's the thing too I get there has to be an accountability piece and I'm all for accountability cause I don't want people showing up and not earning- not doing their due diligence but at the same time there has to be a better way to measure that- not this test score – make some sort of portfolio like have some sort of reflection

Yeah yeah did it increase – I'm glad you mentioned reflection- it sounds like you already have reflective practices

Right and I think that's the thing too I think that early on I was luck, like I said this is my 15th year and my 1st 2 years I got to work with a veteran and she finished at 43 years and she was like the learning tree I tried to sit under her branches just like all sorts of financial things like

save your money like graduate classes take these classes get them now you know you don't have kids –I was lucky to have her –so reflection I took classes early so I've got a master's plus 50 – I've taken a lot of classes –I just realized how important it is –that's the thing too even today after 15 years I'm saying am I doing this the best way? Is this the best way to do it? I don't know if it's the right way to do it

Things are constantly changing

Right

And now with brain research I mean I really I'm really into that and that's where you see- but there's so much so many changes

100% I agree with you so now we've got to swing the pendulum from the standardized test to another form of accountability cause I do I think this is incredible stuff ok but is it helping us answer these trick questions? I don't know I don't think so but are those important and to me the answer's no.

Well and another one of the teachers and I had a conversation about this and it seems like we are teaching to develop a certain kind of student a person to fit almost a certain type of job to a certain extent –we're losing creativity we're losing critical thinking and that's a disservice I feel

Here's the thing too this is confusing to me it's almost like mixed signals cause ah so we are a STEM school I taught STEM this year it was like an afterschool program and man that is incredible because we're building robots and we're soldering parts together and we're figuring out the best way to make our boat go the fastest and this is what it's all about ok and we're talking about how can we put that into the regular school day which is great let's try to get that in there but when that happens your standardized test score isn't going to be what it was. Is that important? To me I say no. but even more so now my evaluation is tied into it so I got attributions the percentage of the time I teach this kid and how well did he do or not do on the PSSA test and it's 25% well not 25% but it's a percentage of my evaluation

I didn't realize it had gone to that –that's unfortunate

And I can even see

Your class oh because you may have different types of learners in your class

Right exactly

And that's enriching for the class for the school but your scores aren't going to be

Right, I know. And here's the next it's buzz rumor in my experience everything is rumor that eventually like your salaries how much money you make will be based on scores so all you're gonna do at this point is encourage cheating –it just came out in the paper all those people in the state of Georgia

Huge huge scandal

I know but what do you think is gonna happen if you tell them they're not gonna have a job unless they do better?

Well and the people the students that are the different learners are really really

Yes it's going to be a fist fight for who's in your room who's my

Alright so I know you're in a time – it's 2:25 so that's good. This is a little thank you gift for all your time and answers

I hope I answered right

No right or wrong

Appendix G

IRB Approval

Youngstown
STATE UNIVERSITY

One University Plaza, Youngstown, Ohio 44555

Office of Grants and Sponsored Programs
330.941.2377
Fax 330.941.2705

February 2, 2014

Dr. Karen Larwin, Principal Investigator
Ms. Constance Youngblood, Co-investigator
Department of Educational Foundations, Research, Technology and Leadership
UNIVERSITY

RE: HSRC Protocol Number: 091-2014
       Title: A Study of Change: Exploring the Impact of a Professional Learning Community
               on the Implementation of a Federal Art Demonstration Grant in Three
               Northwestern Pennsylvania Rural Elementary Schools
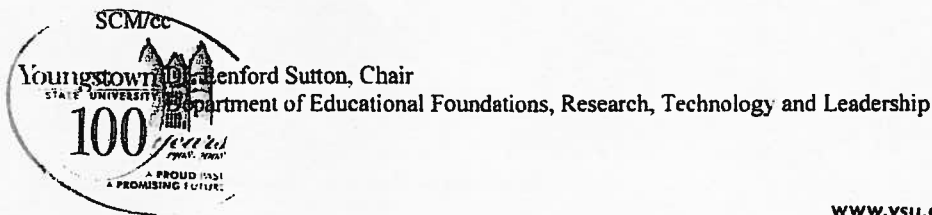
Dear Dr. Larwin and Ms. Youngblood:

The Institutional Review Board has reviewed the abovementioned protocol and determined that
it is exempt from full committee review based on a DHHS Category 3 exemption.

Any changes in your research activity should be promptly reported to the Institutional Review
Board and may not be initiated without IRB approval except where necessary to eliminate hazard
to human subjects. Any unanticipated problems involving risks to subjects should also be
promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Dr. Scott Martin
Interim Associate Dean for Research
Authorized Institutional Official

SCM/cc

Youngstown State University Benford Sutton, Chair
Department of Educational Foundations, Research, Technology and Leadership

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May 4, 2015

Dr. Karen Larwin, Principal Investigator
Ms. Constance Youngblood, Co-investigator
Department of Educational Foundations, Research, Technology & Leadership
UNIVERSITY

RE: HSRC PROTOCOL NUMBER: M091-2014
     TITLE: Study of Change: Follow-up Interview and Q Sort of Select Survey
                 Monkey Responses

Dear Dr. Larwin and Ms. Youngblood:

The Human Subjects Research Committee has reviewed the modifications you have requested to the above-mentioned protocol. The addition of the card sort methodology does not increase risk associated with your project beyond minimal risk. Although your project no longer meets the criteria of exemption for survey research, the project does meet the criteria of minimal risk allowing for an expedited review. Your project is fully approved.

Any other changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Dr. Scott Martin
Interim Associate Dean for Research
Authorized Institutional Official

SCM:cc

c: Dr. Mary Lou DiPillo, Chair
      Department of Educational Foundations, Research, Technology & Leadership