

A Study of the Use of the Digital Portfolio in Middle School Orchestra

by

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Abstract

The purpose of this study was to describe perceived benefits and challenges of using a digital process portfolio as a means of assessment in a middle school orchestra classroom. This study described the perspectives of orchestra students, their parents, the teacher, and the arts supervisor, while using a digital process portfolio over a twenty-week period. Specific research questions included: (a) How do students perceive the benefits and challenges of using a digital process portfolio in orchestra?; (b) How is the use of a digital process portfolio beneficial or challenging to a parent's understanding of their child's progress?; (c) How is the use of a digital process portfolio beneficial or challenging to the teacher's assessment of student learning?; and (d) How does the art supervisor perceive the benefits and challenges of using a digital process portfolio? Data was collected through a 21-item student survey, a 13-item parent survey, a teacher journal, and an interview with the arts supervisor. The themes that emerged from the data included, (a) benefits and challenges of the portfolio program, (b) the use of technology related to the portfolios and, (c) the usefulness of the portfolio for goal-setting and documenting growth over time. The greatest benefits were the inclusion of videotaped assessments and student reflection, which allowed students to see their performance, aided in goal-setting, and documentation of progress over time. The greatest challenges were related to technology and use of class time. The administrator also stressed the importance of support from teachers, administration and the technology department.

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Chapter 1

Introduction

No Child Left Behind places a strong emphasis on standardized test scores in schools, including a requirement that test scores increase every year (“No Child Left Behind,” 2012). In May of 2012, President Obama issued many waivers to states, in exchange for an agreement that the evaluation of teachers and schools must be related to student achievement on standardized tests (“No Child Left Behind,” 2012). In the face of this mandate, many teachers may continue to “teach to the test” rather than what they believe to be valuable (Goolsby, 1995). However, many have questioned the effectiveness of required high-stakes testing and standardized assessment as a measure of student knowledge and understanding (Sarason, 2004). Further, when it comes to standardized testing, the arts are often overlooked. Assessment in the arts is critical to the validation of the arts within the school curriculum. In the arts, particularly in the visual arts and performance-based classes such as band, orchestra or chorus where assessments are generally conducted through teacher observation of student performance, it is difficult to reliably assess student learning through written tests. If assessment of musical skills is critical to the validation of music’s place within the school curriculum and student learning is documented through performance-based assessments in music, then we must explore alternative assessments that reliably evaluate and communicate student progress.

Scott (2012) discusses three different roles of assessment in music education. Scott uses the term “assessment of learning” to describe assessment that is separate from learning and assessment. The primary goal of this type of summative assessment is to determine what students have learned from the teacher’s instruction. Standardized assessment, as well as most written tests and teacher-used rubrics, easily fall into this category. However, if students help the teacher

to develop the rubric by identifying and understanding the criteria on which they should be assessed, Scott called this type of assessment “assessment for learning.” Students become familiar with the expectations and goals of the curriculum through the development of the assessment tools and, therefore, are better able to achieve those goals. Finally, “assessment of learning” is done completely by the student. Students self-evaluate or reflect on their own learning in order to determine what they need to work on or learn in the future. Learning of this type can be achieved through student reflection and specific teacher feedback.

These types of assessment are not mutually exclusive. For example, portfolio assessment, can represent an intersection between assessment, learning and instruction (Scott, 2012). In a performance-based music class, a student may complete a videotaped performance assessment “of learning” to determine whether or not they know their music. If the same students help the teacher to create a rubric and evaluate those performances, identifying the criteria necessary for a high-quality performance, that would be “assessment for learning.” Finally, to address “assessment as learning,” students may watch the videotaped performance and write a reflection identifying areas of success and those that need improvement. Through reflection and teacher feedback, students become a part of the assessment process and develop a better understanding of how, why, and on what they are being assessed. The use of a portfolio allows students to document and display the performance, rubric, and reflection, and to demonstrate all three types of learning as identified by Scott. The existence of a portfolio program does not necessarily mean that assessment is linked to learning and instruction. However, a portfolio program that does serve this purpose has similar goals and evaluation criteria to that of the overall classroom curriculum. Scott contends that this type of assessment will help students to become lifelong learners and musicians.

While it is obvious that assessment procedures differ greatly among teachers, programs and districts, most teachers would agree that effective assessment has the ability to inform the student, teacher and parent about learning and understanding. There have been several studies conducted to investigate the effect of portfolio programs on teacher improvement and curricular change (Blake, et al., 1995; Koretz, Stecher, Klein, McCaffrey, & Deibert, 1992; McCall, 2006; Robbins, Brandt, Goering, Nassif, & Wascha, 1994). Overall, these studies indicated that student portfolios, particularly those that included student reflections, are a powerful indicator of effectiveness of teaching and possess the ability to prompt curricular change to better suit the needs of students. When “both the process and product are captured, [it allows] both students and teachers to better understand depth of student understanding and achievement” (Mills, 2009, p. 32). By examining student learning through the use of portfolio artifacts, teachers are easily able to determine the effectiveness of pedagogical tools, how students feel about particular aspects of the curriculum, and how well students understand concepts or ideas (Dirth, 2000; McCall, 2006; McLeod & Vasinda, 2008). Portfolios may serve as an effective supplement to the current testing mandates, allowing students, teachers, parents, and other members of the community to view student learning in a more authentic context and helping teachers to make effective changes in their teaching activities and curricula to better suit the needs of their students.

While there have been a number of studies of portfolio assessment in general education (McLeod & Vasinda, 2009), visual art programs (Dorn, 2003; Gardner, 1989) and English programs (Moss, et al., 1992; Robbins, et al., 1994), very few studies have examined the effectiveness of portfolio assessment in a music classroom. The lack of research combined with the flexibility of portfolio use has provided music teachers with very little concrete data as to

how implementation of a particular type of portfolio program may benefit their students and program overall.

Purpose and Research Questions

The purpose of this study is to describe perceived benefits and challenges of using a digital process portfolio as a means of assessment in a middle school orchestra classroom.

Specific research questions include:

- (a) How do students perceive the benefits and challenges of using a digital process portfolio in orchestra?
- (b) How is the use of a digital process portfolio beneficial or challenging to a parent's understanding of their child's progress?
- (c) How is the use of a digital process portfolio beneficial or challenging to the teacher's assessment of student learning?
- (d) How does the arts supervisor perceive the benefits and challenges of using a digital process portfolio?

Definitions

Portfolios.

A student portfolio is a collection of student work or artifacts that can be used to assess student progress, understanding of concepts or skills, and attitudes towards learning (Arter & Spandel, 1992; Paulson, et al., 1991; Vavrus, 1990). Within a portfolio, students may include a wide variety of artifacts in order to demonstrate learning. Artifacts may include, but are not limited to, video and audio recordings, examples of compositions, journal entries or reflections, goal statements, and teacher and student assessments (Cole, Ryan, Kick, & Mathies, 2000; Mills, 2009). Teachers have the option of being very specific about what artifacts students may include

or, instead may allow students to choose what they think best exhibits their learning process (Moss, et al., 1992). In fact, some argue that student selection of artifacts is a critical aspect of an effective portfolio because it demonstrates student understanding (Love, McKean, & Gathercoal, 2004; Mills, 2009; Paulson, et al., 1991). The decision to allow or require student input in selection of artifacts would rely on many things including student age level, function of the portfolio and structure of the curriculum.

There are several different types of portfolios. The definitions provided below are taken from Mills (2009) and Robinson (1995). A summative portfolio, also called a presentation/product or product portfolio, is a collection of an individual's best work. Artists frequently use this type of portfolio to display their artwork. A student may also use this type of portfolio when applying for college. A program portfolio, a type of summative portfolio, is a collection of work from a group of students in a particular program. A teacher may use this type of program to illustrate his or her curriculum or to advocate for a particular program within a school district. A third type of portfolio, the product-performance portfolio, is a form of formative assessment. In this type of portfolio, a teacher would include the same artifact from many students in order to assess overall student progress. Finally, a process portfolio is used to document student progress over a period of time. This type of portfolio may also be called a learning portfolio (Zubizarreta, 2009). A process portfolio would not only include examples of student work, but also goal statements, reflections, and teacher and student assessments. For the purpose of this study, the term “portfolio” will be used in reference only to process or learning portfolios.

Self-assessment and reflection.

Most music teachers would agree that the primary goal of their curriculum is to help students become independent musicians. The literature suggests that student self-assessment may encourage students to become critical thinkers, listeners and problem solvers, all characteristics of an independent musician (Goolsby, 1999). Therefore, it makes sense that self-assessment should be an integral part of the portfolio process in a music classroom. Burrack (2002) states that self-assessments "can serve as vehicles for enhancing musical understanding, aesthetic sensitivity, and critical-listening skills" (p. 27). There are several different vehicles for self-assessment in portfolios discussed throughout the literature.

One type of informal self-assessment within portfolios is allowing students to choose artifacts for their portfolios. By choosing artifacts, students demonstrate understanding of curricular goals and primary aims of the portfolio project and curriculum as a whole (Robinson, 1995). In addition, if students reflect on why they chose particular artifacts, it requires that they verbalize a higher understanding of both knowledge and the curriculum (Arter & Spandel, 1992; Mills, 2009; Paulson, et al., 1991).

Another type of self-assessment is formal written reflection. Student reflections can provide insight into student attitudes or preferences and can improve student-teacher communication (Goitmer, Grosh, & Price, 1992; McCall, 2006; Robinson, 1995). By acquiring information about student attitudes and preferences, teachers may better understand student behavior, effectively adjust classroom activities and gain insight into the effectiveness of their teaching. Reflections also encourage students to make connections between concepts, promote self-assessment and allow them to be reflective practitioners (Yancey, 2009). In conclusion, self-assessment and student reflections may provide insight into students' understanding and

knowledge. Teachers may use student self-assessment and reflection to guide curriculum, communicate with students and obtain a better understanding of students' thought processes.

Scope of the Study

Portfolio programs differ greatly between schools and classrooms. Teachers may choose to use portfolios as a final assessment for a course of study, to document student progress over time, or to reflect on their own teaching practices. This study examined the implementation of the digital process portfolio within the context of a sixth grade orchestra classroom and its ability to document individual student growth and understanding over time. The hope is that, based on the findings of the study, teachers will be able to adapt and interpret the findings in order to implement their own portfolio programs in a way that will serve the needs of their students, program, and community.

At the time of the study, the district in which the study was conducted had been using a portfolio program for four years within the Visual and Performing Arts Department. The process overall had been slow moving, but teachers were using the portfolios in different and creative ways. One of the high school art teachers was using the portfolio program to help her students create summative portfolios in order to apply to college visual arts programs. Our middle school general music teacher has developed a program portfolio to share curricular information with students, parents and administrators. In my classroom, I had orchestra students create process portfolios to upload videos of their playing assessments and reflect on their performance throughout the year. While there are certainly many different uses and aims for portfolio programs in an educational setting, through this study, I hoped to explore how a portfolio program may be effectively implemented in the classroom to benefit student learning and growth, as well as parent, teacher, and administrator understanding of student learning. In doing

this, I hope to advocate for the continued use of the portfolio program in my school district as well as the implementation of portfolio programs in other districts.

Chapter 2

Review of Related Literature

As stated in Chapter One, there have been few studies about portfolio programs in the context of a music classroom. Consequently, the review of related literature will also include pertinent studies conducted in the general education field. Also related to the proposed study are studies regarding self-assessment and parent perceptions of assessment. Therefore, the studies in this chapter have been organized into three sections: (a) research on portfolio programs, (b) self-assessment and reflection, and finally, (c) parent perceptions of assessment.

Research on Portfolio Programs

This section describes studies of portfolio programs in both general and music education as they have been implemented in school systems across the country. The Arts PROPEL program is perhaps the largest and well-known portfolio program. The findings of Harvard's Project Zero determined that production, perception and reflection are intertwined (Gardner, 1989; Goitmer, Grosh, & Price, 1992). These findings laid the groundwork for the Arts PROPEL program, a research project which was initially implemented in collaboration with the Educational Testing Service, Harvard Project Zero, and the Pittsburgh Public schools in an attempt to determine the ability of assessment to inform curricular decisions and to make student learning more visible to the students themselves, teachers, parents, and other members of the community. Although the project yielded little data, they did publish handbooks to help guide teachers into creating curricula that incorporate production, perception and reflection, including the use of portfolio assessment. Many portfolio programs, including the one discussed next, are based on the tenants of the Arts PROPEL program.

Portfolio programs in music education.

Dirth's (2000) action research case study, based on the fundamental ideals of Arts PROPEL, examined the feasibility of portfolio assessment within the context of a high school band classroom. The study was conducted over the course of one school year using the researcher's own high school band students ($N = 89$) in a rural Vermont school. The purpose of the study was to develop a curriculum that involved perception and reflection in conjunction with performance and to develop assessment tools to more accurately evaluate students across the three areas. The researcher examined four areas related to feasibility including teacher responsibilities and training, organization and management, student learning and engagement and assessment. Data for the study included observation, student work and student interviews. The body of student work was adapted from the Arts PROPEL model and included a reflective journal, individual performances, ensemble rehearsal critiques, error detection exercises, performance comparisons, and portfolio self assessment. Student work was collected within a portfolio and each student was interviewed by the teacher regarding the collection of work at the end of the marking period.

Conclusions of the study determined that student learning increased significantly as indicated by the reflection and student performance activities. Through the reflections, students were able to demonstrate critical thinking and accurate musical assessments of their own progress. Dirth indicated "the growth and breadth of student learning is the single largest reason for the use of this system" (p. 147). The teacher-researcher also found portfolios to be a useful tool for stimulating change in teaching practices and pedagogy, although structure, planning and time commitments of portfolio assessment were significant factors to consider. Dirth also indicated that he noticed a marked improvement in classroom behavior and efficiency of

rehearsals, and increase student-directed learning, and that students were able to learn music faster than before the implementation of the portfolio program.

In an attempt to determine other forms of learning through portfolios in the middle school music classroom, McCall (2006) conducted a case study in her eighth grade chorus ($N = 53$) in a small suburb in western New York. The purpose of the study was to explore how portfolios informed student and teacher learning. Data for the study was collected over a six month time period during the school year. The data included artifacts within the portfolio as well as interviews of four students. The portfolio artifacts included questionnaires, individual and ensemble performance videos, and reflections by students, their peers and the teacher.

All students were given two questionnaires and performed individually and as a group on videotape to serve as a pre-assessment for the study. Throughout the six months that data was collected, students continued to add videotaped performances and reflections to their portfolio. There was no formal data collection to address the research question of teacher learning, however the researcher noted that she was making changes to the portfolio process based on student information and feedback in student portfolios.

The data from the portfolios revealed significant ideas about both student and teacher learning. One theme was that “repetition of assessment procedures led to students’ increased confidence in their abilities to effectively evaluate singing” (p. 97). McCall suggests that it is imperative for students to understand assessment procedures and to feel comfortable assessing their own performance, which comes through consistent use of the same assessment procedures. In the case of this study, the assessment procedures were videotaping performance, viewing the videotape and reflecting upon the performance.

A second theme of the study was that video recordings serve as valuable teaching tools. McCall states that the videos are valuable in that they provide an accurate depiction of student performance to the student, build confidence in student performance abilities, and help teach students how to assess and reflect on their own performance. McCall cited other studies that also indicated that video recordings are valuable in that they “provide a shared focus between students, as well as between teacher and student” (p. 101). This shared focus provides students and the teacher the opportunity to mutually identify and discuss both positive and negative aspects of performance, again teaching students to constructively reflect upon their performance. The third finding about student learning was that portfolio assessment served as a platform for students to communicate their musical preferences.

Three major themes also arose in the data about teacher learning. Portfolio assessment helped the teacher to recognize student values of identity, belonging and emotional expression and how students communicate that in chorus. One finding was that music performed in chorus had the ability to draw adolescent students together and helped them to form an identity. A second finding related to the first was that eighth grade chorus students felt a sense of belonging in chorus. Thirdly, participation in chorus helped eighth graders monitor and express their emotions.

Overall, both the students and teacher-research acknowledged that there were significant benefits to teacher and student learning in the portfolio program. McCall suggested that because this was an action research study in one classroom, future studies should be conducted in multiple eighth grade chorus classes simultaneously to compare results as well as at other grade levels to determine whether this type of assessment may be effective with students of different ages.

Portfolio programs in general education.

One of the largest portfolio programs in general education was the Vermont Portfolio Project. Similar to the purpose of the previously discussed studies, the original purpose of the project was to “provide useful information about student performance, and to encourage improvement in teaching” (Kortez, Stecher, Klein, McCaffrey, & Deibert, 1992, p. 12). The program was piloted in a select number of schools in 1988 and beginning in the 1991-1992 school year, all fourth and eight grade students in the Vermont Public Schools created mathematics and writing portfolios. The portfolios contained student work collected by classroom teachers and scored by statewide criteria and volunteer teachers.

RAND, the Research and Development Corporation, conducted an evaluative study during the first year of statewide implementation. The study examined implementation of the program in the classroom, its effects on teacher instruction and its ability to measure quality of student performance (Kortez, et al., 1992). Because mathematics portfolios were less common, the study focused primarily on their implementation, rather than the writing portfolio. Specific research questions included: (1) How well-prepared were teachers to use the mathematics portfolios?; (2) In what ways did teachers use the mathematics portfolios, and were portfolio practices similar across teachers?; and (3) What were the major implementation problems encountered by teachers and principals in implementing the portfolio program in both mathematics and writing?

Teachers were given loose guidelines for portfolio construction, regulating only the number and type of artifacts that should be included in the portfolio. For mathematics, students were required to include five to seven examples of work representing three different categories including puzzles, investigations, and applications. A sample of mathematics portfolios from

each classroom was then submitted for scoring by volunteer teachers. A subsample of those portfolios was submitted for rescoring to assess reliability. Data was gathered from teachers and principals regarding implementation and impact of the program and included teacher questionnaires, teacher and principal interviews, classroom observation, student portfolios, scoring methods and rubrics, scorer questionnaires and student and school-level scores. Researchers also examined 43 fourth grade portfolios and 57 eighth grade portfolios from three classrooms for each grade.

Benefits of the program as indicated by teacher questionnaires included a positive impact on instruction, including more time spent on problem solving and communication. Teachers also noted that they had students spend more time working in small groups and in pairs as a result of the portfolio process. Additionally, the data implied positive changes in teacher and student attitudes in relation to mathematics and learning in general. Teachers also found that the portfolios provided them with new insight into students' abilities.

Challenges of the program included confusion related to the purpose and proper implementation of the portfolio. Teachers felt that although they had training, there were many aspects of the process for which they felt unprepared. Also, many teachers felt that they were changing their classroom practices to fit the portfolio guidelines, an issue typically cited with standardized testing. Both principals and teachers cited the significant demands of time and school resources as concerns. The researchers cautioned that the implementation of an effective portfolio program demands significant patience, effort and time, however, all involved found it to be a worthwhile experience for teachers and, most importantly, students.

In a study closely related to the proposed study but in a general education setting, McLeod and Vasinda (2008) examined the perspectives of students, teachers and parents on the

use of electronic portfolios with third and fourth grade students. The purpose of the study was to explore the effectiveness of a portfolio program as a means of capturing and enhancing student learning. Specifically, the researchers wanted to examine the benefits of the portfolio process in relation to student reflection, parent communication, teacher instruction and subjective satisfaction with the portfolio program for all three parties.

The study was conducted in two multiage classrooms of third and fourth grade students in a North Texas suburb. Students in the classes created digital portfolios containing a personal philosophy statement about their learning, artifacts of their choosing, and interview reflections about their artifacts. Every six weeks, students were asked to choose one assignment they felt was important and posted that assignment on their portfolio. The interview reflections focused on why the student chose to include the particular artifact and their learning process during the project. The reflections were recorded with a voice recorder and made into a podcast for posting on the digital portfolio website. Characteristic of an action research study, data was collected halfway through the school year, with the intention of collecting and examining data to further refine the portfolio process. Data included two podcasts of student reflection interviews and questionnaires for each student, a student focus group interview involving a sample of eight students, and parent and teacher questionnaires.

Findings indicated that that students, parents and teachers all found subjective satisfaction with the portfolio process. Specifically, students enjoyed choosing their artifacts and working with the digital platform technology. There was also a noted difference in students' ability to reflect on their work in a constructive way. Teachers' responses indicated that they valued the portfolios as a means of authentic assessment and allowed them to gather insight into student learning. Benefits of the portfolio process perceived by parents included its ability to document

progress and help students become more reflective about their learning. Every parent said they enjoyed being able to see their child's work and hear their reflection digitally. Parents also indicated that they felt a deeper connection to the activities and curriculum occurring in the classroom. Challenges of the portfolio program included the time commitment for teachers, cited as a concern by both the teachers and the parents surveyed.

Regardless of program size, subject area, and method of implementation, studies of portfolio programs consistently show varying positive outcomes including changes in teacher instructional strategies, an outlet for examining student understanding, increased student ability to evaluate musical performances and improved communication between teachers, students and their parents. While there are still challenges to overcome in implementation of these portfolio programs, teachers, students, and parents generally agree that they are worthwhile as assessment tools.

Self-Assessment in Music Education

Many journal articles (Arter & Spandel, 1992; Burrack, 2002; Goolsby, 1999) suggest that student self-assessment may encourage students to become critical thinkers, listeners and problem solvers, all characteristics of an independent musician. Therefore, it makes sense that self-assessment, including self-evaluation and written reflections, should be an integral part of the portfolio process in a music classroom. This section will discuss studies that have examined self-evaluation and written reflection in the middle school music classroom.

Self-evaluation in music education.

One study conducted within the context of a music classroom was Hewitt's (2002) study of self-evaluation tendencies of junior high instrumentalists. The research hoped to determine how seventh, eighth, and ninth grade self-evaluations changed over time, to discover if the

process of self-evaluation itself had an effect on its accuracy, and to find if there was a relationship between self-evaluation accuracy and music performance achievement.

The participants of the quantitative study were junior high band students ($N = 41$), assigned to two treatment groups, with one group receiving an audiotaped model for performance. The dependent variables were music performance achievement and self-evaluation accuracy. Three independent evaluators, using the Woodwind Brass Solo Evaluation Form (WBSEF), scored music performance achievement. The student self-evaluation form was a modified version of the WBSEF. All students were given a pre-test at the beginning of the six-week study. During the first week of the study, students were taught how to use the evaluation form. For each of the following five weeks, students recorded themselves individually and completed the student self-evaluation form. The students assigned to the model treatment group listened to the model performance immediately before recording their performance each time.

Based on analysis of the scores, the student self-evaluation scores increased over time both in the model and non-model groups, indicating that the presence of a model recording had no significant impact on self-evaluation. In comparing the independent and student evaluation scores, self-evaluation accuracy also did not improve over time in either group. However, self-evaluation accuracy and music performance, as measured by the independent evaluator scores, were positively correlated, indicating that student music performance did improve over the course of the six weeks. Finally, there was a low correlation between music performance and self-evaluation accuracy, indicating that ability to self-evaluate is not necessarily related to performance ability.

Based on the findings, the researcher suggests that it may be necessary for music teachers to instruct students in self-evaluation on a longer, more consistent basis. He acknowledged that a

limited, six-week experience with self-evaluation may not have been sufficient to see improvement in student self-evaluation skills. There were also some discrepancies found between the independent evaluators' scores, indicating that the evaluation tool may have caused some challenges in effective evaluation. Finally, Hewitt suggested that future studies should use varied self-evaluation tools and examine self-evaluation trends over a longer period of time.

Shouldice (2010) conducted a teacher research study to examine student and teacher perceptions of self-evaluation within the context of a middle school instrumental music classroom. His research questions were: (a) What were middle school students' perceptions of a self-evaluation unit in instrumental music and; (b) What were the teacher's perceptions of incorporating self-evaluation techniques into instrumental music instruction? Although not explicitly stated in the research questions, the researcher also inquired about parent perception of student self-evaluation.

All students in two middle school bands participated in a four-week unit on self-evaluation. Together with their teacher, students developed the rating scale they would use to evaluate their own performance. Students then learned to use the rating scale by listening to recordings in class and discussing the results together. At home, students recorded themselves and then used the rating scale to evaluate their performance. They then practiced the portions of their music that needed work according to the rating scale. Finally, students recorded themselves a second time to compare the performances.

Participants for the study were five students selected by the teacher based on completion of all assignments within the unit, parental consent, and scheduling. Each of the five students participated in an individual interview, followed by a focus group interview to member check and further explore data with all five participants. The teacher researcher also kept a daily journal

during the unit. The researcher analyzed and coded the data from the interviews and his journal for emergent themes. The themes centered around the process of recording and self-evaluating, previous experiences with self-evaluation, and student opinions of self-evaluation and the unit itself.

In general, students commented positively regarding the rating scale and all students indicated that they enjoyed recording and listening to themselves. Drawbacks of the process cited by students included having too few criteria included on the rating scale, the time commitment involved, and technology issues. Initially, students indicated that they had not evaluated themselves before, however, one student mentioned that they had self-evaluated in their language arts class. When the researcher discussed this with the other students, they were able to make the connection across subject areas. In a broad sense, students enjoyed the self-evaluation activity as a part of their practice routine. Students indicated that it allowed them to become more independent in their growth as musicians. Parents also indicated that they thought it was a worthwhile experience in email correspondence and personal conversations. However, some students indicated that the self-evaluation assignment took too much time at home. Two parents emailed the teacher sharing the same concern. The teacher researcher also noted increased student motivation and improvement in both individual and ensemble performance as a result of the self-evaluation unit.

In discussing implications for further research, the researcher indicated that his self-evaluation unit spanned only four weeks. Related to the proposed study, he suggested that a portfolio might allow students to keep their recordings and self-evaluations over time. He went on to recommend that portfolios might allow a researcher to examine student perceptions of self-evaluation over the course of a semester or school year.

Written reflection as self-assessment.

Written reflection is another form of self-assessment. Two of the portfolio studies discussed earlier in this chapter (McCall, 2006; McLeod & Vasinda, 2008) included reflection as a critical aspect of the portfolio programs. The McCall study was conducted within a music classroom, and the McLeod and Vasinda within a general education classroom. One benefit of student reflection is that it can provide insight into student attitudes or preferences and can improve student-teacher communication (McCall, 2006). Reflections within portfolios allow for dialogue between teacher and student, providing students with more frequent and directed feedback on their learning. In addition, by better understanding student attitudes and preferences, teachers may better understand student behavior, and allow them to adjust classroom activities and gain insight into the effectiveness of their teaching. McLeod and Vasinda's (2008) study revealed third and fourth grade students' ability to reflect through the use of portfolios. Over time, students showed improvement in reflective language as they discussed their learning process and how particular artifacts demonstrated the goals of the curriculum and were related to their learner's philosophy statement. In addition, these reflections can also provide parents with valuable information about their child's progress in the classroom in that they provide an authentic, contextual view of performance and interpretation of the performance both by the teacher and the student. The value of parent communication through assessment will be discussed in the next section.

Self-assessment and reflection are critical aspects of encouraging students to become independent and lifelong learners. They allow students to communicate deeper understanding of curricular concepts and their learning process. Furthermore, they provide important information to teachers and parents regarding student growth and learning as well as values and beliefs.

Based on that information, teachers may make appropriate changes to curriculum and classroom activities, encouraging more effective and efficient teaching.

Parent Perceptions of Assessment

Teachers and researchers would agree that assessment is valuable for documenting student growth, providing students with feedback and suggestions for improvement, and to guide teaching practices and curriculum. Another significant reason for assessment that is sometimes overlooked is the role assessment plays in providing parents with information regarding student progress and understanding. This section will discuss studies that have examined parent perceptions of assessment in general education and music classrooms.

Parent perceptions of assessment in general education.

Diffily (1994) conducted a study to determine if parents understand both the assessment methods and reporting system of a non-traditional school in the southwest. The school, called the Carrington Center for the purpose of the study, served 360 students in kindergarten through grade five. At the school, teachers used various types of non-traditional assessment including observation, student journaling, brochures, presentations and games. Instead of standard report cards, parents learned of their child's progress through conferences and narrative reports. Diffily's research questions that emerged throughout the study were: (1) How well do parents understand the assessment methods being used in the classrooms?; (2) How comfortable are parents with narrative reporting?; and (3) What are parents' concerns about Carrington?

Data was collected through a parent questionnaire and interviews. The questionnaire was distributed to all 297 families at the school and there were 192 respondents. The questionnaire included 20 statements and three open-ended questions. Parents indicated interest in participating in an interview through an item on the questionnaire, and 20 parents were selected from those

responses. Each interview was transcribed and analyzed for emergent data. The data helped the researcher to create the research questions mentioned previously.

Based on the questionnaire data, most parents indicated that they understood the various types of assessment teachers used, but said in the open-ended questions and interviews that they were vague about the specific assessment methods. The researcher offered three possible explanations for this discrepancy. One reason could be that parents do not distinguish between assessment methods and the reporting of their child's progress. In other words, they do not see assessment and the narrative reports or conferences as being separate entities. Another possible reason could be that parents did not feel a need to fully understand the assessment methods, trusting that the teachers knew the most effective way to determine a student's understanding. A final explanation offered was that parents may not fully understand how students should be assessed. Parents indicated in various combinations that students should be evaluated in comparison to the child's previous work, to other students in the class and to grade level standards.

Another finding of the study was that parents felt that the narrative reports, as opposed to report cards, provided them with more information about their child's progress, including their child's strengths and weaknesses. Parents gave positive feedback regarding the narrative reports in both the open-ended questions and in the interviews. However, on the questionnaires and interviews, parents indicated that conversations with the teacher provided the most information, more so than the narrative reports. To a lesser extent, parents mentioned that they learned about their child's progress through conversations with the child and viewing their child's portfolio.

Because of the non-traditional environment of the school, the final research question addressed concerns parents may have about the school and their child's education. The three

categories that emerged were concerns regarding the breadth of the curriculum, if their child would be able to re-integrate into a normal school setting and comparing their child to other students in terms of traditional grade level expectations. The researcher acknowledged that the research was not able to fully address those questions, but that the faculty at the school was confident in their approach to student learning and would make an effort to communicate that to the parents.

The researcher indicated that there is a definite need for continued research regarding alternative assessment and narrative reporting. While the parents at that school were generally satisfied with the education their children were receiving, they were not entirely confident in their understanding of assessment methods and reporting practices. She suggested further education of the parents in these alternative practices. As a result of the study, the school scheduled more frequent conferences, developed grade level standards, and implemented “exemplar booklets”, which may be considered similar to portfolios.

In another study of alternate forms of assessment in a general education context, Shepard and Bliem (1995) examined the attitudes and perceptions of the parents regarding the differences between standardized tests and performance-based assessment. In response to backlash against standardized testing, University of Colorado researchers helped third grade teachers in three schools to develop classroom-based assessment in reading and mathematics. The researchers wanted to determine whether parents were satisfied with the new form of assessment. One research question examined how parents describe the usefulness of standardized tests in relation to report card grades, teacher conferences or student work samples. Another research question addressed if parents value different types of assessment when determining the quality of the

school as opposed to their child's individual progress. The final research question focused on the reasoning behind parent preference for standardized or performance-based assessment.

The original purpose of the study was to compare changes in parent perception of assessments over the course of one school year in schools where teachers implemented classroom-based performance assessments in mathematics and reading. However, researchers found that data collected at the beginning of the study was significant and published the information to demonstrate what parent reactions may be in other districts deciding to implement performance-based assessment.

The research data was collected from parents of third grade students in three schools. Data included parent questionnaires and interviews. The data indicated that parents valued authentic assessment more than standardized assessment when trying to understand how their child was doing in school. Some of the reasons parents cited for why they favored authentic assessment were that they forced children to think critically, were perceived as being more difficult than standardized testing, and they could be used diagnostically by teachers to assess students' understanding,

In addition, parents also favored report card grades, teacher-parent discussion and seeing graded school work over standardized testing. Parents in the study said they trusted teachers to communicate to them regarding how their child was doing in relation to grade-level expectations. They also said that being able to see graded student work offered them a glimpse into the curriculum and the teacher's expectations of the students. Although the study does not mention portfolios, this study is related to the proposed study in that student performance assessments can be encapsulated within a digital portfolio for both the parent and teacher to view.

McLeod and Vasinda's (2008) study discussed earlier in this chapter indicated that parents were able to see not only student understanding of classroom concepts but also the learning process through the eyes of their child through the artifacts and reflections included in the portfolios. The study suggested that parents appreciated seeing their child's work within the context of portfolio assessment and felt that it provided a valuable connection to the student's classroom. This section will discuss two other studies that have been done specifically on parent perceptions of assessment procedures in a general education setting.

Parent perceptions of assessment in music education.

Conway and Jeffers (2004) conducted a collaborative action research study to examine the perceptions of parents, students, and the teacher regarding assessment procedures in beginning instrumental music. The research questions addressed how parents described the assessment tools, the value of the tools, and any changes they would make to the process. In addition, how did students describe the assessment procedures, what did they find helpful and what how might they change them? Finally, how did the teacher describe using the assessment tools over time and what improvements or changes did he make throughout study?

The study was conducted over the course of two years with Jeffers' fourth and fifth grade instrumental students, approximately 50 students each year. Conway and Jeffers worked together to create an assessment report card that addressed objectives, exam expectations and a rating scale for each semester based on Gordon's music learning theory. Students recorded their performance at home and the teacher filled out the report card while watching or listening to the student's recording.

Data for the study was collected in the spring of each year and included a student instrumental music questionnaire, parent evaluation of the assessment report and teacher, teacher

and parent interviews and a student focus group interview. Questionnaire items and interview protocol were developed based on the research questions. The teacher also logged his experience with the assessment procedures. Parents were selected for interviews based on their questionnaire responses, with a total of 12 parents interviewed by Conway over the course of the two years. Another teacher in the school conducted a student focus group interview with five student participants. Conway also interviewed Jeffers, using the teacher's log as a reference point to explore his perceptions of the assessment procedures.

The findings and discussion were grouped into three categories: perceptions of the assessment report and procedures, issues in implementation, and connection between curriculum and assessment. In terms of perceptions of the assessment, all three groups expressed positive opinions. Specifically, parents generally appreciated receiving detailed feedback regarding their child's progress, although some indicated that they would also like to see a letter grade. Students enjoyed recording and evaluating themselves at home. The creation of the assessment tools based on specific musical objectives allowed the teacher to better understand the value of assessment.

Issues in implementation included the large amount of teacher time required to watch and complete progress reports for each child. The researchers suggested staggering when students received the report card, so the workload would be spread out over the course of the school year. Another issue related to the assessment tools was that some parents did not understand some of the musical terminology on the report card, so the teacher made modifications for the second year of the study. The researchers also stressed the importance of the relationship between curriculum and assessment, an idea they said was not novel, but a theme that reoccurred throughout their interactions during the study.

The study uncovered the importance of providing musical information through assessments to both students and their parents. The assessments must demonstrate musical and performance-based skills in order to effectively communicate this information. In addition, obtaining feedback regarding the assessment tools may be valuable to the teacher in creating or modifying future assessments. As we move forward in our continued research of assessment procedures in music, Conway and Jeffers suggest that it is critical to consider the opinions of teachers, students, and parents.

The body of research on parent perceptions of assessment indicates the importance of communication of pertinent, meaningful information through assessment procedures, both inside and outside of the music classroom. Parents value being able to see their child's work and receiving detailed teacher feedback regarding their child's learning. These alternate forms of assessment and reporting have the ability to provide more information about the curriculum and student progress than a test score and help to connect parents to the school community.

Conclusion

Portfolios can be used in a music classroom as a form of authentic assessment to determine understanding of skills and concepts, attitudes towards learning and student progress and a means of communication to parents regarding student performance. Because of the flexible nature of the portfolio, teachers and students must determine together what artifacts best demonstrate the aims of the portfolio as it is implemented in their program. Portfolios also allow teachers to document the learning process and student understanding. Using this information, teachers determine effective teaching strategies and adjust their curriculum as necessary. Through the use of portfolios, students play a more active role in their own assessment through self-evaluation and assessment and may better be able to understand the aims of curriculum.

The processes of self-assessment and evaluation must be explicitly taught to students, but are important tools in helping students become lifelong learners and music makers. In addition, portfolios may serve as a vehicle for communication between teachers, students and parents. Portfolios allow parents to see student progress and understanding in a more dynamic way and studies have indicated that parents value being able rich, detailed information about classroom activities and their child's understanding of the curriculum.

Research on portfolio assessment is relatively new, particularly in the field of music education. However, with the demands for higher levels of performance on academic tests, it is crucial that researchers examine the implications and advantages of assessment programs in music. The studies discussed in this review discuss the positive effects these programs can have on student understanding, teacher sensitivity, evolving curriculum, and communication between parents, teachers and students. Challenges of portfolio programs include time constraints, inconsistency in evaluation, and integration into existing curriculum. Continued research in the field of music education is necessary to facilitate effective implementation of portfolio assessment.

Chapter 3

Methodology

The purpose of this study was to describe perceived benefits and challenges of using a digital process portfolio as a means of assessment in a middle school orchestra classroom.

Specific research questions included:

- (a) How do students describe the benefits and challenges of using a digital process portfolio in orchestra?
- (b) How is the use of a digital process portfolio beneficial or challenging to a parent's understanding of their child's progress?
- (c) How is the use of a digital process portfolio beneficial or challenging to the teacher's assessment of student learning?
- (d) How does the arts supervisor describe the benefits and challenges of using a digital process portfolio?

Research Study Design

This study utilized a teacher research design. Cochran-Smith and Lytle (1993) define teacher research as “systematic, intentional inquiry by teachers about their own school and classroom work” (p. 23-24). They elaborate on this definition by describing three characteristics of teacher researcher. They include methodical collection and documentation of information, a thoughtful, planned method, and that teacher research “stems from or generates questions and reflects teachers desires to make sense of their experiences” (p. 24). My intent was to study the portfolio program that we had been using in my school, collecting data from my own orchestra students, their parents, the arts administrator, and my personal experience as the teacher. We had been using this particular portfolio program in our school district for several years and it was my

hope to determine whether or not it was a worthwhile assessment tool and to identify any issues or challenges associated with the program. The University of Michigan Institutional Review Board for research deemed this study exempt. The notice of exemption may be found in Appendix A.

Participants

Students and parents.

The district in which the study was conducted was located in a suburb in New England. Most of the students in the district were Caucasian and from an upper class socioeconomic background. The district comprised three elementary schools, one middle school and one high school. The middle school served approximately 1,300 students in grades five through eight. The sixth grade class consisted of roughly 300 students in the 2012-2013 school year.

All students in the middle school participated in one music ensemble or class for the duration of the school year, and were encouraged to remain in that music strand for their entire middle school experience. Available options were band, choir, orchestra, or Music Exploration. Approximately 12% of the school population participated in the orchestra program. Students in the orchestra program chose between violin, viola, cello, and bass and typically started their instruments in third grade, although were given the option to begin in fifth grade as well. Cello choir was also offered after school for cello students in grades six through eight.

There were 30 students enrolled in the sixth grade orchestra program during the 2012-2013 school year. All but one student consented to participating in the study. Therefore, the student respondents included 29 students, consisting of 14 violinists, six violists, seven cellists and two bassists. Six students took private lessons on their orchestra instrument outside of school at the time of the study. As an indicator of the level of skill acquired by students at the time of

the study, students completed Essential Elements for Strings 2000, Book One in October of their sixth grade year.

In fifth grade, orchestra students were divided into four non-homogenous groups by homeroom. They met twice each week for 45-minute lessons and performed together as an ensemble for two concerts. Sixth grade orchestra students had three 45-minute classes each week. One class was a small group lesson, grouped by instrument and ranging in size from two to eight students. In small group lessons, students generally worked on technique, performance skills and musical concepts. The other two classes each week were full ensemble rehearsals, with all 30 students in the sixth grade orchestra rehearsing together. In the full ensemble rehearsals, students worked on ensemble skills and applied the techniques and concepts they learned in their small group lessons to their orchestra music. All formal assessments and portfolio activities took place during the students' small group lesson classes.

At the beginning of the 2012-2013 school year, most sixth grade orchestra students had a portfolio containing two performance assessment videos and two reflections from their fifth grade year as well as varying numbers of artifacts from their fifth grade visual art classes. A few students only had one video and reflection from fifth grade due to scheduling issues in the computer lab.

Teacher-researcher.

I was the orchestra teacher for all of the sixth grade participants for one full school year prior to the start of the study. My background is as a violinist and violist, with an undergraduate degree in music education and training in the Suzuki method. The 2012-2013 school year was my sixth year teaching, and fifth year at the school at which the study was conducted. As the orchestra teacher, I taught all orchestra students at the middle school.

Administrator.

The administrator that participated in this study was the Supervisor of Visual and Performing Arts for the school district. He had been the supervisor for six years at the time of the study. As the Visual and Performing Arts Supervisor, he was responsible for 16 music teachers, 14 art teachers and two theater coordinators. Before becoming an administrator, he was a classroom teacher for 19 years and managed educational children's programming in a major city for five years.

Digital Portfolio Platform

The music and visual art departments in our school district began using Digication in September of 2009 in an effort to document authentic assessment in our departments. Digication is a digital portfolio platform that allows teachers and students to create electronic portfolios to document and reflect on their work over time (www.digication.com). Over the course of the past four years, the orchestra students had been using their portfolios fairly regularly and were familiar with both Digication and the portfolio procedures. I had established an efficient procedure for uploading the videos and developed a prompt for student reflections within the portfolio.

Data Collection Devices

Student survey.

A student survey was developed by the researcher using Qualtrics online survey software (www.qualtrics.com). Twenty-nine students completed the survey which consisted of 19 Likert-scale questions and two open-ended questions and required approximately ten minutes to complete. A reliability analysis of the student survey showed a reliability of .82, using Cronbach's alpha. The score for the scale had a mean of 79.2 with a standard deviation of 9.1 on

a range of 19 to 95. The survey items were constructed to measure students' perceived benefits and challenges of using the portfolio. Likert-scale survey questions were developed around the constructs of student's perception of the portfolio process, the use of the technology related to the portfolio, and the usefulness of the portfolio for goal-setting and documenting growth over time. Two open-ended questions were included, that asked students to identify their favorite and least favorite aspects of the process. The complete survey may be found in Appendix C.

Parent survey.

A parent survey was also developed by the research using Qualtrics online survey software. The survey consisted of 11 Likert-scale questions and two open-ended questions and was completed by 24 parents. The reliability analysis of the parent survey showed a reliability of .86. The mean was 43.9 with a standard deviation of 6.4 on a range of 11 to 55. The items were constructed to measure parents' perceived benefits and challenges of using the portfolio process. Likert-scale survey questions addressed parent interest in the portfolio, parent perceptions of their child's interest in the portfolio, and the usefulness and value of the information contained in the portfolio. As with the student survey, parents were asked two open-ended questions to identify the most and least beneficial aspects of the portfolio program. The complete survey may be found in Appendix D.

Teacher journal.

Also during the year, I kept a journal about the portfolio process. Cochran-Smith and Lytle (1993) define teacher journals as "accounts of classroom life in which teachers record observations, analyze their experiences, and reflect on and interpret their practices over time" (p. 26). As a means of data collection, they indicate that journals are effective in that they

"capture the immediacy of teaching: teachers' evolving perceptions of what is happening

with the students in their classrooms and what this means for their continued practices.

Furthermore, because journals stand as a written record of practice, they provide teachers with a way to revisit, analyze, and evaluate their experiences over time and in relation to broader frames of reference” (Cochran-Smith & Lytle, 1993, p. 26).

Although we had been using portfolios in the orchestra program for some time, I had not previously documented my thoughts regarding its implementation. Through the teacher journal, I recorded information about the portfolio program including procedures, time frames, successes and difficulties. In addition, I included my perceptions of student progress and of parent interpretation. Through analysis of the data collected, I hoped to gain a better understanding about how the portfolio program may be better implemented in the future and if students and parents viewed the portfolio assessment program as a means of communication of student understanding and progress in orchestra.

Administrator interview.

To collect data regarding the administrator’s perceptions of the portfolio program, the Visual and Performing Arts Supervisor for the district was interviewed by the teacher-researcher. The interview took place in the teacher-researcher’s classroom and lasted for approximately 25 minutes. The interview was recorded using Audacity software on the teacher-researcher’s computer (www.audacity.sourceforge.net). During the interview, the teacher-researcher asked the supervisor questions about his teaching and administrative background, previous experience assessment, previous experience with portfolios, thoughts regarding the current portfolio program, and suggestions for future portfolio programs. A list of interview questions may be found in Appendix E. After the completion of the interview, the teacher-researcher transcribed the interview. The interview data was then analyzed and coded by the teacher-researcher. In

addition to perception of the portfolio process, the use of the technology related to the portfolio, and the usefulness of the portfolio for goal-setting and documenting growth over time, one new theme arose based on the data, which was the structure of support.

The format of the interview was designed based on Seidman's (2006) three-interview series. The series was modified to accommodate a shorter, one-time interview. The first questions of the interview were intended to "put the participant's experience in context by asking him or her to tell as much as possible about him or herself in light of the topic up to the present time" (Seidman, 2006, p. 17). The middle of the interview focused around the "details of experience", asking the administrator to describe the portfolio program in its' current state. Finally, the questions at the end of the interview asked the participant to reflect on the details of their experience to formulate and articulate opinions. In this case, to make suggestions for the growth of the program within the school district in which the study was conducted and for the development portfolio programs in other districts.

Procedures

Performance assessment and portfolio assignment.

In October, each sixth grade orchestra student completed an individual performance assessment during a small group lesson. The assessment consisted a short piece from the method book. The teacher videotaped the assessment during class using a small handheld camera. After class, the teacher uploaded the videos to Vimeo, a video-sharing website (www.vimeo.com). The following week, students spent one 45-minute class period in the school's Visual and Performing Arts computer lab. During that time, students embedded the video from Vimeo into their Digication portfolios. After they uploaded the video, they were asked to watch it and write a reflection about their performance. Students were provided with specific instructions for both the

uploading process and a prompt for the reflection. These instructions may be found in Appendix B.

This procedure was repeated in February. Due to schedule conflicts, some students completed the assessment during the ensemble period rather than in the small group lesson. The students that completed the assessment during the ensemble period were sent in pairs into a small room off of the classroom. There, they took turns recording each other with the small handheld camera. Once again, the teacher uploaded the videos to Vimeo and students completed the portfolio assignment in the computer lab the following week.

Pilot study.

I had been using Digication with all of my students for three years prior to the start of the study. The pilot study was therefore conducted to test logistics of the survey administration to ensure that the larger study will be efficient and collect appropriate data. For the pilot test, I chose one small lesson group of six eighth grade cello students and their parents. The eighth grade students had six performance assessment videos and reflections in their portfolio. I had originally planned on emailing the survey to each student and parent. However, before administering the survey, I learned through a colleague in the technology department that students did not have a school email address, but did have Google accounts and were accustomed to using Google docs. I determined that the easiest way to provide access to the survey for students was to copy a link into a Google doc and share it with them. This worked well and students had no issues accessing or taking the survey. The entire survey process took approximately ten minutes. The only change that was made after the student pilot test was the decision to take small lesson groups, rather than the entire orchestra of 29 students, to the

computer lab to take the survey at the same time. This decision was based on the number of other technological issues I had experienced in the computer lab over previous months.

The parent pilot study proved to be slightly more challenging. I emailed the survey to the six eighth grade parents in December. After six weeks, only one of the six parents had completed it. After sending out reminders, three more did respond for a total of four responses. For the actual parent survey, I sent out more regular reminders and found that resulted in a better response rate. During the pilot, Qualtrics was also indicating that parents were starting, but not completing the surveys and then they would expire after a given amount of time. There were two apparent causes for this. One being that parents clicked on the link to the survey and decided to take it at another time, the link expired before they tried to take it again. The other cause was that parents were taking the survey on a handheld device, which was not compatible with Qualtrics. To avoid those issues in the actual study, in the email sent out to parents, I included the following “helpful hints”:

1. Please take the survey on a desktop or laptop computer. There were some issues when parents tried to complete the study on a handheld device.
2. Once you click on the link to begin the survey, you have seven days to complete it before it expires.
3. When you complete the survey, be sure to click on the button with the two arrows at the bottom of the screen. After that, a screen that says "We thank you for your time completing this survey. Your response has been recorded." should appear.

Survey administration.

The week after the second portfolio entry, students were asked to complete the survey regarding their perceptions of the portfolio program. The survey was administered in the school’s

Visual and Performing Arts computer lab and took approximately ten minutes to complete.

Concurrently, parents were emailed instructions to access their child's portfolio and the survey regarding their perceptions of the portfolio program.

Data Analysis and Themes

The responses to the individual survey items were analyzed to describe the level of agreement participants indicated for each item. The constructs that were used to develop the Likert-scale items were also used as themes during data analysis. The themes are displayed in Table 1. The open-ended responses from the surveys, the journal entries, and the interview data were analyzed and coded based on these themes. In addition, the theme of structure of support emerged in the administrator interview.

Table 1

Themes used for analysis of student and parent survey, teacher journal, and administrator interview data.

Student Themes

- (a) Student perceptions of the benefits of the portfolio process
- (b) Student perceptions of the challenges of the portfolio process
- (c) Student perceptions of the use of the technology related to the portfolio
- (d) Student perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time

Parent Themes

- (a) Parent perceptions of the benefits of the portfolio process
- (b) Parent perceptions of the challenges of the portfolio process
- (c) Parent perceptions of the use of the technology related to the portfolio
- (d) Parent perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time

Teacher Themes

- (a) Teacher perceptions of the benefits of the portfolio process
- (b) Teacher perceptions of the challenges of the portfolio process
- (c) Teacher perceptions of the use of the technology related to the portfolio
- (d) Teacher perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time

Administrator Themes

- (a) Administrator perceptions of the benefits of the portfolio program
 - (b) Administrator perceptions of the challenges of the portfolio program
 - (c) Administrator perceptions of the use of the technology related to the portfolio
 - (d) Administrator perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time
 - (e) Administrator perceptions of the structure of support for the portfolio program
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Chapter 4

Results and Discussion

Students' Perceptions of the Digital Portfolio

Twenty-nine sixth grade orchestra students completed the survey. Student responses to the 19 Likert-scale survey items may be found in Table 2. The two open-ended questions addressed students' favorite and least favorite things about using the portfolio. In order to ensure honesty, students were informed that the survey was anonymous and their responses could not be traced back to their names.

Student perceptions of the benefits of the portfolio process.

Overall, the student responses to the portfolio program were favorable. To the statement, "I am proud of my portfolio," 60% of students agreed or strongly agreed. Only 4% disagreed and 36% had no opinion. The videotaped assessment and the reflection were two other important benefits of the portfolio process cited by students.

Videotaping and the videotaped assessment.

The Likert-scale statement that students most strongly agreed with was, "I noticed things about my playing when watching my video that I did not notice when playing in class." Fifty-five percent of students indicated that they strongly agreed with the statement and 38% agreed. In response to the statement, "I learned about playing my instrument by watching the videos in my portfolio," 67% of students agreed or strongly agreed.

Being able to watch oneself play emerged as an important aspect of the videotaping process and was referred to in 21 of the 29 open-ended responses. When asked to describe their favorite part of the portfolio process, one student said,

Table 2

Student participants' perceptions of the benefits and challenges of using a digital portfolio in middle school orchestra *

	SD (1)	D (2)	NA or D (3)	A (4)	SA (5)	N
1. I enjoy being videotaped for my performance assessments.	0%	21%	34%	38%	7%	29
2. I enjoy videotaping my friends for their performance assessments.	0	7	34	41	17	29
3. I enjoy writing in school.	7	24	7	31	31	29
4. I enjoy writing about myself.	14	17	28	34	7	29
5. I know enough about music to write a reflection about my performance.	0	0	10	45	45	29
6. I am good at using computers.	7	3	10	31	48	29
7. I enjoy going to the Mac lab in class.	10	0	10	31	48	29
8. I find Digication easy to use.	0	14	10	38	38	29
9. Working on our portfolios is a good use of class time.	0	11	18	43	29	28
10. I understand how to put a video onto my Digication page.	0	0	14	43	43	28
11. I am proud of my portfolio.	0	4	36	46	14	28
12. I learned about playing my instrument by watching the videos in my portfolio.	4	11	18	46	21	28
13. I noticed things about my playing when watching my video that I did not notice while playing in class.	0	3	3	38	55	29
14. Writing reflections has helped me learn about playing my instrument.	0	14	38	38	10	29
15. The videos in my portfolio demonstrate what I have learned in orchestra this year.	0	7	21	54	18	28
16. I would enjoy using the portfolio in my other classes (Math, Language Arts, Social Studies, etc.)	14	10	17	17	41	29
17. The reflections in my portfolio demonstrate what I have learned in orchestra this year.	0	7	21	48	24	29
18. The portfolio provides me with information that is more useful than a grade on a report card.	3	34	24	21	17	29
19. The portfolio helps me create goals for getting better at playing my instrument.	0	7	21	45	28	29

*Note: All figures in percentages (SD = Strongly Disagree, D = Disagree, NA or D = Neither Agree or Disagree, A = Agree, SA = Strongly Agree).

My favorite thing about using the portfolios is seeing the videos. The videos help me see how well I am playing and what I need to improve. I find it much easier to set goals that way and I can see the improvement by watching each video from fifth grade until now.

One student shared, “My favorite thing about using the portfolio is that I am able to see what I look like when I play. This helps me notice what I do wrong so I can fix it when I am practicing.” Another student indicated that “[The video] gives you a whole different perspective of yourself as a music player.”

The reflection.

In response to the three Likert-scale statements related to the reflection, the overall results were positive. Students responded favorably to the statement “I know enough about music to write a reflection about my performance,” with 90% of the students either agreeing or strongly agreeing. In addition, 48% of students agreed and 24% strongly agreed that the reflections in their portfolio demonstrated what they had learned in orchestra that year. To the statement, “Writing reflections has helped me learn about playing my instrument,” 48% of students agreed or strongly agreed and only 14% disagreed. One student referred to the reflection in a positive manner in the open-ended statements saying, “My favorite thing about using the portfolio is that we can write about what we do and that it gives us an opportunity to express our self.”

Student perceptions of the challenges of the portfolio process.

Although responses to the student survey were generally positive, some students indicated challenges including being videotaped, writing the reflection, and usefulness of the information in the portfolio.

Being videotaped.

Although many students indicated that they enjoyed seeing the video of their assessment, 21% of students disagreed to the statement, “I enjoy being videotaped for my performance assessments.” That sentiment was also reflected in six of the open-ended responses, most of which cited being nervous or embarrassed either in front of the camera to explain why they did

not enjoy being videotaped. For example, one student said, “My least favorite thing about using the portfolios in orchestra class is that I don’t like playing the pieces in front of a camera. I think that it is a little awkward...” In reference to performing in front of the camera another student said, “I sometimes get nervous and mess up because of it”.

Writing the reflection.

Although responses to the Likert-scale statements related to reflections were generally positive, some students indicated in both the Likert-scale items and in the open-ended responses that they did not enjoy or see the value in writing the reflection. In response to both “I enjoy writing in school” and “I enjoy writing about myself,” 31% of students disagreed or strongly disagreed. Many of the students that indicated they did not enjoy writing the reflection in their open-ended statements acknowledged that they found it at least somewhat helpful. One student wrote, “My least favorite thing is writing the reflection. I don’t like this because I all ready (sic) know what I did good and bad. But it is a little helpful to write it down.” Another student said, “My least favorite thing about using the portfolio is writing the reflection after watching the video. I don’t think it helps me with anything except when I write the goal. I don’t think we should have to write as much as we do but I still think we should write a little bit.” One other student indicated that they simply did not like writing the reflection in Digication during class, but would prefer another format, such as Google Docs, and to do the writing at home. Two other students said they did not like writing the reflection, but did not provide any additional information about why they did not enjoy it.

Usefulness of information in the portfolio.

The statements regarding the use of portfolios in other classes and providing useful information had a number of disagree responses. To the statement, “I would enjoy using my

portfolio in my other classes,” only 58% of students agreed or strongly agreed and 24% of students disagreed or strongly disagreed. Although responses to the statements about the video and reflections demonstrating what the student had learned in orchestra that year were favorable, only 38% of students agreed or strongly agreed that the portfolio provides them “with information that is more useful than a grade on a report card.” There were no open-ended statements that elaborated on either of these challenges.

Student perceptions of the use of the technology related to the portfolio.

There were four Likert-scale statements that were related to the use of technology. To the statement “I am good at using computers,” 48% of students strongly agreed and 31% agreed. Similarly, a total of 76% of students either strongly agreed or agreed to the statement, “I find Digication easy to use.” Thirty-one percent of students agreed and 48% strongly agreed that they enjoyed going to the Mac lab in class. Finally, 86% of student respondents said they agreed or strongly agreed to the statement, “I understand how to put a video onto my Digication page.” Fourteen percent of students said they neither agreed nor disagreed and no students disagreed to the statement.

However, in the open-ended responses, seven students mentioned challenges related to technology or the process of uploading the video and writing the reflection. For example,

My least favorite thing about using a portfolio in orchestra is the complexity. I find it difficult to apply my videos into my portfolio correctly. This could just be me, and my limited skills with computers, or the whole process of copying and pasting, and if you press one button incorrectly it will cause the whole portfolio to blow up in your face.

Another student shared,

My least favorite thing about using the portfolio in orchestra is all the usernames and passwords. I enjoy how organized it makes me, but it takes a while with lots of instructions to follow. I feel that I always get confused or forget a step, which takes up even more time that I could be watching my assessment...

In general, many of the technology-related challenges cited by students were related to the number of steps involved in the process and the passwords required for the computer and websites.

Somewhat related to the use of technology, one of the other survey items addressed the use of class time. In response to the statement “Working on our portfolios is a good use of class time,” 72% of students either agreed or strongly agreed and 11% disagreed. However, in the open-ended responses, nine students mentioned that the process of uploading the video and writing the reflection was “slow” or time-consuming. In reference to process of uploading the video and writing to the reflection, one student’s sentiment was, “My least favorite thing about using the portfolio is that it is time-consuming to get the video on the page and write a review.” Another student said “My least favorite thing about using the portfolio in class is we don’t get to play music.” However, one student reported, “It is easy to do and it doesn’t take much time,” and another said, “I think it is a great use of our time in orchestra class occasionally,” so the feeling that the process is too time-consuming is not shared by all students.

Student perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time.

Several students indicated that the portfolio helped them to set goals for their performance. Twenty-eight percent of students strongly agreed and 45% agreed to the survey statement, “The portfolio helps me create goals for getting better at playing my instrument.” In

the open-ended responses, one student said, “The videos help me see how well I am playing and what I need to improve. I find it much easier to set goals that way.” In referencing the written reflection, another student said, “I like being able to view things I wrote about my performance because I can find out what my goals were, and if I achieved them.”

Related to the video, several students indicated in their open-ended responses that they enjoyed going back and watching their own videos because it allowed them to see their growth over time. One student referred to the portfolio as an “online music video diary.” Another student said “[The portfolio] shows me what I was like from the beginning of fifth grade to sixth grade...I think using this has given me a reflection of my years playing the viola.” Thinking about the future of the portfolio program, another student said, “I got a chance to go back and watch myself as a fifth grader and see how I’ve improved and what I still need to work on. It will be interesting to see myself as a fifth grader when we do these portfolios in eighth grade.”

Parents’ Perceptions of the Digital Portfolio

Twenty-nine sixth grade orchestra parents were emailed the survey and 24 responded. Parent responses to the 11 Likert-scale survey items can be found in Table 2.

Parent perceptions of the benefits of the portfolio process.

Videotaped assessment.

As with the student survey, parent survey responses to the portfolio were positive overall. To the survey item, “I enjoyed seeing the videos in my child’s portfolio,” 67% of parents strongly agreed and 25% agreed. No parents indicated that they disagreed. In the open-ended responses, many parents shared that they simply liked being able to see their child perform. One parent said, “It is nice to see a video of his posture in an adjudication setting...Aside from group performance, there is not another chance to see him play at school.” Another shared,

Table 3

Parent participants' beliefs regarding the benefits and challenges of using a digital portfolio in middle school orchestra *

	SD (1)	D (2)	NA or D (3)	A (4)	SA (5)	N
1. My child was excited or proud to show me their portfolio.	0%	4%	30%	39%	26%	23
2. I enjoyed seeing the videos in my child's portfolio.	0	0	8	25	67	24
3. I enjoyed reading the reflections in my child's portfolio.	0	0	8	25	67	24
4. The portfolio helped me to understand what the students are learning in orchestra class.	0	4	8	42	46	24
5. The portfolio effectively communicates to me about my child's progress in orchestra.	0	13	13	29	46	24
6. The portfolio provided me with more information about my child's progress in orchestra than their report card grade.	0	4	25	42	29	24
7. There is enough information included in the portfolio to understand how my child is doing in orchestra.	0	17	29	42	13	24
8. Working on portfolios is a worthwhile use of class time.	0	4	17	38	42	24
9. I would like to see work from my child's other classes (Math, Language Arts, Social Studies, etc.) included in their portfolio.	4	8	17	29	42	24
11. The information in the portfolio helps me to guide my child in practicing his/her instrument.	0	8	38	38	17	24

*Note: All figures in percentages (SD = Strongly Disagree, D = Disagree, NA or D = Neither Agree or Disagree, A = Agree, SA = Strongly Agree).

“The videos show me her performance, her positives and negatives while she is performing in school. There is no other way to see these, first-hand!” One other parent said that they liked seeing the videos because “[her daughter] does not always like to perform in front of a live family audience.” Similarly to the student survey, although parents and students both seemed to value the video, 17% of parents disagreed to the statement, “My child enjoys being videotaped for the performance assessments.”

Reflection.

Parents also valued being able to see their child's reflection. To the statement, “I enjoyed reading the reflections in my child's portfolio, 67% of parents strongly agreed and 25% agreed. No parents disagreed. One parent shared that they enjoyed “seeing our child's

comments. Let's us know where she's at and what she wants to work on. We really enjoyed watching the videos and reading her thoughts.”

Communication of progress and learning.

There were four items related to communication of student progress. To the statement, “The portfolio helped me to understand what the students are learning in orchestra class,” 88% of parents agreed or strongly agreed. This sentiment was also reflected in the open-ended statements. One parent said, “I thought it was a wonderful window into [my son's] orchestra experience.” Similarly, another parent shared that they thought that the portfolio was “a nice ‘glimpse’ into the orchestra room to see how much she's learning.” Finally, one parent said, “It give (sic) me as the parent a clearer idea of exactly what my child is learning and accomplishing beyond what we see at the strings concert.” To the statement, “My child was excited or proud to show me their portfolio,” 65% of parents agreed or strongly agreed and only 4% disagreed.

Parent perceptions of the challenges of the portfolio process.

Usefulness of the information in the portfolio.

The statement to which parents responded least favorably was, “There is enough information included in the portfolio to understand how my child is doing in orchestra.” To that statement, 17% of parents disagreed and only 55% agreed or strongly agreed. Similarly, only 49% of parents agreed or strongly agreed to the statement, “The portfolio provided me with more information about my child's progress than their report card grade.” Several parents mentioned the challenge of understanding how their child compares to curriculum standards or other students in the class. For example, “... as a parent it's hard to tell if our child is where they should be in class.” Another parent said,

Maybe I missed something but the way it is now I do not get any information from the portfolio other than what [my daughter] thinks of her work from year to year. I do not get any understanding of what the child might be learning, or how she is progressing... It was fun to watch her play, but it didn't help me help her or understand how she is doing. A few parents also mentioned that they wished they could see teacher feedback within the portfolio. One said, "I don't see a place where there are teacher comments or an actual score . . . It would be nice to get more feedback from the teacher to help him improve." Another parent said,

I think that for the parent to find this useful the teacher would have to provide more information. For example, what piece is it, what it should sound like, and point out the strengths and weaknesses and where there can be improvement.

Finally, one other parent said, "I would have liked to see more details on constructive criticism and some evidence of how the child has progressed from the instruction given."

To the statement, "I would like to see work from my child's other classes included in their portfolio," only 49% of parents agreed or strongly agreed and 12% disagreed or strongly disagreed. Only one parent said that they would like to see it in other classes in the open-ended statements. No parents explained why they were not interested in seeing the portfolio program incorporated in other classes in the open-ended responses.

Use of class time.

The use of class time emerged as another concern cited by parents. Although responses to the statement "Working on portfolios is a worthwhile use of class time," were generally positive, with 51% of parents agreeing or strongly agreeing, three parents mentioned the amount of class time consumed by the portfolio project as being of concern in their open-ended statements. One

parent said, “I am sure [working on the portfolios] must take up a lot of class time ... and that is a detriment”. Another said that they did not like “the time it takes away from playing”.

Additionally, one parent worried that the portfolios “must be time consuming for the teachers”.

Parent perceptions of the use of the technology related to the portfolio.

Parents did not express much of an opinion about the use of technology in relation to the portfolio. However, one parent did say, “This may sound unusual, but not everyone has access to a computer, even in a town like [ours]. For people without a PC or those who are not used to using a computer, access to the portfolio is difficult.”

Parent perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time.

Several parents saw value in the videos and reflections contained in the portfolio as a way to help students set goals and to see growth over time. One parent said,

I think the most beneficial part is for the student to see and hear themselves (sic) play. I would think that this gives the student and teacher the ability to discuss the strengths and weaknesses of the child’s performance, rather than just instruction.

Another parent thought, “Kids always learn better when they can see and hear themselves playing the instrument and then comment on what they can improve.” Specifically related to the reflection, one parent said, “I think the self assessment is a valuable exercise promoting awareness and independent goal setting.” Another parent said that they thought the reflection was valuable because “it is important for [the student] to see how and know what she is doing wrong or right. I think it probably will sink in more if she judges herself.”

Teacher's Perceptions of the Digital Portfolio

As a teacher-researcher, I kept a journal of the portfolio process from October until February, during which time, sixth grade students recorded two performance assessments, uploaded the videos of both assessments and wrote reflections about them in their portfolios. Through the teacher journal, I recorded my thoughts about the portfolio program including procedures, time frames, successes and difficulties, as well as my perceptions of student progress.

Teacher perceptions of the benefits of the portfolio process.

Through this process, I found that the use of the video is valuable for several different reasons. One is that it allows me to assess students even if we do not have time for them to perform for me during class. For example, with all of the snow days and schedule interruptions, I had to send students into the storage room during our ensemble period to record their videos in order to complete the assessments in a timely manner. I knew it would not have been practical or time-efficient to have students perform for me one at a time with 29 other students in the room. I wrote,

I found the procedure of having students record each other to be more efficient. Students had no problems using the camera and I will still be able to assess students accurately watching the video. I also wonder if students felt less nervous completing their assessment this way – that would be another benefit.

Another advantage that I perceived was that the videotaped assessments allow others to see a student's performance, including parents and administrators. For example, I had a sixth grade cello student whose mother was concerned about his progress. She emailed me, suggesting that he not continue in orchestra. He had done quite well on his recent assessment, so I suggested

that she look at his portfolio. “I’m interested to see what [Mrs. Smith] will say about the portfolio. If nothing else, I think the video will provide her with an accurate depiction of how [her son] is doing in class”. After watching the video in the portfolio together, the parent and student both agreed that he was in fact doing well and could continue in orchestra. I also emailed videos of my beginning third grade students to their parents in January. With each video, I wrote a short paragraph about what the student was doing well and one or two specific things on which they could improve. I received tremendous feedback from parents thanking me for the communication and saying that they have been working together at home. Since then, I have seen significant improvement in the third grader’s performance skills. “Last week, I sent videos home of the third graders. This week, I noticed an improvement in their bow holds and saw that many students also had better posture.”

Teacher perceptions of the challenges of the portfolio process.

One of the greatest challenges I faced with the portfolio process was the use of class time and scheduling. These issues were mostly related to interruptions in the schedule including holidays, student absences, weather-related school closings, and technology challenges. For example, one of my Wednesday lesson groups was one week behind because of a Jewish holiday in October. When we were able to go to the computer lab the following week, no one was able to log on to the computers because of technology issues, so we had to wait yet another week before completing the project, leaving that class two weeks behind the other classes. I wrote,

We faced some challenges in the lab today. No one was able to log on to the computers and we did not receive any help when I called the technology department. That lack of support and the fact that the lesson group will now be three weeks behind the other classes is frustrating. I’m wondering how we can plan for these issues in the future.

Additionally, completing the videotaped assessments in January was difficult because of weather-related school closings and student absences. In fifth grade and for the October assessment, I had students complete their performance assessments in front of their small lesson group. As mentioned previously, many students completed the January assessment in a small room off of the orchestra room, which ended up working very well.

Scheduling time in the computer lab also proved to be a challenge, as 14 music and art teachers and 1,300 students share the resource. One of the eighth grade art curriculum units is “Photoshop”, which involves students using the computer lab during every class for several weeks. Therefore, scheduling time in the lab at the end of the marking period proved to be difficult as sixth grade orchestra lessons and eighth grade art classes meet during the same class period. “I went to sign out the lab today and the art teachers have booked it through the end of the second marking period. Perhaps that was poor planning on my part! We’ll have to work around that schedule for now and perhaps come up with some other resources to work with the portfolio in the future.” Although I had intended to have students complete one portfolio entry per term, we were not able to reserve the computer lab until after the second term was over.

Teacher perceptions of the use of the technology related to the portfolio.

The biggest challenges faced during this study of the portfolio program were related to technology, specifically with the computer lab, Vimeo and Digication. For example, in October, the entire district had issues accessing our “Teacher Drives”, where we store our files so that we can access them from any computer in the district. “Today, when I tried to upload videos to Vimeo, I was not able to access my Teacher Drive. I’m worried that this may be permanent, although the technology department said they hoped to restore access soon.” Access to the drive was sporadic for several weeks, so the Arts Supervisor purchased external hard drives for all of

the music teachers, but there were significant periods of time that I was not able to access the Teacher Drive, which included the video files of the sixth grade performance assessments.

Another challenge faced in the computer lab itself was logging on to the computers. I was not able to log on to any of the computers in the lab for the first eight weeks of school, despite requesting assistance from the technology department several times. As mentioned previously, all of the students in one of the sixth grade cello classes in October were also not able to log onto the computers and when I contacted the technology department, they said they were not able to help us. We were able to sign out the lab for the following week and everyone was successful in logging into the computers and completing the assignment, so the issue was eventually addressed.

In October and January, we had some small issues with Vimeo, the video-hosting website to which assessment videos were uploaded so that students could then embed them into their portfolios. On four separate occasions, the videos did not convert correctly, so although the video image appeared normally on the webpage, when the student attempted to click on it to use the embed code, it said it was not done converting. Although they waited the entire class period, the status of the video did not change. I wrote,

I felt badly for [a student] because he couldn't see his video today in the lab. He was a great sport about it and said he would watch it at home, but it was a struggle for him to remember his assessment enough to write the reflection and probably not as accurate because he couldn't watch the video.

Because I was storing their videos on the external hard drive and not my teacher drive, which I would have been able to access from the computer lab, the students had to complete the

assignment without seeing their video and I re-uploaded the videos after class and put them into their portfolio for them.

Another technology issue I faced was related to passwords. When I sent out the parent survey at the end of January, I provided specific instructions for parents to access their children's Digication accounts, which included a password. On February fifth, I received emails from two parents saying that the password was not working. I tried logging in to some of the accounts and was not able to do so. After doing some research, I discovered that the technology department had changed all of the student passwords for Digication but had not notified any of the students or teachers. "This was the most frustrating issue we've had so far. It's so important to have good communication with the technology department. If either the technology department or teachers make changes, we have to remember to let each other know." While we solved the problem fairly quickly, I did have to send out another email to parents about the passwords being reset.

Two weeks after the sixth graders successfully completed their portfolio entry, I took a fifth grade class to the lab to complete the same assignment. When students tried to watch their videos on Vimeo or Digication, they saw a black or white box, respectively. I called the technology department and asked if they could send someone to help us, but the representative was not able to come until the last few minutes of class. In the meantime, I was able to guide students to an alternate way to see the video in Vimeo and access the embed code, but it took much longer and students seemed confused by the extra steps. "Knowing what challenges we are facing, I do think we can work around them and still have students complete the assignment, but students did seem very confused by the extra steps and I wonder if this will have an impact on future attempts to complete the assignment". The representative from the technology department

informed me that Digication had updated their site and it was currently not compatible with the computers in the lab, but that they were working together to solve the problem.

Teacher perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time.

One benefit of the portfolio was the use of reflections as a vehicle for student goal-setting. Reading students' reflections, I was impressed by how well they were able to identify both positive aspects of their playing and areas in which they needed to improve. "I was impressed with how insightful their reflections were. Last year, many of them struggled to articulate musical thoughts but their writing skills and musical vocabulary have improved". Additionally, they were asked to set a goal for their next assessment and to explain how they planned to reach that goal. While some students said that they just wanted to get a better score and they would do that by practicing more, many cited more specific aspects of their playing and provided specific ways they planned to reach that goal.

After completing each portfolio entry, I felt that students could better identify aspects of their playing that needed improvement by watching the videotape of their assessments. This feeling was confirmed by students' responses to the student survey. "During our warm-up in class today, I said, 'Think about your most recent performance assessment and the goal you set for yourself.' I immediately saw students' posture, technique, and even focus change. It was incredible". Specifically, I have seen the biggest difference in students' posture, the straightness of the bow, and bow placement between the bridge and fingerboard.

One concern about the reflections within the portfolio is that I do not think students are looking at the portfolio frequently between assessments, so they may not remember their goal. In one of the student survey responses, one student said, "My least favorite thing about using the

portfolios is that I cannot get on it at home.” While students are able to access their portfolio from any computer with an internet connection, the teachers have obviously not done a good enough job communicating that. “I need to work on strategies for getting students to look at their portfolios more often so that they remember their goal between assessments and portfolio work.” In reading the reflections, I think I also need to provide students with more specific practicing tools to help them reach their performance goals.

Administrator’s Perceptions of the Portfolio Program

The Visual and Performing Arts Supervisor had been in the district for six years at the time of the study and had seen the portfolio program from its inception to its current state. Although he had done some work with composition portfolios with elementary piano students as a teacher, he was relatively new to the idea of digital portfolios when the program began in the district in 2009. The interview focused more on the portfolio program rather than the sixth grade orchestra portfolios, providing a broader view of the portfolio process.

Administrator perceptions of the benefits of the portfolio program.

There were two benefits that the administrator discussed in the interview that had not previously emerged in the surveys or teacher journal. When discussing the initial development of the program, the administrator said, “There’s two reasons [for the program]. Number one, it’s to show student progress, but number two, it’s to promote your programs.” With the assumption that students or teachers are putting examples of best work in the portfolios, it allows administrators as well as the public to see and hear what is going on within the department. This is somewhat related to the idea that the portfolio provides a “glimpse in to the classroom”, which was discussed by some parents in the parent survey.

Another benefit of the use of portfolios cited by the administrator was that students could use portfolios when applying for college. When asked about the future of the portfolio program, the administrator said,

One thing that we didn't talk about is how it is used when kids go to college. I really think that...the students will take more ownership with it and it will be a lot richer because students realize then that oh, we can just upload this, or we can show this to the people at Yale, or to Stamford, or Berkley, so I think that's going to move things forward.

While it is not surprising this did not emerge in the other data as they were related specifically to the sixth grade portfolio, it does deserve mention.

Administrator perceptions of the challenges of the portfolio program.

One of the challenges mentioned by the administrator was scheduling time in the computer lab. He said, "Access to the computers is a pain. You know, we have one lab, we have 1300 students. We have kids having music at the same time, or art." However, he also mentioned several possible solutions to the scheduling issues that will be discussed later in this section.

Related to scheduling, the administrator also acknowledged that the portfolio process takes up class time and that many of the teachers would rather spend that time having students perform and prepare for concerts.

Another challenge the supervisor cited was that, particularly at the middle school, students had not fully taken ownership of their portfolios. Because of that, students rarely access the portfolio at home and many parents have not seen the portfolio. He described the challenge as "getting students to see that it's not just here at school. That it carries over. That they can do it at home. That's important...because we're not quite there here (referring to the middle school). We are at the high school."

Administrator perceptions of the use of technology related to the portfolio.

The importance of providing teachers with professional development and students with learning experiences with the portfolio technology was mentioned several times throughout the interview. The administrator said, “We’ll get to the point where all the students are familiar with the technology, and that’s the hardest hurdle. Once the students and the teachers understand the technology, it’s not a lot of time”.

The administrator indicated optimism about the future of the technology related to the portfolio. He said, “I think that because the world is going digital, that it’s going to change...the paradigm”. He suggested several developments that he thought would make the portfolio process easier. For example, using Vimeo to store and embed videos is somewhat time consuming and adds an additional step to the process. About the video files, the administrator said, “eventually, what we can do is we can put these files somewhere in “The Cloud,” and the fifth grade students are going to come up here in three years and they’re going to know how to get to “The Cloud” and they can do a lot of this work at home”.

Another technological development the administrator mentioned several times throughout the interview was the use of tablets or other handheld devices. At the time of the study, Digication was not compatible with handheld devices because of the software it required. Talking about the future of the portfolio program, the administrator said, “I think it’s going to expand to where we can use things like the tablets to where the portable part will really help out. I think even SmartPhones and iTouches...are going to be able to work with these portfolios.” He said he hoped that teachers and students would soon be able to use some of the schools’ other resources such as iPads or tablets so that portfolio work could be done in individual music classrooms, alleviating the scheduling issues teachers were experiencing with the computer lab.

We have to figure out a way to maybe start using iPads when that happens, or whatever technology comes on board... Now there are issues because some don't have flash.... But I really think in a couple of years all that will kind of morph.

Administrator perceptions of the usefulness of the portfolio for goal-setting and documenting growth over time.

The first benefit the administrator cited in his interview was the portfolios' ability to document student progress over time. He mentioned that, before the portfolio program began, the teachers in the district were already collecting photographs of student work in the visual arts, and recording performance assessments and concerts in the music department. The portfolio, therefore, simply provided a platform for teachers and students to organize the work and see how it developed and changed over time. When asked specifically what he saw as the greatest benefits of the portfolio program, the supervisor said, "I think it's the 'ah-ha' moments for the students". He mentioned a specific orchestra student and the fact that in his portfolio,

you can see him at the beginning of fifth grade, you can see him at the middle, you can see him at the end. And for a student to sit there and reflect upon ... what they've learned, I think that's very powerful. Very powerful.

Administrator perceptions of the structure of support for the portfolio program

One theme that did not emerge in the surveys or teacher journal was importance of support. The administrator stressed the importance of support from and communication with the technology department, including staying current with new developments and software, as well as extensive teacher professional development with the technology.

When asked what advice he would give to another administrator looking to start a portfolio program in their district, the administrator said to "make sure that whoever you are that

you do have a good network of people of administrator or teachers” for support. When the portfolio program began, there were not many K-12 school districts using portfolios. This posed a challenge in that the administrator did not have the support he felt he needed. He said,

When we first came on board, we were kind of the only district doing it, so there was no one out there to have a sounding board with. I want to be supportive for the teachers, but I never really had anybody to go in and say, ‘This isn’t working’

He suggested that it might have been a good idea to reach out to other districts during conferences or workshops for suggestions or ideas and, in the future, for us to work with to districts that are trying to start a portfolio program.

The idea of getting teachers and administration to “buy-in” to the program was mentioned several times throughout the interview. He said understood the many challenges facing teachers including class size, frustration with the technology, and rehearsal schedules and cited those as reasons why some teachers did not want to participate. He said, “You know we don’t have total buy-in. And there are certain reasons why. Some of it’s, “I don’t want to do it’, some of it’s ‘ I have 100 kids. How do I do it?’ and some of it’s, “I’ve got 40 concerts that I’m doing.” However, he said that he’s been trying to address those frustrations. “By trying to work with each individual teacher, I think we’ve really put the systems in place.”

In addition, he also said he thought it was important that teacher education programs expose pre-service teachers to the portfolio technology so they are prepared as these types of portfolio programs become more prevalent. He said he thought that the

next step is working with the teacher ed programs to let them know that this is what we’re doing so those teachers coming into the field will have that in their pocket because a lot of people coming in aren’t prepared with that technology.

The final question of the interview asked the supervisor to share anything else that would be beneficial for the audience to know or include. His final words were,

You have to have a vision, you have to have buy-in, you have to have the finances, you have to have the support from the community, from the staff, to the budget, to ICT, to administration, and you have to have a collective...[pause]... everybody has to do it. And that's, to be honest with you, we do have those things and that's what, where we're falling or faltering.

Discussion

Based on the analysis of the data, the greatest benefit of the portfolio program was the ability to see the videotaped assessments. One benefit of the videotaped assessments cited by all four groups of participants was that they provided an effective way of viewing student progress and documenting that progress over time. The students, parents and teacher also said that they found the video valuable because it allowed students to see their performance from a different perspective, helping them to identify aspects of their playing that were strong and areas in which they could improve. The parents also found the videos useful because they allowed them to see both how and what their child was doing in orchestra. A final benefit for the teacher was that the video allowed me to assess students more efficiently because I could watch the videos outside of class time. The students, parent, and teacher also all suggested that the video helped students with goal-setting because they could see first-hand what needed improvement. Relative to goal-setting, both the students and parents also indicated that the reflections helped with student goal-setting in that it forced them to articulate what needed improvement and steps to take to achieve that goal.

The data also revealed some challenges associated with the portfolios. The two biggest challenges cited by students, parents, the teacher-researcher, and the administrator were difficulties with technology and time. Some students found the process of logging on to the computers and websites, uploading the video, and writing the reflection to be complex and time-consuming. The teacher and administrator both mentioned specific difficulties associated with the computer lab, the computers, and the software. Because of this, the administrator stressed the importance of support from the technology department and professional development with the portfolio software for teachers. The students, parents, teacher-researcher and administrator all perceived time as being a challenge of the portfolio program. Students, parents and the teacher all expressed concern that it was taking away from performance time in class. The teacher and administrator also mentioned the challenge of scheduling time in the computer lab because of the number of classes that share the resource.

A few parents said they did not find the information included in the portfolio to be enough to understand how their child was doing in class and indicated that they would prefer either a number grade or more specific feedback from the teacher. A final challenge discussed by both the administrator and teacher was that they felt the sixth grade students did not yet understand that they could use and access the portfolio outside of class time.

Chapter 5

Summary and Conclusions

Purpose Statement and Research Questions

The purpose of this study was to describe perceived benefits and challenges of using a digital process portfolio as a means of assessment in a middle school orchestra classroom.

Specific research questions included:

- (a) How do students perceive the benefits and challenges of using a digital process portfolio in orchestra?
- (b) How is the use of a digital process portfolio beneficial or challenging to a parent's understanding of their child's progress?
- (c) How is the use of a digital process portfolio beneficial or challenging to the teacher's assessment of student learning?
- (d) How does the arts supervisor perceive the benefits and challenges of using a digital process portfolio?

Summary

The district in which the study was conducted was located in a New England suburb. The participants were sixth grade orchestra students of the researcher and their parents, the Visual and Performing Arts Supervisor and the orchestra teacher, who was also the researcher. Students in the sixth grade orchestra had been using portfolios since the beginning of fifth grade and were familiar with the program.

The study was conducted over a 20 week period, spanning October through February of one school year. During that time, sixth grade students completed two videotaped performance assessments, uploaded the videos to their digital portfolios, and wrote reflections about their

performance. Data regarding student and parent perceptions of the portfolio was gathered via survey after the second portfolio entry was complete. The Visual and Performing Arts Supervisor was also interviewed about his perceptions of the program. Finally, the teacher-researcher kept a journal over the course of the 20 weeks, recording information about portfolio program's procedures, time frames, successes and difficulties as well as perceptions of student progress. The data was analyzed based on the following themes: benefits and challenges of the portfolio process, the use of technology related to the portfolio, and the usefulness of the portfolio for goal-setting and documenting growth over time. In addition, the theme of structure of support emerged in the administrator interview.

The videotaped assessments emerged as the greatest benefit of the portfolio program. To the survey statement, "I noticed things about my playing when watching my video that I did not notice when playing in class," 93% of students agreed or strongly agreed. Sixty-seven percent of parents strongly agreed and 25% agreed to the survey item, "I enjoyed seeing the videos in my child's portfolio." One benefit of the videotaped assessments cited by all four groups of participants was that they provided an effective way of viewing student progress and documenting that progress over time. The students, parents and teacher also said that they found the video valuable because it allowed students to see their performance from a different perspective, helping them to identify aspects of their playing that were strong and areas in which they could improve. The parents also found the videos useful because they allowed them to see both how and what their child was doing in orchestra. A final benefit for the teacher was that the video allowed me to assess students more efficiently because I could watch the videos outside of class time.

The students, parent, and teacher also all suggested that the video helped students with goal-setting because they could see first-hand what needed improvement. Seventy-three percent of students agreed or strongly agreed to the statement, “The portfolio helps me create goals for getting better at playing my instrument.” Relative to goal-setting, both the students and parents also indicated that the reflections helped with student goal-setting in that it forced them to articulate what needed improvement and steps to take to achieve that goal. One parent said, “I think the self assessment is a valuable exercise promoting awareness and independent goal setting.”

The data also revealed some challenges associated with the portfolios. The two biggest challenges cited by students, parents, the teacher-researcher, and the administrator were difficulties with technology and time. Although the student responses to the survey items related to technology were generally positive, some students mentioned technology-related challenges in their open-ended statements. For example, some students found the process of logging on to the computers and websites, uploading the video, and writing the reflection to be complex and time-consuming. The teacher and administrator both mentioned specific difficulties associated with the computer lab, the computers, and the software. Because of this, the administrator stressed the importance of support from the technology department and professional development with the portfolio software for teachers. The students, parents, teacher-researcher and administrator all perceived time as being a challenge of the portfolio program. Students, parents and the teacher all expressed concern that it was taking away from performance time in class. For example, one student said, “My least favorite thing about using the portfolio in class I we don’t get to play music.” The teacher and administrator also mentioned the challenge of scheduling time in the computer lab because of the number of classes that share the resource.

A few parents said they did not find the information included in the portfolio to be enough to understand how their child was doing in class and indicated that they would prefer either a number grade or more specific feedback from the teacher. Additionally, some students and parents expressed a lack of interest in using the portfolio in other subject areas. To the statement, “I would enjoy using the portfolio in my other classes, 24% of students disagreed or strongly disagreed and 17% of students neither agreed nor disagreed. Likewise, 12% of parents disagreed or strongly disagreed and 17% neither agreed nor disagreed when asked if they would like to see work from their child’s other classes included in the portfolio. None of the open-ended responses elaborated on this sentiment. A final challenge discussed by both the administrator and teacher was that they felt the sixth grade students did not yet understand that they could use and access the portfolio outside of class time.

Discussion

While there were relatively few studies that examined the use of portfolios in the music classroom and no studies within middle school orchestra classrooms, many connections can be made between the present study and prior research. Overall, the current portfolio program was deemed to be valuable by all participants. This was also found to be true in studies of portfolio programs conducted by Dirth (2000), McCall (2006), McLeod and Vasinda (2008), and Korte, et al., (1992). Additionally, Shouldice (2010), who studied self-evaluation over a four-week period, suggested that portfolios may be used to keep recordings and self-evaluations over time. Although those studies were conducted in various types of classroom settings, and the portfolios were implemented in different ways, the researchers indicated that using the portfolio was a positive addition to the curriculum.

In the current study, the videotaped assessment proved to be the most valuable aspect of the portfolio program. The videos allowed students, parents, the teacher, and the administrator to see how the student was doing currently, as well as the ability to compare the video to previous recordings to see student growth. Video and audio recordings were also found to be beneficial in prior research by McCall (2006) and Shouldice (2010). McCall felt that the video recordings were valuable because they provided an accurate depiction of student performance to the student and helped students to develop self-assessment and reflection skills. Shouldice used audio recordings to have students evaluate themselves. Students indicated that they enjoyed hearing themselves perform and the teacher noted increased student motivation and improvement in performance as a result of the self-evaluation unit.

Student reflections were also an important benefit of the portfolio program. They helped students to set performance goals and allowed parents and the teacher to see student understanding of performance technique and musical concepts. McCall (2006) found that reflections provided insight into student attitudes and preferences and facilitated communication between the teacher and the student, which allowed the teacher to make curricular changes to better suit the needs of her students. McCleod and Vasinda (2008) discovered that third and fourth grade students were able to demonstrate that they understood curricular goals through their reflections.

A final benefit found in the current study was that the portfolio allowed parents to see how and what their child is doing in orchestra. Some parents referred to this as a “window” or “glimpse” into the classroom. Previous research has indicated the importance of assessment tools that allow parents to connect with classroom activities and curriculum. McLeod and Vasinda (2008) determined that reflections have the ability to provide parents with valuable information

about their child's progress because they provide an authentic, contextual view of performance as well as interpretation of the performance by student. Conway and Jeffers (2004) shared detailed progress reports with parents and found that most parents appreciated receiving the detailed feedback. However, a few parents in the current study also requested a number grade or more feedback from the teacher. Some parents in the Conway and Jeffers (2004) study also indicated that they would like to see a letter grade. In a study of non-traditional assessment and narrative reporting (Diffily, 1994), some parents indicated that they thought students should be evaluated in comparison to other students in the class and grade level standards.

Time and technology were cited as the biggest challenges of the current study. Specifically, time spent working on the portfolio meant less time performing in class, which was cited as a challenge or drawback by students, parents, and the teacher. In previous research, both parents and teachers indicated that they were concerned about the amount of time consumed by portfolio work (McLeod & Vasinda, 2008; Dirth, 2000; McCall, 2006). Related to technology, the students and teacher mentioned specific issues they had encountered. The administrator noted the importance of technological support and professional development for teachers. It is important to note that although time and technology have been repeatedly found to be difficulties associated with portfolios, all prior research determined that the benefits of portfolio programs outweigh the challenges.

Implications for Teachers

It is important to note that this study was conducted within one school program with a relatively small number of participants. The purpose of the study was to determine whether the orchestra program's current use of portfolios was an effective way of documenting and communicating student progress. Cochran-Smith and Lytle (1993) said, "Although teacher

research is not always motivated by a need to generalize beyond the immediate case, it may in fact be relevant for a wide variety of contexts” (p. 24). Teachers that read the findings of this study may be able to find connections to their own teaching experiences. For example, teachers may see the benefit in surveying their students and parents, formally or informally, about their assessment tools. I do hope that the findings of this study encourage other teachers to begin their own portfolio programs. Further, I hope that teachers who begin their own portfolio programs conduct a teacher-research study to contribute to the body of research on portfolio assessment.

Implications for the Teacher-Researcher

At the beginning of my research, I was finding the challenges of the portfolio program to be frustrating to the point that I was questioning the value of the program. While I assumed that the students were benefiting from the program, I was not positive that was the case. I emailed the parents each time their child put a video and reflection into the portfolio, but had rarely received any responses, so I did not know what parents thought of the program. As I began to research portfolio use in other educational settings, I became even more discouraged as I found many journal articles toting the benefits of portfolio assessment in music, but very few studies that had actually researched the benefits and challenges. It was then that I realized the importance of conducting this study.

The results of this study have helped me to realize that portfolio assessment, while sometimes demanding of time and patience, is a worthwhile experience for students, parents, and the teacher. As music teachers, we provide students with the opportunity to demonstrate their knowledge through performance, which I believe demonstrates the highest level of understanding. The portfolio simply allows us to document that understanding over time. As a teacher, I feel that the information contained in the portfolios can communicate far more than

number grades because they have the ability encapsulate student performance and self-assessment. However, based on findings of this study and prior studies, I believe many parents and students still desire a number grade to as an indication of comparison to other students or curricular standards. If one of the goals of the portfolio program is to communicate progress to parents and students, I now understand the importance of including teacher feedback and a numerical grade within the portfolio. As a result, I have decided to add the teacher rubric that I have been filling out for each student performance assessment as a new component of the portfolio.

Recommendations for Further Research

Currently, the body of research on portfolio assessment in music programs is very small. As the education system become more assessment-driven, I think it is important that music teachers are prepared with effective assessment tools that demonstrate high levels of student understanding. Therefore, I think that other music teachers must continue to research assessment methods including, but not limited to, portfolio assessment in their classrooms.

Although parents and students indicated that they valued portfolio assessment in orchestra, many parents and students indicated that they did not have interest in seeing it used in other subject areas. Research should be done in our district to examine the differences in perception of portfolio use in various subject areas. In addition, research should be done to see if students and parents in other school districts value portfolio assessment differently in different subject areas.

The district in which this study was conducted is in a high socioeconomic status community. Because of this, the portfolio and technology programs are well supported financially and almost all students have easy access to technology. Research should be done to

determine whether such a program is feasible at other socioeconomic levels and what challenges may arise given the difference. If there are other challenges, how can those challenges be addressed so that the program is successful?

The current study did not examine student survey responses by gender, instrument choice, or academic achievement. It would be interesting to see if there is a difference in response when students are grouped by these criteria. In addition, the parent survey was sent out to the mother's email address that the school had on file. Responses from fathers may have produced different data.

Conclusion

When students perform, they are required to apply the knowledge and skills they have learned. Further, when we ask them to evaluate their performance, formally or informally, they are forced to think critically about music as a whole as well as the quality of their own performance. In any subject, application of knowledge and critical thinking demonstrate the highest level of understanding and are the goals of effective assessment. These things happen naturally in our classrooms on a daily basis. Therefore, in music performance classes, the challenge is not assessing understanding, but in capturing and documenting that understanding. This study was intended to explore how and if portfolios have the ability to capture and document understanding. While I cannot say that portfolio assessment is perfect, I do think it captures student understanding and progress in an authentic way.

With greater access to technology and development of new technology, it is to our advantage to explore possibilities. Technology can be scary and sometimes frustrating, but it also provides wonderful opportunities for both our students and us. The most valuable thing I have

learned from my parents, who are both teachers, is to keep learning and trying new things. Some things will fail and some will be tremendous successes, but it is in trying that we learn the most.

Appendix A

IRB Notice of Exemption

eResearch Notification: Notice of Exemption

eresearch@umich.edu <eresearch@umich.edu>

Reply-To: eresearch@umich.edu

To: karoach@umich.edu



Health Sciences and Behavioral Sciences Institutional Review Board • 540 East Liberty Street, Suite 202, Ann Arbor, MI 48104-2210 • phone (734) 936-0933 • fax (734) 998-9171 • irbhsbs@umich.edu

To: Kathleen Roach

From: Richard Redman

Cc: Kathleen Roach, Michael Hopkins

Subject: Notice of Exemption for [HUM00066526]

SUBMISSION INFORMATION: Title: A Study of the Use of the Digital Portfolio in Middle School Orchestra Full Study Title (if applicable): Study eResearch ID: [HUM00066526](#) Date of this Notification from IRB: 7/24/2012 Date of IRB Exempt Determination: 7/24/2012 UM Federalwide Assurance: FWA00004969 expiring on 6/13/2014 OHRP IRB Registration Number(s): IRB00000246

IRB EXEMPTION STATUS: The IRB HSBS has reviewed the study referenced above and determined that, as currently described, it is exempt from ongoing IRB review, per the following federal exemption category:

EXEMPTION #1 of the 45 CFR

46.101.(b): Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom

management methods.

Note that the study is considered exempt as long as any changes to the use of human subjects (including their data) remain within the scope of the exemption category above. Any proposed changes that may exceed the scope of this category, or the approval conditions of any other non-IRB reviewing committees, must be submitted as an amendment through eResearch.

Although an exemption determination eliminates the need for ongoing IRB review and approval, you still have an obligation to understand and abide by generally accepted principles of responsible and ethical conduct of research. Examples of these principles can be found in the Belmont Report as well as in guidance from professional societies and scientific organizations.

SUBMITTING AMENDMENTS VIA eRESEARCH: You can access the online forms for amendments in the eResearch workspace for this exempt study, referenced above.

ACCESSING EXEMPT STUDIES IN eRESEARCH: Click the "Exempt and Not Regulated" tab in your eResearch home workspace to access this exempt study.



Richard Redman
Chair, IRB HSBS

Appendix B

Performance Reflection Digication Assignment Instructions

Performance Reflection Digication Assignment

Follow the instructions below to upload the video of your most recent performance assessment and write a reflection. *Follow the steps carefully* and ask Mrs. Dorfman if you have any questions.

1. Please log onto the computer using your own log-on name and password.
2. Open the Safari web browser (looks like a compass) located in the computer's dock.
3. Type www.ncps.digication.com into the address bar (**NOT** the search bar)
4. Login
 Username: **xxxxxx**
 Password: **xxxxxx**
5. Click on "(Your Name)'s Portfolio"
6. Click on the "Orchestra" tab on the top of the page.
7. Click on your "Grade" page on the left hand side.

To add a video:

1. Click on **Add a Module**
2. You will see several types of module options appear. For a video we'll need an Image/Video/Audio module, so...
 - Click **Image/Video/Audio**
 - Click **Add this Module**
3. Do **NOT** close the Digication page.

Go to Vimeo:

1. In the toolbar (at the very top of the computer screen), please click **File**, then **New Tab**.
2. In the new address bar, please type: www.vimeo.com
3. Click **Log in:**
 - Email Address: **xxxxxx**
 - Password: **xxxxxx**
4. Click the **Videos** at top of page
5. Find your video. Each video is named with your first name followed by the date of the assessment. Click on the **title of the video**.
6. In the upper right hand corner of the video, click the **Share** box.
7. Find the "Embed" box. You will use the code in the box to embed your video into your Digication page. Copy the embed code by selecting the code (it will turn blue) then clicking **Edit** in the toolbar at the top of the page, then **Copy**.

Go back to Digication to embed the video:

1. Click on your Digication page tab (under the address bar).
2. In the module you created before, please click the **Edit** tab, then **Replace this Media**
3. Select the **Media from Web** tab then paste the embed code from Vimeo. To do this, go to the toolbar at the top of the computer screen, click **Edit** then **Paste**
4. Click **Done**, then select the **Publish** tab, then **Publish Changes**.

Add a text box for your reflection:

1. Click on **Add a Module**
2. Select **Rich Text** (instead of Image/Video/Audio). Click **Add this Module** then **I'm Done**
3. Click the **Edit** tab
4. Please see the **Reflection Instructions** below to write your reflection.
5. When you are done writing your reflection, please raise your hand so Mrs. Dorfman can "approve" it.
6. Click **Save**, then the **Publish** tab and **Publish Changes**
7. Above your Rich Text module (the one with your reflection in it), click the gray box that says **Drag to Reorder**. Drag the box to below the module with your newly-added video. Now, your Digication page should have a video, reflection, video, reflection, etc. from top to bottom.
8. To see the finished project, select the **Published** tab in the upper left hand corner of the page.

Reflection Instructions

Your reflection must include:

- What you performed (please see the first sentence of the example below)
- 1-2 things you think you did well
- 1-2 things you think you need to improve
- Whether or not you achieved your goal for improvement from your assessment OR what has improved since your last assessment
- One thing you would like to work for your next assessment (something specific)
- A specific, practicing strategy to help you improve for the next playing assessment.

Example:

For this performance assessment, I performed Monday's Melody. I think I did an excellent job keeping my left wrist straight and my bow near the bridge, helping me to create a beautiful tone. However, in watching the video, I noticed that the B and F-sharp were slightly flat and my right pinky was not bent the entire time. Since my last performance assessment, I have been working hard to keep my bow straight and near the bridge while I practice my Essential Elements exercises and have improved a great deal. Between now and my next playing assessment, I plan on focusing on my bow hold when playing my scales and Essential Elements exercises to make sure that my thumb and pinky are consistently bent.

Appendix C
Student Survey

Student Survey

Q1 Please answer each question below based on how strongly you agree or disagree to the statement.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I enjoy being videotaped for my performance assessments. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy videotaping my friends for their performance assessments. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy writing in school. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy writing about myself. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know enough about music to write a reflection about my performance. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am good at using computers. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy going to the Mac lab in class. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find Digication easy to use. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working on our portfolios is a good use of class time. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand how to put a video onto my Digication page. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of my portfolio. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I learned about playing my instrument by watching the videos in my portfolio. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I noticed things about my playing when watching my video that I did not notice when playing in class. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Writing reflections has helped me learn about playing my instrument. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The videos in my portfolio demonstrate what I have learned in orchestra this year. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would enjoy using the portfolio in my other classes (Math, Language Arts, Social Studies, etc.) (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reflections in my portfolio demonstrate what I have learned in orchestra this year. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The portfolio provides me with information that is more useful than a grade on a report card. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The portfolio helps me create goals for getting better at playing my instrument. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 What is your favorite thing about using the portfolio in orchestra?

Q3 What is your least favorite thing about using the portfolio in orchestra?

Appendix D

Parent Survey

Parent Survey

Q1 Please answer each question below based on how strongly you agree or disagree to the statement.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
My child was excited or proud to show me their portfolio. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed seeing the videos in my child's portfolio. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed reading my child's goal statement in their portfolio. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed reading the reflections in my child's portfolio. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The portfolio helped me to understand what the students are learning in orchestra class. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The portfolio effectively communicates to me about my child's progress in orchestra. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The portfolio provided me with more information about my child's progress than their report card grade. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is enough information included in the portfolio to understand how my child is doing in orchestra. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working on portfolios is a worthwhile use of class time. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to see work from my child's other classes (Math, Language Arts, Social Studies, etc.) included in their portfolio. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child enjoys being videotaped for the performance assessments. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The information in the portfolio helps me to guide my child in practicing his/her instrument. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 What do you find to be the most beneficial part of the portfolio program in orchestra?

Q3 What do you find to be the least beneficial part of the portfolio program in orchestra?

Appendix E

Administrator Interview Questions

“Interview One”: Focused Life History

1. Tell me about your teaching experience prior to coming to New Canaan.
2. As a teacher, what types of student assessment did you use?
3. How did you come to be an administrator?
4. Describe the music department when you first started working here.

“Interview Two”: The Details of Experience

5. What was your experience with portfolios before we began the program here?
6. How did the portfolio program evolve in New Canaan?
7. What do you see as the greatest benefits of the portfolio program?
8. What difficulties or challenges have you seen with the program?

“Interview Three”: Reflection on Meaning

9. Given what you have said about the benefits and challenges of using portfolios as assessment, how do you see the program moving forward over the next few years?
10. What advice would you give to an administrator in another district who is looking to start a portfolio program in their department?

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