This report describes a plan for using authentic assessment tools in the Fine Arts classroom. The targeted populations were classes of fourth and eighth grade students in two suburban school settings. Analysis of the data about the Fine Arts classes, based on surveys completed by teachers, parents, and students, showed that traditional assessment methods did not focus on acquisition of knowledge. Instead, arbitrary letter grades were assigned to students. Reviews of the literature revealed that current assessments in the Fine Arts were lacking or did not exist. Existing assessments were not authentic representations of student knowledge based on the concepts or lessons provided. A review of solution strategies by knowledgeable others documented the validity of authentic assessment tools such as observation checklists, rubrics, student logs and journals, and portfolios. These tools fit well with the teaching strategies used in the Fine Arts classroom. In interventions implementing authentic assessment in the two classrooms, teachers found that such assessments involved major investments in grading time, working classroom time, and planning time. Authentic assessment tools proved valuable at the middle school level, but more a nuisance at the elementary level. Overall, authentic assessment strategies did result in a better understanding of student progress for both teacher and student than the methods currently being used. Appendixes present 28 survey, consent forms, and evaluation forms used in the classroom. (Contains 93 figures and 40 references.) (SLD)
IMPROVING STUDENT LEARNING THROUGH AUTHENTIC ASSESSMENT

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An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

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Abstract

This report describes a plan for using authentic assessment tools in the Fine Arts classroom. The targeted populations consisted of classes of fourth and eighth grade students in two suburban school settings. The problem became evident to the two teachers involved due to the lack of the following: time for grading accurately, Fine Art standards, plan time, and amount of importance placed upon it.

Analysis of the data revealed that current traditional assessment methods did not focus on acquisition of knowledge; rather, arbitrary letter grades were assigned to students. Reviews of the literature revealed that current assessments in the Fine Arts were lacking or in some cases, non-existent. The assessments given also were not authentic representations of student knowledge based upon the concepts or lessons provided.

A review of the solution strategies by knowledgeable others documented the validity of authentic assessment tools such as observation checklists, rubrics, student logs and journals, and portfolios. These tools coincided with the teaching strategies used in the Fine Arts classroom.

The teachers found that the implementation of authentic assessment in the classroom involved major investments in grading time, working classroom time, and planning time. Authentic assessment tools proved to be valuable in at the middle school level, but more as a nuisance in the elementary level. Overall, authentic assessment strategies did display a better understanding of student progress for both the teacher and the student than methods that were currently being used by both researchers.
This project was approved by

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

Traditional assessment methods do not adequately meet the needs of the Fine Arts Programs. Evaluating student performance using traditional pencil and paper methods does not appear to truly improve student learning. Evidence that this problem exists includes teacher observation, students’ performance on traditional and standardized tests in comparison to student performance on authentic assessments, and the results of student, parent, and colleague surveys.

Immediate Problem Context

The two schools involved in this action research project are a suburban middle school and an elementary school located in the boundaries of a major midwestern metropolis. For purposes of clarity, the schools will be referred to as Site A, and Site B respectively.

Site A

The two-story brick building was built in 1998 and is attached to an elementary school. The total enrollment for the school is 617 middle school students. Racial ethnic background is 58% White, 39.5% Hispanic, 1.3% Asian/Pacific Islander, 0.6% Black, and 0.2% Native American. Low-income students account for 32.7% of the total population with 10.9% of the students having limited English skills. The student attendance rate is 94.3% with the rate of
mobility at 8.5%. Chronic truancy is 12.6% with 81 students considered to be chronically truant. The average class size is 22.3 at the seventh grade level and 21.8 at the eighth grade level (School Report Card 2000).

The school employs 68 people of whom 52 are certified. There are 52 classroom teachers with an average of seven years of teaching experience in the district. Twenty teachers have masters degrees and fifteen more of them are currently enrolled in an advanced degree program. Staff members include 24 core teachers, eight special education teachers, 14 exploratory teachers, one speech/ resource teacher, two Title One teachers, and one Reading Resource teacher. Additional staff includes: one full- time librarian, one full-time librarian assistant, four full-time custodians, eight cafeteria employees, one full-time nurse, and two full-time social workers, and two full-time secretaries. There are eight teaching assistants that provide support in the special education classroom. Female employees account for 78% of staff, while 22% are male.

The main office, located at the entrance of the first floor, is comprised of two secretaries, the nurse’s office, the assistant principal’s office, the principal’s office, a conference room and a time out area.

The school has 41 classrooms, four of which are mobile units. There are 34 core classrooms. In addition to these classrooms, there is a music room, an art room, a computer room, an applied technology room, a library, a multipurpose room, a gymnasium, and teachers’ lounge. There are two sets of student bathrooms on each floor. Every classroom is equipped with at least one computer, with language arts classrooms having a total of four computers. The mobile units have laptops for security reasons.
Many opportunities are provided to students both academically and recreationally. Many teachers are also involved with after school activities as coaches or sponsors. Intramural sports include boys’ and girls’ basketball, boys’ and girls’ volleyball, and boys’ and girls’ softball. Students can also be involved in choir, show choir, competition cheerleading, non-competition cheerleading, student council, reading Olympics, science club, art club, chess club, jazz band, and pompons. For students needing help academically, there is an after school homework help program. School Parent Teacher Student Association (PTSA) meetings occur on a monthly basis.

The music room is approximately 26 feet by 16 feet in diameter. There are cages on the North, East, and South walls of varying sizes to hold instruments and equipment used for teaching music. Above the cages various posters and student work is displayed. There are carpeted risers of three levels with railings on all sides for safety. There is a conductor’s podium, stand, and chair in the front center of the risers. There are 80 student desks located on the various levels and on the third level of the risers; there are various percussion instruments. There are two entrances to the music room; the first door is located on the East wall and the second door is located on the South wall. There are three movable dry erase boards approximately 4 feet by 5 feet long and two of the 3 boards have one side permanently scored with music staves. There is also a small chalkboard to the right of the entrance located on the South wall. Above the chalkboard is a large television with a VCR, which works by a remote control for easy access.

The ceiling is 15 feet above the floor. The West wall has no cages and holds a variety of music posters. There is access to a computer room, sewing/math room, and an office when you walk through the music room. There is daily traffic before, during, and after classes through the
music room as it is the only access to the computer room, sewing room, and office is through the main area of the music room. There is a cordless phone located on the South Wall to the left of the entrance and the emergency call button is next to the cordless phone. There is a stereo under the cordless phone and a Clavinova electronic piano located in front of the cages on the South wall but not quite to the edge of the risers. The teachers schedule for Site A consists of teaching sewing, eighth grade choir, and three sections of music for 40-minute periods. This teacher also teaches choir to 7th and 8th graders during lunch on a daily basis. Sewing is taught to students in a room connected to the music room while band is occurring. And neither of the rooms is soundproofed.

The Surrounding Community

The district includes seven schools. There are a total of 2,912 students of which, 33.2% are low-income families and 16.3% have limited English. The racial background of the students is 54.4% white, 44.0% Hispanic, 1.1% Asian Pacific Islander, 0.5% Black, and 0.2% Native American.

The district attendance rate is 94.8% with a mobility rate of 17.5%. Chronic truancies account for 2.9% of the students. Chronic truants are students who were absent from school without valid reason for 18 or more of the last 180 days of school. The district spends approximately $6,143.00 per year on every students’ instructional needs. The ratio of students to teachers is 18.2 to 1 at the elementary level.

The average teachers salary is $39,087.00 and the average administrator salary is $79,277. 12.1% of the teaching staff is male and 87.9% is female of which 96.5% are White, 3.0% Hispanic, and 0.5% Asian/Pacific Islander. Teachers with bachelors degrees account for
59.9% of the district staff and 40.1% of the teachers in the district have a masters degree or above.

The town surrounding the school, and its proximity to the city, makes it popular with commuters. Retail and commercial development is mixed with residential development. Recreational opportunities include several park district programs. Area highways and major local roads serve transportation needs. There is commuter service provided by trains and buses.

According to the latest census, the population in the suburb is 42,588. The median age is 40 years old. The ethnic population of the community is 90.1% White, 7.8% Hispanic, 2.0% Other, and 0.1% Black. The community proclaims about 32 different ancestries. The median family income is $59,356.

There is one library. There are 22 places of worship. There is one major hospital and one convalescent facility. There are nine child-care facilities. The community also provides a one square mile park and several playgrounds. There is also a Young Men’s Christian Association (YMCA) as well as a pool and recreation center. A variety of clubs are provided for all ages throughout the community.

Site B

This neighborhood school consists of two conjoined brick buildings. One is the original school that dates back about 100 years. It has four floors with large rooms, large windows, wood floors, an assembly hall, a fallout shelter, and neither air conditioning nor elevator. The other building was built a few years ago and, from the outside, has almost identical architecture. It is only three floors and has modern rooms, tile floors, air conditioning, an elevator, and Internet wiring. The school is kept in beautiful condition.

The grade levels are preK-5 with an enrollment of over 1,200 students. The
average class size is as follows: kindergarten 22.2, first grade 23.1, and third grade 20.8.

Racial ethnic background is 76.5% Hispanic, 20.7% White, 1.5% Black, and 1.3% Asian/Pacific Islander. The average daily attendance rate is 95.2% with a 33.8% mobility rate. Chronic truancy is 1.8% with 19 chronic truants. The percentage of families who are designated low income is 90.6%, and those who are Limited-English-proficient is 44.7%. (School Report Card 2000).

The district pupil-teacher ratio is 22.6:1. Racial ethnic background of teachers is 45.4% White, 40.6% Black, 11.3% Hispanic, 2.3% Asian/Pacific Islander, and .3% Native American. Women account for 76.9% of district teachers. Average teaching experience is 14.6 years, and over 40% of teachers hold a masters degree or higher.

The average teacher's salary is $50,521, and the average administrator's is $87,753 (School Report Card, 2000).

The school faculty consists of one principal, two assistant principals, two counselors, one psychologist, one social worker, one speech pathologist, one occupational therapist, two science lab teachers, two art teachers, two physical education teachers, two media specialists, one nurse, and resource teachers for all of the following: Arabic, Polish, reading, Spanish, and technology. Homeroom classes include: two pre-kindergartens, four regular kindergartens, four Spanish-Bilingual kindergartens, 3 regular first grades, 4 Spanish-Bilingual first grades, 3 regular second grades, 1 Polish-Bilingual second grade, 3 Spanish-Bilingual second grades, 3 regular third grades, 1 Polish-Bilingual third grade, 3 Spanish-Bilingual third grades, 4 regular fourth grades, 2 Spanish-Bilingual fourth grades, 5 regular fifth grades, 1 Spanish-Bilingual fifth grade, one
self-contained cross-categorical class, and 4 multi-age inclusion classes. Other staff includes three clerks, 15 teaching assistants, eight custodians, and one security officer.

The art room is located on the third floor of the new building. It is a typical classroom setting with tables and chairs, low shelves, storage cabinets, one sink, and two computers. The room has very large windows that provide a wonderful view of the residential area.

The Surrounding Community

The surrounding community is mostly blue-collar. It has many different nationalities and a low median family income. Restaurants, shops, theaters, parks, museums, sports arenas, music venues, recreational facilities, and a zoo are all nearby. All are easily accessed by the cities excellent public transportation system, even including two airports.

National Context of the Problem

There has been a shift towards the need for more authentic assessment tools that relate to real-life tasks that include problem solving activities and higher order thinking skills (Burke, 1999). This shift is due to many factors including: changes in the job field, technology, students population, etc. Assessing student knowledge accurately pertaining to specific material taught is a time consuming and difficult procedure. Many class sizes are extremely high with little room for movement in the room itself. Fine arts teachers are not necessarily trained to teach the subject material and also teach more students than core teachers which makes it difficult to establish a personal connection with the students (Hills, 1991). In addition to this, fine arts subjects are usually given less planning time, in comparison to core teachers, to develop and prepare quality lessons and have even less time to actually teach students.

Teachers nationwide are realizing that standardized tests and traditional measuring assessment tools are not accurately depicting student learning. Traditional methods of testing
such as scantrons do not allow for any type of student reflection or personal conferencing. Often times, grading using traditional measurement tools can allow a teacher to pass judgment on a student and issue a grade based on things like behavior, attendance, and attitude as opposed to a grade based on actual knowledge gained (Burke, 1999). This can happen in the fine arts classes very easily when time is not allotted for proper assessment; especially when a teacher may only see a student once a week. Varying testing procedures is necessary in order to give an accurate picture of the complex learning that takes place in the fine arts curriculum (Jasmine, 1994). In addition, effective assessment produces a multifaceted scoring scale instead of an inflexible grading scale and takes student learning styles into account (Forte & Schurr, 1993).

Another concern related to the fine arts curriculum is that there are no complete standardized assessment procedures (LeCroy, 1999). While fine arts educators across the nation are trying to develop standards, they are confronted with attitudes that the arts have not been recognized as a central need in our culture (McFee, 1995). As proven in the past 25 years, fine arts classes are the first classes to be cut in order to make time for students to attend basic or core classes.

Another problem that faces fine arts educators nationwide is that little attention is given to the fact that engagement with the arts helps student do better in other core classes (Catterall, 1998). Instead of embracing the arts as an asset to students, many times administrators see the fine arts curriculum as fluff and stuff.

We propose that authentic assessment techniques will help promote the benefits and necessity of fine arts education. Using techniques such as observation checklists, logs/journals, portfolios, and graphic organizers will help us assess true learning and knowledge gained. Further, we believe that students will transfer their learning and knowledge from fine arts classes into core
classes. Additionally, we hope to develop quality lessons to help promote the benefits and assets to strong fine arts programs nationwide.
Chapter 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document the extent of student, parent, and staff knowledge of authentic assessment strategies and devices for each group surveyed were developed. A total of 6 surveys were developed. Students, parents, and staff from each site completed surveys about authentic assessment. These same surveys will also be distributed at the end of the intervention. A copy of each of these surveys can be found in the Appendices.

The surveys were designed by the researchers to obtain information regarding the use and knowledge of authentic assessment. Some general questions about the Fine Arts were also added. The surveys were given to all students who participated in the study at the targeted sites as well as their parents and to all school staff at Site A and Site B. The surveys were given nine weeks apart at Site A and eighteen weeks apart at Site B.

Site A Teacher Survey

A total of 52 teachers participated in this survey. Surveys were placed in a total of 75 teacher mailboxes and 52 were returned.
Figure 1. Do ever set aside time to discuss what happens in music class?

Figure 2. Do you ever play music in class?

Figure 3. Do you think letter grades are a fair way to assess student achievement in music class?

Figure 4. Should students' effort affect their grades?

Figure 5. Should a student's behavior affect their grade?
Figure 6. Do you ever use music to enhance your regular lessons (not just playing background music but actually discussing specific happenings in music)?

Figure 7. Do you think that music is as beneficial to students learning as a core class such as reading and/or math?

Figure 8. Do you ever use portfolios in your class?

Figure 9. Do you know of any other authentic assessment techniques other than portfolios?

The above graphs have led to the observation that in many cases, most of the teachers agreed 90% of the time with one another. Of the teachers surveyed, most teachers do not discuss music class, play background music, or use music to enhance learning in core academic areas. One area that teachers were split at was regarding the importance of music in comparison to core
classes. These teachers also felt that effort and behavior should be part of an overall grade with an overwhelming 99% majority. Surprisingly, many of the teachers who were surveyed did not know of any other authentic techniques other than portfolios. This is surprising as many of the educators who were surveyed have recently obtained or are in the process of obtaining their M.A. degree and the district is well in-serviced and educated. Overall, the teachers although supportive, do not often use music to enhance student learning.

Site B Teacher Survey

A total of 12 teachers participated in this survey. Surveys were given to 18 teachers whose classes attend Researcher B’s art class.

Figure 10. Do you ever supplement your lessons with art projects?

![Graph showing responses]

Figure 11. Do you display work from art class in your classroom?

![Graph showing responses]
Figure 12. Do you prefer for your students to place their art projects in their locker/book bag immediately after class?

Figure 13. Is time set aside for your students to discuss with you what they did in art class or what their projects are?

Figure 14. Do you think letter grades are a fair way to assess student achievement in art?

Figure 15. Do you think effort should affect a student’s grade in art?
The above graphs show that 90% of the teachers supplement core lessons with art projects and that 95% display student art projects. Most of the teachers surveyed also try to discuss the work with their students. Most of the teachers surveyed also believe that letter grades are a fair assessment of student achievement in the area of art. The teachers also felt that effort should be included in the students' grade. Interestingly, the teachers were split 50% on the last two questions regarding personal choices in art as to whether or not they felt they could draw. Overall, the graphs show that teachers appreciate art and use it a tool to enhance student learning; however, they do not believe letter grades are a fair assessment in art.

Site A Parent Survey

A total of 21 parents participated in this survey. Students enrolled in advanced music were each given a letter to take home to a parent. A total of 32 surveys were given to the parents and 21 were returned.
Figure 18. Do you feel your child’s grades in music are accurate?

Figure 19. Do you ever see the projects your child is working on in music?

Figure 20. Do you play music at home?

Figure 21. Have you ever been to a live music performance?

Figure 22. Has your child ever worked on a portfolio or a collection of his/her work before?
Figure 23. Has your child ever participated in band or choir (school or non-school related)?

![Graph showing participation in band or choir](image1)

Figure 24. Does your child ever bring music assignments home to work on?

![Graph showing music assignments](image2)

Figure 25. Do you feel music class is as beneficial to your child's learning as a core class such as reading or math?

![Graph showing benefit of music class](image3)

The above graphs show that 85% of the parents surveyed felt that their child's grades are accurate. Some parents see music projects but a majority of the parents had not seen any music projects being worked on or completed in the home environment. Ninety-five percent of the parents play some sort of music at home. Figure 24 also points out that the parents have never seen music assignments that need to be completed at home. A majority of students had previously participated in band/choir or both. Figure 24 shows that parents are split as to the benefit of music class in comparison to a core class. Overall, many parents do not see music projects at home. Many have attended live performances but over half of the parents surveyed do not feel music is important to their child's education.
Site B Parent Survey

A total of 13 parents participated in this survey. Surveys were given to all parents of the 27 students enrolled in the fourth grade art classroom. Only 13 surveys were returned.

Figure 26. Did you have an art teacher in elementary school?

Figure 27. Did you save any of your art from middle or high school?

Figure 28. Does your job involve the fine arts?

Figure 29. Have you visited any art museums?
The results of the parent survey were very interesting. Only 66% of the parents surveyed had ever taken art in the elementary school. An overwhelming 80% of parents did not save any artwork from high school yet 90% of them felt that their job involved the Fine Arts. Fifty percent of the parents visited an art museum. Surprisingly, 90% of the parents save their child’s artwork AND feel that their child’s art grade is as important as his/her math grade. Fifty percent
reported that they did not have a favorite artist. One of the most interesting answers to the survey was that 50% of the parents felt they could not draw. I expected that number to be higher than the results showed and was excited that at least 50% of the parents felt that they could draw. Overall, parents seemed to have a positive attitude and appreciation for art.

Site A Student Pre-Survey

A total of 24 students participated in this survey. All 33 students enrolled in advanced music class were given a survey to complete. Nine students did not want to participate in this intervention.

Figure 34. Have you ever been to a live performance?

Figure 35. Do you like to work alone?

Figure 36. Have you ever been given an assignment in music class that you didn’t know how you would be graded?
Figure 37. Have you ever done poorly on a test (any test) when you knew the material?

Figure 38. Do you know someone who makes his or her living in the music field?

Figure 39. Do you think music is as beneficial to your learning as a reading or math class?

Figure 40. Have you ever played an instrument or sung in a choir?

Figure 41. Do you feel that your music grades in the past have been a fair assessment of what you had learned?
Figure 42. Do you think behavior should be included in your grade?

Figure 43. Have you ever created a portfolio to assess your learning?

Figure 44. How have you been assessed in music class before?

Figure 45. How often did you have music class in the past?

The above graphs show that a majority of students have attended a live performance of music. Most of the students surveyed like to work alone and many have been given an
assignment in which they did not know how they would be graded. Almost 85% of the students have done poorly on a test when they knew the material. Some of the students know a person who makes their living as a musician. On the contrary, many students do not think that music is as beneficial to their learning as their core classes are. Approximately 50% of the students have played an instrument or sung in a choir. According to the students surveyed, at least 60% felt that their final grade was not a fair assessment of what they had learned. Overwhelmingly, but not surprisingly, 80% of the students surveyed felt that their behavior in class should not affect their grades. Students surveyed responded that they had been graded using a variety of techniques such as tests, quizzes, homework, and class participation and some students had created a portfolio in an academic class in the past. Overall, many students were not satisfied with their music grades in the past as they felt that behavior should not be included in their grade.

Site B Student Pre-Survey

A total of 13 students were surveyed. Twenty-seven students in art class were given a survey to complete. Thirteen of the students returned the survey the following week.

Figure 46. I have a television at home.
Figure 47. I have a computer at home.

Figure 48. I have art supplies at home.

Figure 49. I have been to an art museum.

Figure 50. I save my artwork.

Figure 51. My parents do not mind if I make a mess when making an art project at home.
Figure 52. I like to work alone.

Figure 53. I like to show my artwork to people.

Figure 54. I like to see my artwork on display.

Figure 55. I look at artwork on display that is not mine.

Figure 56. I know an artist.
Figure 57. I can draw well.

Figure 58. I want to be an artist when I grow up.

Figure 59. I get good grades in art class.

Figure 60. Art class is interesting.
Figure 61. I could choose to do an art project, I would pick:

- Painting
- Drawing
- Using Clay
- Reading about an artist

Figure 62. List in order what you would do in your free time, #1 if first and #8 is last.

The above graphs show that the majority of students like art class, like to look at other people's artwork, and like when their artwork is on display. The majority of students also think art class is interesting and that they earn good grades. Less than 50% want to be an artist when they grow up or even know a living artist. Given a choice of art materials to work with, the majority chooses clay. According to the students, art, computers, and sports are most often what
they like to do during free time. Music, reading, and outdoor fun ranked fourth, fifth, and sixth.
Mathematics ranked as students least favorite activity to do during free time for 40% of the students surveyed.

Overall, students report they generally earn good grades in art and music. Parents at Site B report that their child’s grade in art is equally important compared to other subjects; whereas at Site A, music is not viewed to be as important as other core subjects. Teachers from both sites report that letter grades are not always an accurate assessment tool for measuring student knowledge. This information will demonstrate authentic assessments concerning are needed in the Fine Arts. Difficulties may arise when using authentic assessment tools because although parents report an appreciation for Fine Arts, it does not appear to be evident outside the school environment as seen in Figure 29, which shows the number of parents/students who have attended a museum. This may lead to students not putting forth as much effort or pride in their work as the researchers expect.

Probable Causes

As teachers nationwide well know, evidence of student learning is an on-going process that occurs on a daily, weekly, monthly, and even yearly basis. Unfortunately, one thing that Fine Arts teachers lack that core teachers do not is a systematic and credible way to assess, document, and evaluate student learning. According to Boughton,

“Despite the best efforts of experts to clearly state expected achievement standards in the arts, the business of conducting assessment remains as one of the most complex tasks teachers face. Several factors contribute to this complexity. First, assessment demands several forms of analysis and reporting from teachers to serve up different educational purposes. Second, much discussion about
evaluation and assessment in the field is confused by lack of agreement about, or understanding of the meaning of some key terms. Third, the current effort by politicians and administrators to neatly define the nature of the field in terms of performance standards is lacking at best. Fourth, recent thinking and research has provided an array of suggestions for alternative forms of evidence and methods of analysis in the assessment of the fine arts and student learning.” (1996, p.1).

The above reasons help to define the minute use of authentic assessment in the Fine Arts curriculum that the researchers encounter in their teaching fields. Other factors to consider regarding the use of authentic assessment are a rigid school infrastructure, inconsistent grading procedures among teachers, unclear standards some of which are not specific to grade levels, and personal attitudes towards Fine Arts classes in school curriculum, and testing policies and procedures.

Both researchers are involved in school environments, which create rigid, artificial reactions to the natural creativity of the students. For example, Researcher B is performing action research projects with a specific class that goes directly to lunch at the end of her class. While students' journal, they often rush so they can go to lunch and therefore are not engaged in the thinking process. Schedule constraints and time constraints also lead to a choppy learning process. According to Tranquilli, “children are accustomed to jumping from one activity to another and so it becomes difficult to focus on work completion, especially on projects that span longer than one class period” (1999, p. 20). Researcher B’s schedule is such that students only see her once a week for 40 minutes. To finish one assignment in which students reach the skylight, it would take approximately one month and by that time, student and teacher interest no longer exists. Fine Arts teachers especially want quality from student projects not large
quantities of non-constructive assignments; unfortunately, many Fine Arts teachers are pressured from classroom teachers to have a finished product each class meeting.

In 1999, according to Alfie Kohn, “the primary purpose of assessment is to improve student learning” (1999, p. 191). Sadly, the growing trend across schools in the researchers current state is to test students extensively to determine educational achievement. In fact, according to Neill children in the United States are among the most tested students in the world (1998). Because of this reality, Kohn states, the “intellectual life is being squeezed out of classrooms, schools are being turned into giant test-prep centers, and many students, as well as some of our finest educators, are being forced out” (1999, p. 68). In addition to this, although children in the United States are among the most tested children in the world, testing has not yet been shown to be an accurate indicator of student learning (Neill, 1998).

Even though evidence and research has proven testing not to be an effective measure of student learning, districts continue to emphasize preparing students for the test. In fact, researcher A’s district is currently undergoing major preparations to meet state standards in ALL classes. This means that the researcher not only has to incorporate and meet music standards but must also meet reading and math standards as well. In 1997, LeCroy stated that only eight states nationwide were including music education in state assessments and there is no standardized assessment procedure for many classes that fall under the Fine Arts category. Because of this fact, it is difficult to know what concepts Fine Arts educators should consider as significant.

Wells believes that “the language of the achievement standards do not clearly specify what educators should look at or listen to when determining whether students have achieved standards” (1997, p. 36). Cairn & Cairn add that “the new standards have to do with the application of basic standards” (1999, p. 68). It is unfortunate that although we are teaching to
the new state standards, often our testing doesn’t match the new objectives contained within the standards (Burke, 1992).

Assessment tools need to measure meaningful skills and worthwhile classifications of knowledge. Another aspect of authentic assessment is that it should illustrate progress before, during, and after instruction (Popham, 1999). It is important for teachers to understand what the student has learned as well as how far the student can go. Assignments should present students with “a full array of tasks that mirror the priorities and challenges of the instructional materials” (Wiggins, 1990, p. ). In addition, Wiggins adds that authentic assessment forces students to justify their answers (1990). By forcing students to justify their answers, students are more likely to reach critical thinking strategies in which they will retain the knowledge and excel in a specific task. Furthermore, Shepard argues that multiple-choice tests generally lead to “endless practice on decontextualized skills” (1989, p. 37). Roger Farr also adds that there really isn’t any way to “build a multiple-choice question that allows students to show what they know” (as cited in Kohn, 1999, p.83). When teachers use interactive teaching methods and do not rely on didactic approaches, student achievement is increased (Rossi, 2000).

Another authentic assessment technique that helps students’ excel is when they know how they will be graded in advance. According to Keenan-Tagaki, students will “progress steadily and surely when you make your expectations clear to them” (1999, p. 46). Hickey adds that “when students work with rubrics, grades do not surprise them or leave them without feedback as is the case with apparently arbitrary letter grades” (2000, p. 32). Authentic Assessment also helps teachers prove what students actually learned in class (Chiodo, 1999).

One of the problems with traditional grading methods in Fine Arts’ classes is that there are no specific criteria in which to measure student knowledge. Fogarty recognizes that
"traditional grades include number or letter grades for daily work, homework, quizzes, tests, and for class participation. While they are considered objective measures, often they are actually subjectively based on individual teacher standards" (Fogarty, 1997, p.210). Cheryl Lavender further points out that “before the dawn of music assessment, a child’s music grade was quite often the music teacher’s subjective judgment of that child’s effort, behavior, or personal attributes. Some music grades were based on attendance and attitude. Musically speaking however, these “qualifiers” had little to do with a child’s actual music development. It’s no wonder that music programs were viewed as academically soft in the curriculum – they appeared to offer nothing “substantial” to document” (Lavender, 2000).

Barr insists that “the biggest single impediment to improve teaching and learning is the way which we evaluate student achievement (Barr, 2000, p. 22). As teachers, we must realize that “we cannot test our way to better schools.” (Neill, 1998, p. 45). An important component to authentic assessment is the ability to clarify the learning process. According to Asmus, “assessment is not an add-on to instruction. Rather, it is an integral part of the instructional process, and it can inform both the teacher and the learner” (1999, p. 19). Learning should not be a puzzle incapable of solving or a perplexing brainteaser; but rather a construction project where students can build banks of knowledge and form bridges to connect that knowledge to real life experiences and situations.
CHAPTER 3
THE SOLUTION STRATEGY

Literature Review

According to Miller and Coen, “the U.S. school system has been under attack for some time by business leaders, politicians, and the news media and everyone agrees that our schools should do more to cultivate better-disciplined and hard-working citizens. Music (Fine Arts) is the one area of the curriculum that has shown itself capable of doing the job” (1994, p. 7). Unfortunately, many Fine Arts programs in schools across the United States seem to be thought of, or actually are, merely babysitting classes. Jennifer Barrett, a professor of music education in Wisconsin, pointed out in 1999 that Fine Arts classes are often trivialized in comparison to other subject matter (2001). This philosophy could be due to the fact that assessment in the Fine Arts curriculum is difficult due to the following: lack of teacher training, lack of preparation time, student/teacher ratio, lack of teaching time, colleague support (or lack of), and the lack of quality standards and benchmarks as a whole (LeCroy, 1999; Lehman, 1999; Keenan-Tagaki, 1999).

According to Snyder, “assessments should be developed to allow students to demonstrate the new understandings and skills gained through the unit” (2001, p. 38). Promoting cultural awareness and stimulating creativity is the core of quality Fine Arts classes and authentic assessment assignments allow teachers to validate student achievement while at the same time help students appreciate and enjoy the Fine Arts (Keenan-Takagi, 1999).
Fine Arts curriculum has many benefits to help students prepare for the future. According to Jensen, benefits in the arts are “sprinkled across the spectrum, from fine motor skills to creativity and improved emotional balance” (2001, p. 1). In many cases, students need to demonstrate not only knowledge of core subjects, but also demonstrate the ability to be creative and think abstractly. Classes in Fine Arts also help students develop the ability to appreciate the ideas and work of other students especially when it comes to individual creations. Another benefit of Fine Arts classes is that they help students prepare for the changing workplace, as employers tend to be looking for unique, creative individuals who possess the ability to work in solitude or engaged in a team process. For example, Ford Motor Company employs artists to develop clay models to scale of future cars. The artists’ work together to manipulate the clay to engineer specifications, the artists then join with other members of the team such as engineers to arrive at one common goal (Painter, 2001). Gardner, as cited in Kassell, pointed out that educators need to prepare individuals for the world beyond school, develop each person’s potential fully, and make sure students’ master core knowledge (1998).

Authentic assessment offers a variety of benefits for teachers in all fields. Authentic assessment provides teachers the opportunity to develop lessons that encompass all intelligences. One of the assessment tools called a rubric is able to provide a valuable communication link among teachers, students, and parents (Whitcomb, 1999). Teachers can not only strengthen weak intelligences using specific lessons to help individual students, but also develop lessons to enhance the intelligences that their students thrive on (Lazear, 1999). Teaching lessons with a variety of intelligences will help students retain the material presented and help broaden the base of knowledge. Authentic assessments also help students make the connections to transfer the knowledge they have learned. According to Burke, “Learning standards and district goals are
important for all students to achieve, but educators need to honor the diversity of students and understand that not all students can achieve the standards at the same time and by only one mode of instruction or one method of assessment. Gardner’s theory of multiple intelligences maintains that people possess several different capacities for creating products and solving problems” (Burke, 1999, p. 149). Geocaris and Ross also pointed out that portfolios allow a student to express knowledge in ways that meet individual learning styles and intelligences (1999).

Authentic assessment is an asset in the Fine Arts classroom because standards and benchmarks are very broad and general. For example, arts and music standards can be accomplished in several different ways depending on how the teacher interprets the standard. Many school districts across the United States have begun to revise music and art curriculum based on new National Standards. Unfortunately, although the standards provide educators a valuable resource to guide the development of curriculum, “there is no clear procedure for turning them into a grade-by-grade curriculum. This process, however, will become increasingly important if the standards are to have a meaningful impact in the classroom.” (Wells, 1994, p. 34). Authentic assessment benefits students and parents by giving students choices, grading on knowledge rather than behavior and ensuring that testing is valid based on content taught.

Portfolios are a wonderful asset to art teachers. Portfolios allow art educators to actually view student progress. “Periodically the teacher reviews portfolio work with the teacher individually and discusses the student’s learning, progress, and aspirations in art” (Hurwitz, 1995, p.41). Using portfolios in Fine Arts classes helps parents see the work their children are doing as opposed to parents seeing what the teacher is doing (Roe & Vukelich, 1998). Portfolios are equally beneficial to the music teacher. Students can create a variety of portfolio topics from individual portfolios focusing on a specific topic such as lyric analysis to group portfolios
focusing on material taught throughout the grading period. Likewise, the art teacher can focus on long-term projects and progress as well as short-term mini-portfolios. The researchers have tried to incorporate both types of assessments into the solution of the benefits of authentic assessment.

There are numerous advantages towards the use of portfolios in Fine Arts classes for students, teachers, and even parents. In 1998, Hebert pointed out that “traditional testing addressed the question ‘Which child knows more?’ whereas portfolios address the question ‘What does my child know?’” (p. 25). Portfolios allow students to reflect on their progress as well as their strengths and weaknesses. They also facilitate students’ understanding of the relationships that exist across the curriculum. Portfolios also help students develop a collaborative climate in the classroom through the use of peer critiques and cooperative working. They also provide students an opportunity to assume responsibility for their own learning and their own independence. Portfolios also provide “more complex outcomes and provide holistic and comprehensive pictures of students by emphasizing what students know and can do in response to real world tasks” (Wolfe, 1999, p. 29). Advantages for teachers include having a more meaningful picture of student growth as well as provide data, which can be useful to aid in instructional decision-making. Portfolios also allow for the integration of assessment and instruction as well as provide a wide range of information for both formative and summative evaluations of the multiple abilities, talents, and skills of students. Finally, parents have advantages because portfolios demonstrate knowledge, and growth over a period of time. They also provide concrete and tangible evidence for facilitating communication between parent, student, and teacher. (Gillespie, Ford, Gillespie, & Leavell, 1996)
Although the benefits to portfolio use in the Fine Arts classroom are ten fold, there are also disadvantages. Authentic assessment takes a great deal of planning time not only to create assignments but also in grading student work. It can be difficult to set up a schedule during the school day for teachers to conference with individual students.

Another reason that authentic assessment could be considered a problem is the “lack of training” teachers receive. In 1991, Hill also reported that “only a few states require prospective teachers to take a course on evaluation.” (p. 36). Furthermore, Stiggins states, “Our current assessment values may also be contributing to inadequate daily assessment of student achievement in some classrooms. Since we have rarely inquired into the quality of teacher-developed tests, offered training in classroom assessment in the principal’s leadership role, we simply do not know how well teachers measure student achievement or how to help them if they need it” (1985, p. 54).

Project Objectives and Processes

Students in the targeted classrooms will increase their ability to demonstrate acquired knowledge through the use of creating portfolios and rubrics as well as gain newfound appreciation for the Fine Arts in relation to their other subject curriculums.

- Students will learn metacognitive skills as measured by student reflection journals and learning log
- Students will learn how to assess their own learning by creating and using student-made rubrics in order to grade assignments and portfolios
- Students will assess the value of the intervention by making a comparison between traditional assessment and authentic assessment used in this intervention

In order to accomplish the above objectives, the following processes are necessary:
1. Materials in music and art will be developed in order to create student portfolios.

2. Pre-surveys and post-surveys for students, parents, and staff will be distributed and collected to identify prior knowledge about authentic assessment versus traditional assessment.

3. Teacher and student descriptive journals and learning logs will be completed weekly in order to chronicle the learning process.

4. Observation checklists will be created and used daily to help monitor student progress.

Individual conferences with students will be held in order to encourage metacognition and continue the reflective process.

Project Action Plan

The two teachers will spend the first week of intervention preparing for the introduction of authentic assessment tools. The targeted students will be surveyed on their knowledge of and experience with authentic assessments. Teacher A sees students each day, and will spend nine weeks teaching an appropriate unit(s) related to her subject matter. Teacher B sees students once a week and will spend nineteen weeks teaching an appropriate unit related to her subject matter. During this time students will be assessed using a variety of pre-created authentic assessments such as observation checklists, portfolios, surveys, journals/learning logs, and rubrics.

Throughout the nine and nineteen week periods, the teachers will complete weekly journal entries, which will describe the effects of the intervention on the classes. In addition, the students will be asked to complete assignments pertaining to the unit including but not limited to: Specific journal topics regarding the assessment tools used to grade given assignments, learning
logs to assess teaching objectives, pre-and post surveys to analyze student learning, and student-made rubrics to assess their work.

As the units near completion, students will be asked to compile a unit portfolio. When all portfolios are completed, time will be set aside for sharing and class discussions regarding the units. Students will complete a post-survey to help the teachers assess the value of the intervention. The teachers will then make a comparison between traditional assessment and authentic assessments used in this intervention.

METHODS OF ASSESSMENT

In order to assess the results of the intervention, observation checklists, student and teacher made rubrics, teacher and student logs/journals, and a portfolio evaluation will be developed. Each of these items, as well as an explanation of the results, can be found in the Appendices section of this report. In addition, each portfolio will contain projects and activities, which entail the use of graphic organizers to incorporate student-learning styles. The portfolios will be evaluated with a student made rubric. Time will also be devoted to class discussions of the portfolio process after students have shared their portfolios with the class. Finally, students and parents will complete a post survey about the use of the different types of assessment as used in this project as well as how it has benefited their appreciation of the Fine Arts classes.
CHAPTER 4
PROJECT RESULTS

Historical description of the Intervention

The intervention chosen by the two teachers involved the implementation of authentic assessment tools. The students involved were members of an eighth grade music class and a fourth grade art class. The objective of the intervention was to determine if authentic assessment methods would provide a more accurate method of assessing student achievement more than traditional methods such as quizzes or tests.

In order to measure the results of the intervention, it was determined that the students and their parents would complete presurveys at the beginning of the project and postsurveys at the end of the project. The responses to both surveys would then be compared. Both teachers kept weekly journals during the intervention, during which time they recorded positive and negative impacts of authentic assessment tools in their classes. During the intervention period, students were asked to complete daily and weekly journals/logs to reflect on their feelings about the work in progress. The post-surveys provided feedback from the students and their parents about the feasibility of using authentic assessment tools as an indicator of student achievement.

Original plans for the intervention at Site A called for authentic assessment tools including KWL charts, student journals, teacher journals, a portfolio based on animation, observation checklists, and student and teacher made rubrics. Three weeks into the program, the devastating terrorist attack took place at the World Trade Center in New York. The intervention...
was stalled for one week due to assemblies and class discussions. Teacher A was concerned with the short amount of time but realized that by using observation checklists, student journals, and portfolio construction, there was ample time to receive a clear picture of how the intervention was working. The intervention ran eight weeks although approximately four class sessions were lost due to the terrorist attacks.

Original plans for the intervention at Site B called for six art projects, each enhanced with a teacher rubric, and one of the following: PMI, KWL, log, or journal, to be completed by two fourth grade classes over the course of 19 weeks. One week into the program, the attack on the World Trade Centers took place. The start of the intervention was pushed back two weeks due to poor attendance and school ceremonies/assemblies. Two weeks into the intervention, one of the fourth grade classes was changed into a multiage Spanish Bilingual class so the intervention was discontinued with that class. Time constraints such as class time, field trips, and staff development days also caused the researcher to drop two of the six art projects, the KWL and PMI worksheets, the rubric on the last project, and the student portfolio rubric. The intervention did run 19 weeks, which is 19 class periods.

Presentation and Analysis of Results

Twenty-three eighth grade students at Site A met for 40 minutes, five days per week for eight weeks and fourteen fourth grade students met at Site B for 40 minutes, one day per week, for seventeen weeks.

Site A Teacher Post Survey

This survey was distributed to the same 52 teachers who completed the pre-survey at the beginning of the intervention.
Figure 63. Do you ever set aside time to discuss what happens in music class?

Figure 64. Do you ever play music in class.

Figure 65. Do you think letter grades are a fair way to assess student achievement in music class?

Figure 66. Should a student’s effort affect their grade?
Figure 67. Should a student’s behavior affect their grade?

Figure 68. Do you ever use music in class to enhance your regular lessons (not just playing background music but actually discussing specific happenings in music)?

Figure 69. Do you ever use portfolios in your class?

Figure 70. Do you know of any other authentic assessment techniques other than portfolios?
The teachers of each team were given a packet of information about the effects of music and learning as well as a presentation of these effects during the time of the intervention. Facts and research findings about how the brain processes information as well as how music actually affected the brain and student learning was a heated debate in some of the meetings. Figure 28 shows a dramatic increase of the number of teachers who now use music to enhance student learning in their classes. Unfortunately, some teachers just were not convinced that music is beneficial to student learning or even a worthwhile class for students to take. Several of the teachers also attended an in-service workshop regarding the use of authentic assessments in the middle school setting as is shown by the increase in awareness in Figure 70. Overall, the results have changed a bit into a positive awareness of the benefits of music as a class and to student learning.

Site A Parent Post-Survey

Surveys were distributed to the same 21 parents whose children were involved in the research project and completed and returned a pre-survey.

Figure 71. Do you feel your child's grade in music is accurate?
Figure 72. Did you ever see the projects your child was working on in music?

![Bar chart](image)

Figure 73. Do you play music at home?

![Bar chart](image)

Figure 74. Have you ever been to a live performance?

![Bar chart](image)

Figure 75. Do you feel your child's portfolio represents knowledge learned in music?

![Bar chart](image)
Figure 76. Did your child ever bring music assignments home to complete.

Figure 77. Do you feel music is as beneficial to your child’s learning as a core class is?

The above graphs show that all but one parent felt that the grade their child received was an accurate representation of the information their child learned. Figures 72 and 75 show an extreme contrast in the pre and post surveys. These graphs show that before the intervention, 90% of the parents had never seen music homework or music projects their child worked on. After the intervention, 90% of the parents had not only seen the finished work but also students completing the project. There was a small increase in the amount of parents who now feel music is as beneficial as a core class is when it comes to learning.

Site A Student Post-Survey

Surveys were given to the 24 students who were participating in the intervention.
Figure 78. Have you ever been to a live performance?

Figure 79. Were you ever given an assignment in music this quarter that you did not know how you would be graded?

Figure 80. Do you think music is a beneficial to your learning as a reading or math class?

Figure 81. Did knowing how you would be graded on each assignment help you receive the grade you wanted?
Figure 82. Do you feel your music grade this quarter is a fair representation of what you have learned?

![Graph showing the distribution of responses to the question about the fairness of music grades.

Figure 83. Did you enjoy creating the portfolio as a way to assess your learning?

![Graph showing the distribution of responses to the question about enjoying creating the portfolio.

The above graphs show that this was a positive intervention for the students. Students agreed 100% that for every assignment they knew exactly how they would be graded and 96% of them admitted that this information helped them receive the grade they wanted. Ninety-six percent of the students also agreed that the portfolio was an accurate display of the information they acquired in music class. Eighty-six percent of the students also enjoyed creating the portfolios. Overall, the assessment tools that were used seem to have a positive effect on student learning.

Site B Student Post-Survey

This survey was distributed to the 13 students who participated in the research intervention.
Figure 84. I save my artwork.

Figure 85. I like to work alone.

Figure 86. I like to show my artwork to people.

Figure 87. I like to see my artwork on display.
Figure 88. I look at artwork on display that isn’t mine.

Figure 89. I know an artist.

Figure 90. I can draw well.

Figure 91. I want to be an artist when I grow up.
Figure 92. I get fair grades in art class.

Figure 93. Art class is interesting.

The above graphs show a negative change in students saving artwork, showing their artwork to others, and the students report not liking their work to be on display as much as before. Positive changes were seen in student liking to work alone, confidence in their drawing skills, liking to look at artwork that is not their own, and more students report they would like to be an artist when they grow up. These graphs demonstrate that the intervention had negative effects on student pride and attitudes toward their own art. Through observations, the researcher believes these changes were due to using rubrics for grading. After receiving their grades, many students appeared discouraged. Figures 85 and 86 demonstrate this as well. Overall, this intervention as based on the surveys given, was not a positive experience for students.

Conclusions and Recommendations

The teachers observed many benefits to the use of some authentic assessment strategies such as observation checklists and rubrics. Students at Site A were proud of their work and took
advantage of the opportunity to rework projects in an effort to achieve the best grade possible. Overall, students at Site A were very successful in the use of authentic assessment strategies, especially the portfolio. Amazingly, the students completed more work in their portfolios than they would have doing regular homework assignments. The teacher at Site B was able to use observation checklists to show student progression based on assignments and clearly displayed student attendance and participation.

The teachers felt that the observation checklists and rubrics provided clear expectations for the students. They also felt that students had more control over their success as opposed to standardized tests. The portfolios also provided a clearer picture of the students, and their choices of which assignments to include provided teachers with information about their learning styles. A student at Site A wrote, "I knew exactly what I had to do to get an A or a C and the choice was mine. Sometimes I made good choices and sometimes I made poor choices but it was nice to have the option anyway."

The main reason to use authentic assessment tools with classes in Fine Arts coincide with the teaching philosophies of the researchers. Assessments should improve student learning, students should show growth, students should have the opportunity to be creative, and students should be involved in some parts of the grading process. Instead of focusing of memorization or recall, authentic assessment tools stress the effort put forth by the student and illustrates that there is not one right way to achieve success. The students must make judgments about their progress as learners and must include concrete evidence of their growth from pre-instruction to post-instruction.

Standardized and book tests bothered the researchers because they really did not force students to be creative or think critically. Tests provide an immediate assessment that may be
influenced by many outside factors. Authentic assessment tools provide assessment that have been accumulated over time and show individual student preparation.

The teachers are cognizant of the fact that they have only used a portion of authentic assessment strategies in terms of alternate assessments available to teachers today. They hope to use more of a variety in future projects. The teacher at Site A realized that authentic assessment skewed the grading scale upwards, due to the fact that many students were able to rework assignments and were graded less often during the intervention period. While this was not a main concern of the teacher at Site A, the administration was looking for a bell curve that just did not exist at the end of the quarter for those students who took place in the intervention.

One of the drawbacks to authentic assessment in the Fine Arts was the sense of disapproval from colleagues. At Site A, one teachers went so far as to insinuate that it must be nice not to have to teach all day and just watch students play. Perhaps, if more teachers were informed of the benefits of authentic assessment, a system of teachers who support this philosophy would help inform other teachers unaware of the system.

It was somewhat difficult to grade the portfolios, based on the number of subjectiveness of the projects. The teachers felt that checklists and rubrics (Appendix) provided the most accurate method of scoring. This is due to the fact that they are more concrete and specific. Another difficulty the teachers encountered was balancing the need to provide grades for the school and still respect the contents of the portfolios and the creativity that lent itself to this project. The portfolio experiences at Site A proved to be a positive intervention. There was definitely an emphasis on creativity and the accomplishments of the individual students involved. However, at Site B the intervention proved to be a negative experience. Students were unable to complete the number of projects originally intended due to time constraints. Although
students worked hard to complete projects, journals proved to be an insurmountable task for them. One of the most positive outcomes for both teachers was to see the progress of the students as they learned to assess their own work using checklists and rubrics. The journals and logs also provided valuable insight into the true learning style of each student.

The students at Site A were excited to be creating a portfolio to showcase their work in. Students also felt that the portfolio process would be easier to complete than regular homework assignments, quizzes, and tests. Teacher A felt that the time allotted in a forty-minute class period was suitable for the use of authentic assessment tools in her classroom. She found that one of the interesting features about the process of using authentic assessment tools was in discovering what the students felt was important to learn.

Teacher A was intrigued by the honest insightful reflections of the students. Not all of the student responses were positive. Some students expressed concern about the time allowed for completing projects. The parents at Site A seemed to appreciate and understand the benefits of authentic assessment upon completion of the intervention. One parent even wrote a letter about how wonderful the assignment was stating, “It was nice to see my daughter working hard on a project outside of school. She was so excited to be analyzing lyrics and animating drawings to music. I think this has been an extraordinary, rewarding experience and it should be included in all subject areas at one time or another.”

The teacher at Site B’s intervention felt that some of the results were interesting and some showed no or little change. This may be partly due to the fact that the two projects that the researcher had to delete from the intervention were both drawing skill based. Figure shows confident in drawing skills only rose by one student. Interest in art class and showing others their work remained the same. Students wanting to be an artist when they grow up rose by five
students and students liking to work alone increased by six. Receiving fair grades in art and liking to see their work on display were the only 2 questions that had a negative change. The researcher believes this is due to using rubrics to grade because the students knew if their work was poor they did not want it displayed. Overall, more students think that art class is more interesting than they did before.

Based on the presentation and analyses of the data on authentic assessment, both teachers were in agreement that the greatest drawback to authentic assessments related to time. It was time-consuming to deal individually with students concerning the contents of their portfolios as well as commenting on their journals/logs; however, the one-on-one conversations between teacher and students were very rewarding. The teachers also felt that the original plan contained too many authentic assessment tools; which made it difficult to determine overall effectiveness of the intervention.

We realize that assessment must satisfy many different people including teachers, students, parents, administrators, school boards, school improvement committees, and politicians. Authentic assessment is a complex issue, which is complicated by the individuality of students being assessed. Our final thoughts are although authentic assessment tools provide a clearer picture of student learning, in today's rigid classroom infrastructure as well as the demands placed on educators, we would encourage using some of the authentic assessment tools which may fit each teachers needs. Student age is a definite factor to consider when using and applying authentic assessment tools. Older students fair much better at individual unstructured portfolio work time whereas, younger students have a great deal of difficulty utilizing time in an unstructured setting. We would suggest that educators in a block schedule system address the
this process covered neither of these areas. All in all, we feel that authentic assessment, used in moderation, can be a very effective tool to measure student knowledge.
References Cited


City Census. (2000).


Jensen, E. *Teaching With the Brain in Mind*.


Kohn, A. (September 15, 1999). Confusing harder with better. Why the tougher standards movement is undermining our schools. *Education Week, XIX* (2), 68.


Tranquilli, P. (May 1999) Improving student achievement through increased confidence and accountability in art. Skylight Professional Development.


Dear Student,

I am currently enrolled in a master’s degree program at Saint Xavier University. This program requires me to design and implement a project on an issue that directly affects my instruction. I have chosen to examine the benefits of authentic assessment in relation to the Fine Arts program at Heritage Middle School.

The purpose of this project is to help better assess students learning in addition to traditional pencil and paper assignments. This project is designed to help students learn metacognitive thinking strategies as well as help them develop self-esteem and pride in their work.

Your participation in this study is voluntary. All information will be kept confidential, and information included in the project report will be grouped so that no individual can be identified.

If you have any questions about my project or would like further information about my project, please set up a time during academic lab when we can talk and I’ll answer your questions to the best of my ability.

If you are willing to be a participant in this study, please complete the attached statement and return it to me.

Sincerely,

Caroline L. Craig
Dear Fellow Colleague,

I am currently enrolled in a master's degree program at Saint Xavier University. This program requires me to design and implement a project on an issue that directly affects my instruction. I have chosen to examine the benefits of authentic assessment in relation to the Fine Arts program at Heritage Middle School.

The purpose of this project is to help better assess students learning in addition to traditional pencil and paper assignments. This project is designed to help students learn metacognitive thinking strategies as well as help them develop self-esteem and pride in their work.

Your participation in this study is voluntary. All information will be kept confidential, and information included in the project report will be grouped so that no individual can be identified.

If you have any questions about my project or would like further information about my project, please feel free to contact me in person, or via e-mail at ccraig@schooldistrict100.org

If you are willing to be a participant in this study, please complete the attached statement and place it in my school mailbox.

Sincerely,

Caroline L. Craig
Consent To Participate in a Research Study

Improving Student Learning through the use of Authentic Assessment

Dear Parent,

I am currently enrolled in a master's degree program at St. Xavier University. This program requires me to design and implement a project on an issue that directly affects my instruction. I have chosen to examine the benefits of authentic assessment in relation to the Fine Arts program at Heritage Middle School.

The purpose of this project is to help better assess students learning in addition to traditional pencil and paper assignments. This project is designed to help students learn metacognitive thinking strategies as well as help them develop self-esteem and pride in their work.

Your child’s participation is voluntary. All information will be kept confidential, and information included in the project report will be grouped so that no individual can be identified.

If you have any questions about my project or would like further information about the project, feel free to contact me in person, or via e-mail at ccraig@schooldistrict100.org

If you are willing to allow your child to participate in this project, please complete the attached statement and have your child return it to me tomorrow.

Sincerely,

Caroline L. Craig
SITE A

SAINT XAVIER UNIVERSITY
Institutional Review Board

Consent to participate in a Research Study
Improving Student Learning Through the Use of Authentic Assessment

I, ____________________________, the parent/legal guardian of the minor named ____________________________, acknowledge that the researcher has explained to me the purpose of this research, identified any risks involved, and offered to answer any questions I may have about the nature of my child’s participation. I freely and voluntarily consent to my child’s participation in this project. I understand that all information gathered during this project will be completely confidential. I also understand that I may keep a copy of this consent for my own information.

NAME OF MINOR ____________________________

Signature of Parent/Legal Guardian ____________________________ Date ____________________________
Consent to participate in a Research Study
Improving Student Learning Through the Use of Authentic Assessment

I, ____________________________, the person named below, acknowledge that the researcher has explained to me the purpose of this research, identified any risks involved, and offered to answer any questions I may have about the nature of my participation. I freely and voluntarily consent to my participation in this project. I understand that all information gathered during this project will be completely confidential. I also understand that I may keep a copy of this consent for my own information.

NAME ____________________________

Signature of Person Named Above ____________________________ Date _____________
SITE B

Consent to Participate in a Research Study

Improving Student Learning through the use of Authentic Assessment

Dear Fellow Colleague,

I am currently enrolled in a master's degree program at Saint Xavier University. This program requires me to design and implement a project on an issue that directly affects my instruction. I have chosen to examine the benefits of authentic assessment in relation to the Fine Arts program at Falconer School.

The purpose of this project is to help better assess students learning in addition to traditional pencil and paper assignments. This project is designed to help students learn metacognitive thinking strategies as well as help them develop self-esteem and pride in their work.

Your participation in this study is voluntary. All information will be kept confidential, and information included in the project report will be grouped so that no individual can be identified.

If you have any questions about my project or would like further information about my project, please feel free to contact me in person, or via e-mail at paintererin@hotmail.com.

If you are willing to be a participant in this study, please complete the attached statement and place it in my school mailbox.

Sincerely,

Erin P. McCormick
Dear Parent,

I am currently enrolled in a master’s degree program at St. Xavier University. This program requires me to design and implement a project on an issue that directly affects my instruction. I have chosen to examine the benefits of authentic assessment in relation to the Fine Arts program at Falconer School.

The purpose of this project is to help better assess students learning in addition to traditional pencil and paper assignments. This project is designed to help students learn metacognitive thinking strategies as well as help them develop self-esteem and pride in their work.

Your child’s participation is voluntary. All information will be kept confidential, and information included in the project report will be grouped so that no individual can be identified.

If you have any questions about my project or would like further information about the project, feel free to contact me in person, or via e-mail at painetererin@hotmail.com.

If you are willing to allow your child to participate in this project, please complete the attached statement and have your child return it to me tomorrow.

Sincerely,

Erin P. McCormick
SITE B

SAINT XAVIER UNIVERSITY
Institutional Review Board

Consent to participate in a Research Study
Improving Student Learning Through the Use of Authentic Assessment

I, ______________________________, the parent/legal guardian of the minor named
Below, acknowledge that the researcher has explained to me the purpose of this research, identified any risks involved, and offered to answer any questions I may have about the nature of my child's participation. I freely and voluntarily consent to my child's participation in this project. I understand that all information gathered during this project will be completely confidential. I also understand that I may keep a copy of this consent for my own information.

NAME OF MINOR __________________________

Signature of Parent/Legal Guardian __________________________ Date ____________
### Teacher Daily Observation Checklist  SITE A

<table>
<thead>
<tr>
<th>NAME</th>
<th>Participated in discussion</th>
<th>Prepared for class</th>
<th>Completed Assignment</th>
<th>Overall Behavior</th>
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+ Participated well; Completed assignment; Excellent Behavior

✓ Participated a little; Partially completed assignment; Good behavior

- No participation; did not complete assignment; Poor Behavior
# Teacher Portfolio Observation Checklist - Site A

<table>
<thead>
<tr>
<th>NAME</th>
<th>COVER</th>
<th>TAB OF CON</th>
<th>ACT. 1</th>
<th>ACT. 2</th>
<th>ACT. 3</th>
<th>ACT. 4</th>
<th>PEER RUBR</th>
<th>SELF RUBR</th>
<th>MOV. REFL</th>
<th>PORT. REFL</th>
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**Key:**
- **IP** = In Progress
- **F** = Finished
- **R** = Redoing
- **?** = Needs Assistance
Student Portfolio Checklist  SITE A

- Portfolio Cover Designed & Colored
- Table of Contents
- Movie Narrative
- Activity ____________________________
- Activity ____________________________
- Activity ____________________________
- Activity ____________________________
- Peer Rubric
- Self Rubric
- Reflection regarding portfolio assignment
DICTIONARY CHECKLIST SITE A

____ Used all letters of the alphabet
    missing letters__________________

____ All words relate to music

____ All words have definitions

____ Pictures for at least 15 words

____ Dictionary words are all in alphabetical order

____ Colored

____ Neat

____ In the form of a booklet
Researcher's Daily Log  SITE A

Week of ________________________________

Unit of instruction _________________
Daily Lessons ________________________

Reflection:

Pluses +     Minuses -     Interesting!

New ideas/suggestions
Student Logs  SITE A

What week is this?

What did I do this week?

What are 2 things I learned this week?

What could I have done better on this week?

What are some things I am confused about or have questions about?

What could Mrs. Craig have done to help me better achieve my goals?

On a scale of 1 - 10 (1 being high 10 being low), my behavior was a ___ If less than an 8 please explain below.
4 Level Reflection Model about LYRIC ANALYSIS SITE A

Level 1  Where and how does this issue touch my life? How does it make me feel? What are my thoughts and opinions?

Level 2  What are the Pluses, Minuses, and Interesting things?

+ Pluses

- Minuses

! Interesting

Level 3  If I were in charge of this situation, what would I do? What do I think needs to happen? What action(s) should be taken?

Level 4  What could I do to resolve this situation?
RUBRIC FOR LYRIC UNIT

SITE A

☐ Self  ☐ Peer  ☐ Teacher

TOP 100

1. Creative Cover  Middle Ages

2. Completeness

3. Form

4. Creativity  John Jacobsen

5. Evidence of Understanding  Elton John

6. Reflection  Duet

Top 20  Classical

Top 10  20th Century

Comments:

Martha Graham  Bob Fosse

Bernie Taupin  Tim Rice

Quartet  Orchestra
**ORAL PRESENTATION RUBRIC**

<table>
<thead>
<tr>
<th>DELIVERY</th>
<th>POSTURE</th>
<th>VOLUME</th>
<th>RELEVANCE</th>
<th>ORIGINALITY</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT QUITE (1)</td>
<td>uninterested and very fidgety</td>
<td>couldn't be heard</td>
<td>lyrics have little or definite meaning</td>
<td>very popular song Top 20</td>
<td>17-20 A</td>
</tr>
<tr>
<td>YOUR GETTING THE PICTURE (2)</td>
<td>sort of interested somewhat fidgety</td>
<td>barely heard</td>
<td>lyrics have some definite meaning</td>
<td>somewhat popular Top 100</td>
<td>13-16 B</td>
</tr>
<tr>
<td>ALMOST THERE (3)</td>
<td>very interested stands tall – fidgets once in a while</td>
<td>heard by most</td>
<td>lyrics have a great deal of meaning</td>
<td>some people have heard the song before</td>
<td>9-12 C</td>
</tr>
<tr>
<td>RIGHT ON TARGET (4)</td>
<td>extremely animated stands proud doesn’t fidget</td>
<td>heard by all</td>
<td>lyrics have a clear meaning</td>
<td>very few people have heard the song before</td>
<td>LESS THAN 9 – TRY AGAIN!!</td>
</tr>
</tbody>
</table>

**SITE A**

good eye contact
uses note cards some of the time
good eye contact
no note cards memorized

can’t be heard
barely heard
heard by most
heard by all

<table>
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<tr>
<th>ORIGINALITY</th>
<th>SCALE</th>
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<tbody>
<tr>
<td>Top 20</td>
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<tr>
<td>Top 100</td>
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</table>
Journal Assignment  SITE B

1. Which elements or principles did you use for this lesson?

2. Did you follow the directions for the assignment?

3. Do you like what you made? Why or why not?

4. If you could do this project over again, how would you do it differently?

5. Have you seen art like this anyplace else before? If so, where?

6. What other things have you made using these materials?

7. Can you think of a job you could do using these materials?

8. What else could you do/make with these materials?

9. I get fair grades in art class.
   Yes  No

10. Art class is interesting.
    Yes  No
11. I think art class is more important than I did before.

Yes       No
Log Assignment  SITE B

1. What media (materials) did you use to make your artwork?

2. List any vocabulary words from the lesson:

3. Was an artist or culture related to this lesson? If yes, who?
Observation Checklists  SITE B

<table>
<thead>
<tr>
<th>Name</th>
<th>Date &amp; Project</th>
<th>Mark</th>
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</thead>
<tbody>
<tr>
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Mark Key:
- L=work on listening
- E=poor effort
- ✓=present
- X=absent
- MS=poor motor skills
- FD=not following directions
- C=not understanding concept
- B=inappropriate behavior
- O=missing assignment
1. Did you have an art teacher in elementary school?
   Yes  No

2. Did you save any on your art from middle or high school?
   Yes  No

3. Does your job involve the Fine Arts?
   Yes  No

4. Have you visited any art museums?
   Yes  No

5. Do you save your child's artwork?
   Yes  No

6. Do you think you child's grade in art is as important as his/her grade in math?
   Yes  No

7. Do you have a favorite artist?
   Yes  No

8. Can you draw?
   Yes  No
## Assignment Rubrics  SITE B

Name:  
Date:  
Project:  

<table>
<thead>
<tr>
<th>Effort</th>
<th>Process</th>
<th>Craftsmanship</th>
<th>Creativity</th>
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<tbody>
<tr>
<td>2. You know you could.</td>
<td>3. Had to keep asking directions.</td>
<td>4. Made by Picasso.</td>
<td>5. Looks just like your friends.</td>
</tr>
<tr>
<td>4. You were in it all the way!</td>
<td>5. Followed process.</td>
<td>6. Made by a computer.</td>
<td>7. Everyone in the class wants yours!</td>
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<tr>
<th>Total Points</th>
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**Grade Scale:**  
A=16-14  A famous artist in the making!  
B=13-12  Good job!  
C=11-9  Better luck next time.  
F=8-0  Not yet.
Student Post-Survey  SITE B

1. I save my artwork.
   Yes  No

2. I like to work alone.
   Yes  No

3. I like to show my artwork to people.
   Yes  No

4. I like to see my artwork on display.
   Yes  No

5. I look at artwork on display that is not mine.
   Yes  No

6. I know an artist.
   Yes  No

7. I can draw well.
   Yes  No

8. I want to be an artist when I grow up.
   Yes  No

9. I get fair grades in art class.
   Yes  No

10. Art class is interesting.
    Yes  No

11. I think art class is more important than I did before.
    Yes  No
Student Pre-Survey  SITE B

1. I have a television at home.
   Yes  No

2. I have a computer at home.
   Yes  No

3. I have art supplies at home.
   Yes  No

4. I have been to an art museum.
   Yes  No

5. I save my artwork.
   Yes  No

6. My parents do not mind if I make a mess when making an art project at home.
   Yes  No

7. I like to work alone.
   Yes  No

8. I like to show my artwork to people.
   Yes  No

9. I like to see my artwork on display.
   Yes  No

10. I look at artwork on display that is not mine.
    Yes  No

11. I know an artist.
    Yes  No

12. I can draw well.
13. I want to be an artist when I grow up.  
   Yes  No

14. I get good grades in art class.  
   Yes  No

15. Art class is interesting.  
   Yes  No

16. If I could choose to do an art project, I would pick:  
   PAINTING  DRAWING  USING CLAY  READING ABOUT AN ARTIST

17. List in order what you would do in your free time. #1 is first and #8 is last.

   ____Reading  
   ____Sports  
   ____Music  
   ____Art  
   ____Math  
   ____Computers  
   ____Outdoors  
   ____Television
Teacher Survey 

SITE B

1. Do you ever supplement your lessons with art projects?
   Yes  No

2. Do you display work from art class in your classroom?
   Yes  No

3. Do you prefer for your students to place their art projects in their locker/book bag immediately after class?
   Yes  No

4. Is time set aside for your students to discuss with you what they did in art class or what their projects are?
   Yes  No

5. Do you think letter grades are a fair way to assess student achievement in art?
   Yes  No

6. Do you think effort should affect a student's grade in art?
   Yes  No

7. In college, did you elect to take any Fine Arts courses?
   Yes  No

8. Can you draw?
   Yes  No
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**Author(s):** Craig, Caroline L.; McCormick, Erin P.

**Corporate Source:** Saint Xavier University

**Publication Date:** ASAP

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