INSTRUMENTAL MUSIC ASSESSMENT: CURRENT PRACTICES IN INDIVIDUAL MUSIC ASSESSMENT

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   by
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Abstract

Assessment is necessary in all of today’s classrooms. More than ever, developing systems of assessment that allow students to show growth and encourage mastery of skill development is incredibly important to students, teachers, administrators and parents. This study explored the current assessment practices of teachers of instrumental music. The study was guided by the following research questions:

1. What forms of assessments are being utilized by band teachers to guide student performance and provide them with adequate feedback for growth?
2. How are these assessments useful, as perceived by these band directors?
3. How do these assessments benefit their students, as perceived by band directors?

This qualitative study included interviews with three New Jersey band directors and a review of assessment documents provided by participants. The Learning for Mastery framework of Bloom (1968) was the lens that guided this study. This study found that each director varied the types of assessments used, provided valuable feedback to students, modified a student’s educational program based on data, and were relevant to skills being taught in the classroom. These findings could help educators and administrators develop individual assessment practices that encourage student growth and adequately demonstrate student growth to stakeholders.

Keywords: Assessment, Music, Band Directors, Mastery, Skill Development, Evaluation, High Schools
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Chapter I: Introduction

Statement of the Problem

Currently, in the state of New Jersey, there is a need to develop assessment strategies that display student achievement to people who are not specifically trained in the performing arts. Teacher evaluation criteria are being changed to include the use of student growth data to display teacher effectiveness. It is my intent to research effective strategies currently being used by practitioners in instrumental music to demonstrate how they assess and present student growth in the subject matter to anyone. A great disparity has developed in the performing arts education that children receive throughout their school careers. The availability and quality of instruction in this area vary greatly among school districts. Some provide high quality instruction in all areas of the arts while other districts provide none at all. Unlike many other disciplines, such as mathematics or English Language Arts, standardized tests do not exist in this area and teachers must create their own assessment that communicates student growth.

The intent of this study is to examine the use of assessments used by instrumental music teachers at three different sites with performing ensembles that achieve high ratings at state festivals. Through the completion of this multi-site case study, a collection of best practices in assessment as developed and practiced by three highly respected band directors can be shared with others for potential use or adaptation.

Kirkland and Manning (2011) assert that art and music teachers in low performing districts have been replaced by teachers of “core academic” subjects (p. 285). This is a manifestation of the larger problem caused by a lack of adequate assessment strategies in performing arts education. Lake and Jackson (2013) assert that the performing arts provide insights into assessment strategies in other disciplines (p. 11). If a clear strategy for assessment
in this area existed, the general public would be able to identify the correlation between high performing arts education and the other academic subject areas. Baum, Oreck, and Owen (2003) state there is a lack of valid, research based methods of assessment in the performing arts. Cole and Ruth (1997) found that in order to utilize portfolio assessment in schools our teachers need to be extensively trained and the criteria used to evaluate them Towels-Reeves and Einhart (2009) state there is a significant gap in in the ability to provide alternative assessment strategies for students. School districts have long justified cuts in performing arts education by using data on other subjects leaving those of us in the performing arts at a disadvantage due to the lack of quantifiable student growth data that can show a correlation between student achievement. In a different study, Hampshire and Matthijsse (2007) show that students that participated in a choral program displayed a higher level of social and emotional well-being than their peers. Students that study music and are exposed to quality programs are taught valuable life lessons that carry over to the rest of their lives. In today’s society it is important to ensure access to quality programs to all of our students.

This problem of practice is pertinent to the members of my district’s performing arts department as there are currently seven faculty members teaching in five different schools. This creates a need for standardized assessment to display appropriate student growth in each of our school buildings. If a system of student assessment were in place, administrators would also be able to see where our program has deficits and in turn can work together to address them. It may also assist the faculty in identifying causes of the lack of student achievement in instrumental music as well, such as, limited resources, materials, staffing and the like. This problem has implications to all teachers in that it will allow all of them to show growth to parents, school boards, administrators, and community members.
Significance of Research Problem

This research has significance both locally and globally within the educational community. There have been many problems created with the lack of an effective assessment strategy for performing arts students lack of teacher accountability, unreliable data, and the loss of many programs are just some of them. For many years the arts have been seen as extra pieces to the curricular puzzle and not as a core component. This could be in part due to the lack of data regarding student performance in the arts showing student growth. If there were a system of more objective assessment strategies and a well-written curriculum there would be much more teacher accountability and data available for the general public to review. If a more objective system of assessment in place educators could potentially use this data to show correlation between successes in the area of music to the success a child experiences in other disciplines.

The New Jersey Department of Education states on their Achieve NJ website that current evaluations tend to be perfunctory, subjective, and do not positively impact teaching or learning (New Jersey Department of Education, 2014). They propose that through the creation of valid Student Growth Objectives this will have a positive impact on both teaching and learning. In our district we just completed the process of creating Student Growth Objectives and have administered teacher created assessments. The data from these assessments will be collected and analyzed and each teacher will be given a rating at the end of the year based on how their students completed the objective that was written for them. Unfortunately, not much guidance was provided to teachers of non-tested areas, such as music, art, and foreign language. These teachers were left to create assessments entirely on their own. The faculty were all allowed to create their own objective and only had to administer one to their class. This objective could be completely subjective and assess students on any singular part of the teacher’s curriculum. It is
my intent through further studying the literature to uncover strategies for assessment in the performing arts that are valid and less subjective. This would help all of our music teachers as they assist students to acquire the skills they need to be successful as they move on past K-12 education and into higher education or into the workforce by creating assessments that have value in the real world.

**Positionality Statement**

When looking at positionality it is important to understand that one’s own life experiences have an impact on how we interpret research as well as the conclusions that we draw. Parsons (2008) states, “As advanced by postmodern and feminist thinkers, positionality is a concept that acknowledges the complex and relational roles of race, class, gender, and other socially constructed identifiers in being” (p. 1129). This concept of positionality is integral to research, as your audience needs to consider you unbiased on the topic for conclusions to be validated.

As a teacher I have had the opportunity to work at all levels from pre-kindergarten through twelfth grade it has offered me a very unique perspective that many of my colleagues do not possess. Currently, the state department of education in New Jersey is overhauling teacher evaluation for all professional staff members. On the Achieve NJ website it states that all teachers in related arts and other non-tested subject areas now have to develop their own assessments and student growth objectives in order to show student progress (New Jersey Department of Education, 2014). This data will then be used to evaluate the teacher as part of their annual performance reviews and ultimately will determine whether a teacher is to be re-hired, receive tenure, or be let go. As a high school teacher, I am very excited to see these objectives instituted especially in our areas that are un-tested by the state. Will the use of these
student growth objectives and assessments have a positive impact on student learning? Will our students in the instrumental music department be better equipped to succeed at the secondary and post-secondary level? How exactly should these objectives be structured in order to ensure student success?

It is important as I assist other teachers in creating these goals that I separate myself from my position as teacher at the high school level while assisting them in developing goals and objectives for their students that will benefit their students the most effectively. From my position as high school band director I know what I would like students to know as they enter my classroom, however, sometimes it is not possible for students to have achieved all of the objectives I would have liked them to throughout their playing career. Briscoe (2005) argues for a more inclusive representation of the other. “Based on historical evidence, an author’s demographic is a cause for suspicion but not grounds for indictment.” (p. 38) Briscoe’s advocates for an inclusive approach to researching. This would certainly be true with my topic as it is easy for me to take a biased standpoint without taking into consideration the needs of students at the lower levels. Having input from teachers of other disciplines that work at those levels would also prove to be very useful to the problem with which I am working.

The New Jersey State Department of Education helped guide my proposed research topic. There are many implications for the creation of the required student growth objectives. In our school district there are approximately thirty staff members delivering instruction in non-tested related arts disciplines that all need to create methods of showing student growth over time. So far I have spent a total of ten years in public education teaching various areas of music both instrumental and vocal at all levels. My experience comes solely from working in the public school systems of New Jersey. In our department there is no supervisor but often it is the two
high school staff members, myself and our choir director, that are looked at as the “heads” of the department. It is my goal to examine the research available on portfolio assessment strategies and the development of SMART goals to bolster student achievement in the related arts department to create students that are much better equipped to handle the tasks that will be presented to them as they grow. Both of these strategies when used in conjunction with each other allow for the ability to show student growth over the course of time. On the Creating SMART goals website SMART goals are defined as being specific, measurable, attainable, realistic and timely. Through the use of these goals it should not be difficult to show student growth and provide students with an educational experience that they can help guide.

My positionality will certainly influence how I view the research that I will complete in this area as my experience so far is what has guided me throughout my career. It is my hope through my research to develop best practice strategies for our classroom in the areas of related arts to ensure quality education for our children but also to assist teachers in displaying student growth to administrators, parents, and community members. Jupp (2006) states “As educators, we are constantly working within and against commonsense thinking, trying to enable educators to enable others because the ways we understand and articulate differences represent historical and social practices that, ultimately, describe and constitute ways we live together” (p. 212).

There are many differences between the levels in education as well as between the teachers that deliver the instruction. These all need to be taken into account when drawing conclusions that will ultimately shape the way we deliver instruction. I often have trouble with administrators that are “too far removed” from the classroom and question whether or not they remember what it was like to be a teacher or even a student. In speaking with colleagues, this topic comes up quite often when they are critiqued or offered suggestions for improvement. Positionality is not
something that solely affects research or researchers positionality can also have an effect on supervisor’s or other administrators whether it is in schools or other areas where people are evaluated. In conclusion, positionality is the lens through which the world around us is viewed. It is important for all people to be aware of their positionality and use that knowledge to make decisions. A person’s point of view has the ability to be very narrow if they do not step back to take a look at the picture as a whole.

**Research Questions**

The three research questions guiding this investigation are as follows:

1. What forms of assessment are being utilized by band directors?
2. How are these assessments useful to the instructor as perceived by band directors?
3. How do these assessments benefit students, parents, and the educational community as perceived by band directors?

**Theoretical Framework**

The Learning for Mastery framework introduced by Bloom (1968) is the appropriate lens for this study. The learning for mastery framework is derived from the work of Carroll (1963). Carroll devised a model in which students were given the time they needed to master a certain skill or concept. This effectively made time the variable in the equation as opposed to the constant that our educational system usually defines it as. In order for the mastery framework to be effective students must be given the time they need to allow skills to develop. This becomes effective in the instrumental music classroom as students typically study a musical instrument over the course of nine years, if they begin as a fourth grade student and continue through high school.
The learning for Mastery framework deals directly with students mastering concepts as presented in a specific order. Bloom (1968) states “Most students (perhaps over 90 percent) can master what we have to teach them, and it is the task of instruction to find the means which will enable our students to master the subject under consideration” (p. 1). That statement was found to be true then and still applies to our students today. In order to move on to the next level of study students must display that they have mastered the previous content to show they are ready. Students that do not achieve mastery continue to work on the skill until they are ready to move on. The curriculum of music is spiral in nature, meaning that skills are constantly being reinforced throughout the career of a musician and as they progress they are expected to demonstrate these skills at higher levels of achievement. In the creation of assessments and student growth objectives, teachers are required to develop assessment criteria that show the level of mastery of each and every student enrolled in their classes. The display of mastery depends on several criteria that teachers are responsible for creating: the learning environment, the means in which assessments are presented, and the assessments used are a few.

Bloom (1968) goes on to discuss the impact of displaying mastery has on a student’s future learning and the level of confidence it creates. This lens works for this study as it introduces this concept of skill mastery into the equation and will allow data regarding current student assessments to be viewed in this light by putting director responses in context. It will create the ability to analyze interview responses regarding director’s feelings on assessment and how they feel these assessments benefit students over the course of their academic career and how they allow the director to see skill development as it relates to mastery. In the performing arts, and specifically music, mastery is expected of our students. For music students to perform a piece of music in public their knowledge and understanding of both the music and their
individual instruments must be of a high level. As an instrumental music teacher assessing mastery of different skills is necessary throughout the playing career of a student to ensure a student is prepared to move on to study at the next level. Many teachers depend on this type of assessment to place students into appropriate ensembles that will meet their individual performance needs.

Romiszowski (1981) discusses the learning for mastery model and contends that it is different from traditional models suggesting that the aptitude of a student does not necessarily affect their learning outcome. Romiszowski goes on to explain that is students are distributed appropriately that mastery is can be achieved. Whiting (1995) studied the effects of mastery learning on student learning outcomes over the course of 36 semesters. This study showed that student achievement was consistently high in courses utilizing the teaching for mastery approach. Arlin (1984) concluded in his study that time is a necessary consideration in the mastery learning approach as students learn at different rates. Arlin (1984) raised concerns regarding the amount of time given to students of heterogeneous groupings as students that move quickly were actually given too much time. Adeyami (2007) revealed that students who were taught in the mastery approach outperformed their counterparts that were taught using standard teaching methods showing that learning for mastery is still relevant to the educational community today and when mastery teaching is utilized in the classroom students still benefit greatly.

In summation music teachers regularly utilize the concept of mastery learning, as it is the fundamental structure of an instrumental music program. Mastery is required of students in order to perform publically and demonstrate musical ability. There are many seminal works utilizing this framework as it applies to educational assessment that have helped advance its
application. This lens is particularly helpful when looking at how instrumental music teachers
grade their students and assess their ability to move forward in the study of music.
Chapter II: Literature Review

In this literature review the researcher provides an overview of the research regarding the variety of assessment strategies have been examined for validity in application to the instrumental music. It has been shown that many different strategies can be applied to instrumental music education to display student growth and achievement. Through the creation of a valid system of assessment education in the instrumental music can be sustained and improved on for all students. The following topics will be presented: Portfolio Assessments, Alternative Self-Assessments, and Computer Assessments. Throughout this literature review it is my intent to review relevant material related to assessment strategies in the performing arts in the attempt to find viable options to apply to the instrumental music. The non-performing arts disciplines have far more information pertaining to assessment strategies than music and art. Therefore, for the purpose of this review the researcher has included articles published pertaining to successful assessment strategies in all disciplines.

Assessment Strategies

In 2010, Remesal completed a study on the perspectives of elementary and secondary teachers on the concept of assessment and its importance in our classrooms. Remesal (2010) asserted that practice was directly linked to a teacher’s perspective on assessment. Depending on how the school or the teacher practiced assessment influenced their view of how assessment should be used. Remesal (2010) highlights the difference between student accreditation and teacher accountability. This article presents some interesting ideas for my ideas about assessment in the instrumental music classrooms. Since a teacher’s perspective on assessment can be linked to their current practice of assessment, it would make sense to extrapolate that a teacher’s practice of assessment can be linked to how they were assessed as a student.
Shiqi and Hao (2013) state that the manner in which assessments are conducted have an influential outcome on learning outcomes for students. Shiqi and Hao (2013) go on to describe their study in which they compared assessment strategies to student learning outcomes in fourth grade literacy objectives. Language arts literacy skills are directly relational to the skills required in the music classrooms, as the same decoding skills are present in both disciplines. The different types of assessment strategies used and their effect on student learning. Through their study they found that American teachers spent more time and effort using traditional paper and pencil assessment strategies than their colleagues in England who tended to use more oral activities to assess student learning. American teachers also opted for the multiple-choice option of assessment more often than their overseas counterparts. Overall the results presented were inconclusive regarding the types of assessment strategies used and student achievement and more research needs to be completed in this area.

Music assessments should model these various types of assessments, as they would certainly apply to the type of learning that these students would encounter. Not only would they be effective in music classroom but they can certainly be applied to the other instrumental music as well. Multiple choice testing strategies can be utilized to decipher student understanding of terms and the historical context of the arts being studied. Performance and oral strategies are used almost daily in an effective instrumental music classroom and are excellent gauges of student achievement if a proper rubric and grading criteria are in place for both students and teachers to understand the quality of the work being presented. It is with the use of true quality assessments in the instrumental music classrooms that students will excel and prosper.
Portfolio Assessments

When used properly, portfolio-based assessment can be used in various disciplines to show student growth and mastery of skills and techniques. The development of a student’s skills is essential to development and the growth process in the educational environment. Through the use of portfolios students can display their level of attainment of certain objectives and materials. Wolfe (1997) describes the issues surrounding the use of portfolio assessment in high school settings. It was his hope to identify these barriers so teachers who wish to develop these types of assessments on a large scale can find it easier to do so. The biggest barrier identified by this study was the amount of time it would take teachers to develop these assessments. Portfolio based assessment certainly does take a considerable amount of time to put in place, however, once a portfolio assessment system is in place it is highly effective and easily manipulated from year to year to meet the needs of all students and the changing standards that are in place in our nation’s classrooms. Wolfe (1997) goes on to explain that portfolio based assessment can be combined with many different styles of assessment to create an overall picture of a child’s growth and knowledge base. This type of assessment can easily be passed from one grade level to the next to assess student skill levels prior to the start of an academic year. This style of assessment can be implemented in all disciplines to show achievement to the public and administrators alike and certainly has a place in the instrumental music as an essential assessment technique.

Portfolio based assessment cannot only be used with student assessment but also teacher assessment. Quality teacher assessment creates excellent learning atmospheres for students and encourages high quality learning to take place in our classrooms. Van der Schaaf, Stokking, M and Verloop, N. (2008) describe the relationship between teacher beliefs and behaviors in
portfolio assessment. They conclude that their study was inconclusive regarding the correlation between the two was mixed and without further study they were unable to prove such a correlation existed. It is fair to extrapolate, however, that student’s benefit from teachers that have a favorable attitude towards portfolio assessment. Van der Schaffa et al. (2008) advocate that when developing the portfolio assessment a list of behaviors and objectives to be completed by teacher or student needs to be created so all are aware of how they are being assessed. These types of real world performance based assessments are integral to the learning process. They are especially beneficial in the assessment of non-concrete subject matters such as the art of teaching and even performing art as well. This study does show that in order for this type of assessment to be effective a favorable view of the type of assessment needs to exist. This favorable view of the assessment can be created by quelling any of the fears regarding it by making sure all questions are answered prior to implementation. Students and teacher alike need to be on the same page as far as assessment to ensure effective results.

According to Cole (2007), for portfolio assessment to be valid teachers must be skilled in the creation, evaluation and maintenance of student portfolios. Teachers must be allowed to practice these strategies once they have been taught in order to engage students in meaningful portfolio assessment. Portfolio assessment is not only concerned with the assessing of student abilities but also with the skills and outcomes that students will achieve. These documents need to be treated as continually developing throughout the course of a child’s educational career in order to guide instruction and assessment. These documents when passed on throughout their educational experience serve as a guide for curriculum and instruction. The information contained in these documents when created properly is invaluable in determining learning objectives for subsequent years. Skill building is encouraged and shown throughout the life of
the portfolio. This style of assessment encourages all children to participate in their education not just our top performing students and if utilized correctly will encourage them to continue their growth at their own pace throughout their elementary and secondary experiences.

Wortham (2005) defines meaningful portfolio assessment strategies. Wortham (2005) says that educators must make an honest effort to embrace exactly what it is that portfolio assessment seeks to accomplish. It is easy to use portfolio assessment in a classroom without actually accomplishing any of the goals that it sets forth to achieve. The concept of maintain student growth objectives and finding ways for each child to display their own personal growth needs to be maintained throughout the process in order to maintain its validity. Wortham (2005) goes on to explain that the portfolio itself needs to be an accurate picture of a child’s level of achievement as it pertains to their classroom environment. The amount of guidance provided prior to the implementation of such portfolios is integral to their success. Teachers and students alike all need to be educated on how to use this type of assessment and to its meaning. Portfolio assessment is focused on student growth more so than mastery of skills as opposed to the standardized tests that all students have been exposed to. The level of fear involved with high stakes standardized tests is not present in portfolio assessment since the goal is displaying growth and not mastery. This is a very difficult concept for students and teachers to understand as typically mastery has always been the objective. Student and teacher experience have a huge impact on the quality of portfolio assessment in all disciplines. In instrumental music portfolios are increasingly popular as it allows students to collect artifacts, recordings, and other meaningful items for them to use to guide their own personal instruction in the arts. The arts itself are all a very personal experience in terms of growth as students all have very different
skill sets and in an effective environment they set their own goals for growth and help develop a plan to achieve those goals.

Driessen (2005) asserts that the creating portfolio assessments that are less subjective is possible. In the medical setting the need for accurate assessment that is not subjective is a necessity. Throughout the article a method is described that entails mentor review of portfolios twice a year and a committee to review the portfolios to assign a grade for the students learning. As part of the study 233 portfolios were reviewed and only in three percent of cases there was disagreement on the grade a portfolio should be given. The article argues for the use of a large number of raters to maintain validity of grades assigned. The philosophy behind this is that the greater the number of raters the more important their agreement becomes. By having more individuals rating agree the score assigned is to be considered more valid than if only a few raters were to participate. Driessen (2005) explains that subjectivity does not necessarily equal unreliability and this can be overcome by the presence of multiple raters. This type of approach would certainly be largely beneficial if the time were allotted for its adequate implementation. They also present a flow chart to explain the process as would be required in their particular setting.

Harris (2009) argues that the use of portfolio assessment is highly useful in communicating with parents if they are managed effectively. This article focuses on the impact of using portfolios in the early childhood classroom to demonstrate student attainment of necessary skills. At that age learning is truly subjective as the skills being taught are not assessable by any standardized pen and pencil test as most of the students are still learning how to hold a pen or a pencil. The skills developed in this classroom need to be assessed in the style of portfolios and through the collection of artifacts to demonstrate what skills the children have
acquired. At this level the concept of pre and post tests could be easily used, for example, a child could write their name on the first day of school and then again on the last day of school. Harris implies that this is a great artifact to include in a child portfolio to display fine motor skill development over the course of the school year. Student development is easy to document if they complete basic tasks throughout the year and document the outcomes. As students develop both physically and mentally, the outcomes will show growth of some sort. The rate at which children grow will vary and the portfolio and artifacts contained in it will assist in the guiding of their instruction.

Chang and Tseng (2009) explore the effect of web-based portfolios on student achievement in their study. The use of web-based portfolios definitely aids in communication with both parents and students about their progress, but, it also creates a much more permanent portfolio as the artifacts can be held on to for practically forever. They conducted a study using two separate groups of students chosen from a high school computer class. They concluded that the use of the web-based portfolios had a marked effect on the group that used them. The study was geared specifically toward a high school computer applications class, however, if a web-based portfolio were designed for courses in other disciplines a similar conclusion could be drawn. The use of these web-based portfolios makes peer assessment so much easier as well as improves the self-assessment process. In instrumental music students can be asked to anonymously assess both their own work and the works of others. The feedback received from peer assessment can be invaluable to other students as it is much easier for them to relate to each other than it is for them to take suggestions from the teacher. Web-based portfolio assessment also allows for the creation of student resumes that can go with them to college or beyond. It can contain recordings of students’ performances throughout the years and can easily be utilized
during the college audition process. This would create a virtual scrap book of a child’s successes and growth over the course of their study. The integration of peer assessment is an invaluable tool as an educator as it would be extremely helpful for a teacher to know if their assessments match those of their students. If the assessments match that could be a case for greater validity of the assessment itself.

Many educators throughout the course of the last few decades have used portfolio assessment. Krueger and Wallace (1996) offer many suggestions for the implementation of portfolio assessment to science teachers. They explain that it is important to have explicit purposes for the creation of these assessment portfolios they are not merely a collection of student work. They state that a big part of the process is to allocate enough time for students to work on their portfolios and to allow for time to conference with them regarding their progress. They assert that a large impact this type of assessment has is the creation of students who are reflective on their progress. This creates students who will be more successful and conscientious, as they will tend to reflect on things that they do in all areas of their life. Through the portfolio design process it is important to teach students how to reflect on their own progress and how to document their progress for others to see. The portfolio process can also be used for students to create their own goals as they move forward in their educational career that they will be able to assess on their own. This type of self-assessment is the most valuable, as I strongly believe it is our job as educators to create lifelong learners that can think and create independently of their teachers.

Gorlewski’s (2010) presents the ideas on the under use of portfolios and discusses ideas about how students discard valuable at the end of each year. Students discard valuable material at the end of each year that can easily be used to show their own personal growth not to mention
the value of that material to their future educational endeavors. Gorlewski’s (2010) article focuses on English language arts assessment and the collection of data to assist in assessment strategies. Gorlewski (2010) discusses the implementation of a program to collect students writing artifacts to display growth. They actually took the approach of collecting all students writing work in grades seven through twelve. Gorlewski (2010) suggests through the review of these portfolios an administrator can gather data about their language arts programs to guide future instruction. Gorlewski (2010) goes on to discuss how integral it is to collect this type of data and review it to ensure that students have a truly valuable learning experience. Student self-assessment was also incorporated into their portfolio project to integrate students’ own views of their growth into the process. These types of portfolios if maintained and reviewed periodically are valuable to all disciplines. The collection of student artifacts can be displayed to others so they can assess the value of the programs in their schools. Artifacts and portfolios of this nature are very useful in curriculum development and the creation of future student growth objectives.

There are many ways in which portfolios can be utilized in the music classroom to capture student progress. Silveira (2013) defines a portfolio as a purposeful collection of a student’s efforts, progress, and achievements. Through the process of creating the portfolio, a student can map out his or her own progress over the course of time. In this article the use of making recordings and subsequently having students assess the quality of their own performance is presented as part of the portfolio process. In order to strengthen the portfolio teachers can use computer programs such as Smart Music to provide students with immediate objective feedback. The students receive a percentage score as soon as they complete the assignment based on the number of correct notes and rhythms they perform. The program also collects this data and maintains recordings of all submission for students and teachers to review at a later time.
Portfolios in music can be a strong way to assess student skills in objective areas such as rhythm and pitches.

**Use of Alternative and Self-Assessments**

Chang, Liang, and Chen (2013) discuss alternative assessment and what has been learned since 2003 the authors take a look at the current literature regarding alternative forms of student assessment. These alternate assessments exist for a specific population; however, the ideas they raise regarding alternative assessment are certainly applicable to the non-standardized tested subject areas. They outline the three currently used forms of alternative assessment, portfolio, performance and checklist. In the end they conclude that more research needs to be done on the effect of alternative assessment on the child and raise several issues as it relates to federal regulations surrounding student assessment. A large obstacle that is faced in the educational arena is consistency the amount of time it takes to evaluate the effectiveness of any educational initiative is too long for any one administration to see and sadly the pendulum tends to swing with each and every administration that takes office at both the state and federal levels. They do state that there are still significant gaps in the research to provide anyone with proof that alternate assessment works. This is not surprising considering the amount of time it takes to evaluate a child’s ability to be successful. The educational career of a child is at the very least 13 years long and no initiative can be evaluated in that limited time.

**Computer Assessments**

Chang et al. (2013) completed a study on the validity of student self-assessment in web-based portfolios where they concluded that student self-assessment when done properly was valid and matched the teacher assessment. They used an end of course assessment and compared it with the students’ own self-assessment and they determined that the assessments results
matched therefore proving reliability of student self-assessment. Through the self-assessment process students are much more likely to identify deficiencies that a teacher may not. This process of self-evaluation is incredibly useful in achieving student growth. Through the use of carefully crafted rubrics that students can understand the ability of the student to assess themselves is greater. Rubrics are nothing new to the world of education and have been used for years in order to gauge student achievement and guide the intended outcomes. They did note that in order to truly determine the validity of self-assessment a longer time period would be required for the study. However, the fact that they were able to prove validity with student self-assessment is a huge breakthrough for the use of these portfolios in classrooms.

Timmers, Braber-van den Broek, and van den Berg (2013) examine computer based formative assessment and student behavior towards feedback as well as their beliefs and motivation. They looked at how often students sought out feedback and how long they actually spent processing that feedback. They concluded that some of the aspects were too difficult to observe given the time frame of the study. Student motivation is incredibly difficult to observe and can change depending on the task being performed or the topic being studied. Even within a discipline in which students enjoy there are specific topics that a student may or may not be intrinsically motivated. They did determine that students that regularly sought feedback did perform better on formative assessments. The process in which students seek feedback could constitute student motivation towards learning; however, the study does not identify that as a contributing factor. The concept of both giving and receiving regular feedback is particularly useful to the instrumental music as students that regularly seek out feedback from the teacher do experience a higher rate of success. Utilizing the concept of feedback is integral to the student assessment process and can certainly be utilized in portfolio assessment to create students that
take an active role in their education. Students can incorporate teacher feedback into their goal creation and the assessment of those goals. Bryce and Wu (1994) argue for the creation and use of computer-interactive assessments in music. The use of computer assessments will make the sharing of data efficient and reliable among the music community.

Parkes (2010) describes the difficulty of assessment in the higher education setting within the confines of the music studio. Parkes (2010) focuses on applied music teaching, which is typically one on one and looks to describe quality ways of assessing student achievement. Parkes (2010) states that written assessments are not applicable to the instrumental music studio and it is important for us to take the strategies developed by our colleagues to develop quality assessments in our studios, within the article she presents a rubric that can be used by both the teacher and the performer to assess performance. To expand on this rubric the use of recordings can be used to have students assess themselves to ensure validity between student and teacher evaluation. Having students use the rubric to assess them will also show whether or not the student truly understands the concepts being taught in the studio through their lessons. The terminology in the rubric needs to be understood by the students and they will be able to display that understanding if they can adequately evaluate themselves. This article really highlights the ability of applying assessment strategies from other disciplines into the instrumental music curriculum effectively. By doing so it makes the ability to share data with non-performing artists possible.

Schuler (2012) states that the most important reason teachers assess is to increase levels of student performance. Schuler (2012) also states that the primary purpose of assessment is to improve student learning, improve teaching create better programs and inform stakeholders. By increasing stakeholder awareness of the results of a music program teachers will only garner
more support from the general public, which will allow for a better support network when your program is in danger. Schuler (2012) presents the idea that in order for students to improve they need accurate feedback on how they are doing as well as what they need to address to move forward. Schuler (2012) also focuses on how teachers can use assessment in order to better themselves. Schuler (2012) states that all good teachers realize the importance of assessment and make it their responsibility to improve their student’s quality of work. Schuler (2012) notes the importance of participating in reflective practice in order to take a look at areas in which the teacher could make learning more meaningful. The major implication presented for teachers is the need for everyone to view assessments as necessary to the educational process and use the collected data ultimately to drive the instruction of their classrooms. Grading is not the most important reason for assessments, however, student achievement is.

Hale and Green (2011) present various ideas in their article on key principles in music assessment. They present a backwards design model for curriculum design which begins with creating the assessments around the skills the teacher would like students to gain by the end of a period of time. Targeting the end result assists teacher with keeping instruction on task and ultimately serves the student best. They go on to explain that effective instruction contains assessments throughout the instructional process and allows time for students to assess themselves. They conclude that teachers should view assessments as ongoing and skill based to have the greatest benefit to the student.

There are many ways to assess students in instrumental music that will benefit both students and teachers. Asmus (1999) asserts that assessment is an integral part of the instructional process that provides valuable information to students and teachers. Asmus (1999) outlines three factors that are inherent in all music instruction as content and process, ongoing
assessment, and outcome of instruction. Assessing the outcomes of student instruction is an area that can be focused on to allow non-subjectivity. Asmus (1999) advocates for the use of rubrics in music assessments that are easily understood by all and can be used within the confines of class time. For this a rating scale would need to be developed by the teacher and explained to students so it can be used as a self-assessment tool as well.

With the creation of the Race to the Top program assessment in all areas takes the spotlight as a way to gauge teacher effectiveness. There is now increasing importance being placed on the outcomes of classroom instruction and their assessment. Perrine (2013) details an initiative in Florida as part of this program. A group of arts administrators actually developed a system of standardized assessments as part of a collaborative effort. As part of this process they asked teachers to submit questions for the assessment that center around state prescribed benchmarks. The state paid a stipend of fifty dollars per question submitted and accepted for use on the exam. The largest issue, however, with this assessment to instrumental music is the lack of authentic assessments based on student performance. In order for an assessment like this to be useful and meaningful it would need to include a student performance component where a student would need to perform on an instrument.

Through the development of assessments in all areas both teachers and students should exercise care to develop rubrics that will be easily understood and used. A well designed rubric not only improves the objectivity but also serves as documentation of a student progress. Rubrics have many benefits to students and teachers such as providing tangible measures of achievement, quantitative means of assessment, and a clear way of implementing standards. Wesolowski (2012). In order to develop a quality rubric a teacher must begin with a skill that a student should have acquired through the course of instruction. The rubric that is designed
should be clear enough so that multiple teachers can utilize it in their classrooms without extra instruction from the creator.

**Summary**

Through the course of this literature review it has been shown that it is quite possible to incorporate a multitude of strategies that exist in other disciplines into instrumental music to strengthen the assessment process. There are many different ways to show student growth in the discipline as well as being possible to remove some of the subjectivity from the assessment process. Through the use of adequate assessment strategies our instrumental music teachers will be able to display student growth to their communities in an effort to show the quality of their programs. Effective assessment systems provide teachers with information that enables them to provide better instruction. If teachers can develop a valid instrument to assess instrumental music students the defending of our programs as a part of the core curriculum of all students will become easier as we will have quantifiable data to prove the success of our programs similar to our colleagues in other areas. The process of student assessment cannot be overlooked in any discipline, as assessment is integral to the learning process and if implemented correctly can be used as learning tools as well. Through the development of a system of assessment in the instrumental music administrators will have the ability to effectively evaluate their programs even in areas, which they are not considered an expert. Through the course of creating these assessments students will be able to assess themselves without concern to the competitive arena of music.
Chapter III: Methodology

Research Questions

The research questions guiding this study are as follows:

4. What forms of assessments are being utilized by band teachers to guide student performance and provide them with adequate feedback for growth?

5. How are these assessments useful, as perceived by these band directors?

6. How do these assessments benefit their students, as perceived by band directors?

In order to answer the research questions the best-suited methodology was to conduct the research as a multi-site qualitative study. Creswell (2007) defines a case study as a variation of an ethnography in that the researcher provides an in-depth exploration of a bounded system based on data collection. By utilizing this methodology it enabled the researcher to take an in-depth look at three different sites and the ways that band directors incorporate individual student assessment into their programs. In addition to the conducting of interviews, a document review was also conducted to gather data from the assessments that are being used in their classrooms.

Methodology

This study was qualitative in design as the intent was to uncover information regarding methods of assessments currently being used by high school band directors. By conducting a qualitative study it enabled the researcher to identify current practices used by high school instrumental music teachers as it relates to assessments in the instrumental music field that other practitioners may be able to use in their own classrooms, which in turn, supports student success. Cresswell (2012) explains a qualitative study as an inquiry method useful for exploring and describing trends around a certain phenomenon. The nature of the data collected lent itself to being conducted as a qualitative study as the data collected required the use of multiple data
collection sites and the answers to rather broad questions regarding the use of assessment in the instrumental music classroom. This research collected data from three band directors regarding the use of assessment in their classrooms and how they perceive the effect it has on their groups. The data was collected through the use of interviews and document collection to organize the data into common themes for analysis. Butin (2010) explains the differences between several different dissertation components and goes on to explain that if the research purpose is explorative such as this study then the methodology should be primarily qualitative. The purpose of this study was to explore current trends in instrumental music assessment, therefore, a qualitative study worked best to effectively collect the available data. Yin (2009) suggests that the multiple case study design uses the logic of replication, in which the researcher replicates the procedures for each case. The researcher used identical interview protocols for each case in the attempt to create this replication and maintain continuity of procedures to collect appropriate data. He also states that the context of the cases will differ and making generalizations amongst them will be difficult. The purpose of this research was to identify common trends amongst different sites and not necessarily to make any generalizations regarding instrumental music assessment.

**Participants**

The participants in this study were band directors from three different schools in New Jersey with ensembles that regularly attend concert band festivals sanctioned by the state music educators association. The purpose of this study was to determine which assessment practices are being used by successful programs. The only standard for group assessment available for comparison is performance at region concert band festivals held in the state. These festivals are held in each of the three regions where high school concert bands are adjudicated by experts in
the field of music education and rated accordingly. By using scoring data available from these festivals it enabled the researcher to compare scores using a common set of criteria.

**Recruitment and Access**

In order to recruit sites the researcher contacted each school’s band director via email to ask for their participation and willingness to participate in an interview and the study. If there was no reply to the initial email after one week a phone call was made to speak with the potential band directors. All individual student data was collected anonymously without the use of any names or other identifying criteria. Special care was taken to ensure anonymity of all student assessment data.

**Data Collection**

The data required for this study consisted of interviews conducted with each participating director via videophone call. Interviews lasted between 50-75 minutes at a time that was convenient for the band directors and allow the directors to elaborate on their views of assessments and how they are utilized in their programs. Questions were asked to solicit director’s views on how their use of assessment specifically benefit their students. Interviews were recorded in order to transcribe them after they were completed.

**Data Storage**

Data will be stored until completion of the research study. Recordings of interviews will be maintained in a secure location on the researcher’s personal laptop computer that requires a password to access. The recordings were used to create transcripts and all interviewees are referred to by a pseudonym to maintain privacy and confidentiality. All documents collected are being maintained electronically in order to be utilized for any future research studies.
Data Analysis

After the interviews were transcribed they were organized into common themes using the process of value coding. Johnny Saldana (2013) explains, “Values coding is the application of codes onto qualitative data that reflect a participant’s values, attitudes, and beliefs representing his or her perspectives or world-view.” Through the process of values coding interview data was collected via the use of an interview protocol. Each director answered the same set of questions in an attempt to look for similar themes. The first step was to consolidate the themes into a chart and organize responses by assigning codes. The codes are short and represent a value, attitude, or a belief. Once these codes were assigned to the responses and they were organized into their values, attitudes, and beliefs the researcher looked for any commonalities that occurred between the three sites and organized into a chart.

For the process of coding the researcher will utilize the following steps presented by Creswell (2007)

1. Conduct a thorough review of all transcripts making any necessary notes in the margins.

2. Using one of the documents look at the responses looking for the underlying meaning behind what the person is saying.

3. Create a series of codes making use of any notes created through the review of the transcripts.

4. Make a list of all code words and group together in an effort to reduce the number of codes present.

5. Use the newly shortened list and review the transcripts for any specific quotes that support use of the code.
6. Further reduce the list of codes to major themes.

Saldana (2013) states analytic reflection through memoing and assertion development weaves the most salient codes and themes together. Through the reflection on these themes the data collected was organized into the values present. This allowed the researcher to highlight the themes that occurred most frequently in the interview process.

**Trustworthiness**

Creswell (2010) states researchers need to ensure that findings and interpretations are accurate. He suggests doing this by utilizing member checking or triangulation. He goes on to describe member checking as the process of requesting that a participant review the accuracy of the account. In order to ensure the trustworthiness of the data collected an interview protocol was utilized to maintain consistency in the intent of the interview questions. In instances where the subject did not provide enough data to a particular question follow-up questions were used to gather sufficient data to analyze. Questions asked were standardized and written ahead of time to reduce the amount of researcher bias present in the interview process. Following the creation of the interview transcript member checking was utilized by sharing collected information with the participant to ensure accuracy prior to the coding process.

**Protection of Human Subjects**

Participating directors were presented with a consent form to sign prior to being interviewed. Participation in the interview was voluntary and they were permitted not to provide an answer to any particular question. Directors were identified by pseudonyms as to protect the identities of their schools. All notes, recording, and any transcripts of the interviews are being stored in a secure location and will all be maintained for future studies.
Chapter IV: Research Findings

The purpose of this research is to gain insight into assessment strategies used in other areas as they apply to instrumental music as a means to evaluate student learning and teacher effectiveness. Based on the goals of the research proposal, the theoretical framework adopted for the study and the methodology of the study, the following three research questions were developed:

1. What forms of assessment are being utilized by band directors?
2. How are these assessments useful to the instructor as perceived by band directors?
3. How do these assessments benefit students, parents, and the educational community as perceived by band directors?

This chapter is presented with a summary of study sites, participants and data collected, followed by an analysis of the emergent themes discovered in response to each research question.

Data Collection

Data was collected through interviews using a pre-established interview protocol. Each participant completed a phone interview in which a recording was made. From the interview recording a transcript was created and sent to all participants for them to review for accuracy. In addition to the phone interview documents were requested from each site to be reviewed. The collection of the documents allowed the researcher to establish consistency between what was said during the interview and what was done in practice. Each participant provided different types of documents such as the rubric that was used in grading or the portfolio that was used as part of the assessment process.
Summary of Study Sites and Participants

As discussed in chapter three the study consisted of three different high school instrumental music programs that all attend and perform consistently at a high level of achievement at their region concert band festivals in the state of New Jersey. Each school was of similar size and each had multiple faculty members in their instrumental music department. The participation of teachers in this case study was dependent on their willingness to participate and their ability to schedule the one-hour interview. The average years of experience of the teachers included in this study was 25 years. All of the teachers that participated taught in their current schools for at least 12 of those years. Each teacher had various teaching responsibilities as shown in the chart below showing years of experience, years in current assignment, schedule, teaching relationship, number of faculty members and teaching responsibilities. Table 1 provides a summary of years teaching and responsibilities.
Table 1

*Demographic Information in relationship to each Participant*

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Lauren Smith</th>
<th>Melissa Wendt</th>
<th>Kent Thompson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Teaching</td>
<td>30</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>Years in Current Position</td>
<td>12</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>Woodwind Lessons, Wind Ensemble Freshman Band, Music Theory 1, Co-teach Symphonic Band, Freshman Band Chamber Orchestra</td>
<td>Music Theory, AP Music Theory, Symphonic Band, Instrumental Lessons 7th Grade General Music</td>
<td>Instrumental Lessons, Freshman Band, Symphonic Band, Wind Ensemble, AP Music Theory, Guitar, Keyboard</td>
</tr>
<tr>
<td>Schedule</td>
<td>We have a block schedule with an alternate A and B day schedule. We see each class/ensemble for 90 minutes every other day.</td>
<td>Traditional 8 period day</td>
<td>5 Periods per day operates on a rotation</td>
</tr>
<tr>
<td>Consistency</td>
<td>Yes</td>
<td>Yes</td>
<td>Varies year to year based on enrollment</td>
</tr>
<tr>
<td>#Faculty</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Relationship</td>
<td>Mostly Co-Teach</td>
<td>Mostly Individual</td>
<td>Mostly Individual (Co-Teach when possible)</td>
</tr>
</tbody>
</table>

**Lauren.** Lauren started her teaching career in private schools, after eight years of teaching she moved into public education where she has been for the last twenty-two years. She has been in her current school serving as band director for the last twelve years. She is a woodwind specialist and is in charge of all things pertaining to woodwind instruments at her school. Lauren directs the school’s Wind Ensemble that regularly appears at region concert band festivals. That ensemble typically achieves top ratings and performs publically on a regular basis. In addition to directing this ensemble Lauren teaches the school Music Theory I class and co-teaches the orchestra and symphonic bands. She participates regularly in the state
professional organization for music educators and has served as coordinator for several different state level band events.

Through the course of her interview she shared that individual student assessment is absolutely necessary to the educational process. “We assess on a daily basis based on the piece that we are currently working on. It may not be a formal assessment, however, we tell the students if they are progressing toward the finished product at the rate they should be.” She shared that in order to get her students to the end goal it is crucial to keep track of their current status and of the work that still needs to be done to accomplish the goals of the ensemble. Lauren also uses the data that she collects to program for the ensemble and sets goals accordingly for each student. If she finds that students are particularly deficient in a concept she will program material that assists in the teaching of that concept to strengthen the ensemble.

As a result of the rhythmic assessments used with all of their freshman students she can see a marked difference in their ability to read when they move on to the more advanced level ensembles. In response to being asked about the impact assessments have Lauren said “When students get into the upper level bands they are not afraid to read more difficult passages and pieces and work them out on their own. It especially impacts the wind ensemble in their reading. They can take a piece of music and read it to a respectable degree and decide that they really like it.” She also said this provides them the motivation to keep working on more difficult literature.

**Melissa.** Melissa has been teaching at her current school for seventeen years and has a total of nineteen years of teaching experience. She is responsible for directing the school’s symphonic band and has taken them to the region concert band festival consistently earning gold ratings and being selected to perform in the New Jersey State Gala concert. In addition to these responsibilities she also teaches the school’s Music Theory and Advanced Placement Music
Theory courses and seventh grade general music classes at their middle school. There is not much ability to co-teach as all of the teachers in the department have different schedules. When possible she does teach pull out lessons from the Wind Ensemble and another teacher in the department does the same out of her symphonic band.

Melissa uses assessment as a tool to encourage students to practice more on their own and through the use of her assessments she can see growth. She said response to the impact of her assessment practices, “I like using these assessments because they keep the kids practicing and working just a little harder than they might otherwise. It also gives them variety in learning.” She sees assessment as an opportunity to find out what her students need from her as a teacher. She feels that when students know they will be tested on a particular piece of music they prepare just a little bit harder than if they were not going to be tested on it. She has noticed a big difference in quality between the pieces that are available on SmartMusic and those that are not. Melissa also shared that even her classified special education students are able to achieve the goals set for them and perform consistently well on the assessments. SmartMusic is a commercially available piece of software designed to give students immediate feedback on whether or not they performed an exercises or excerpt of music correctly.

**Kent.** Kent had been teaching at his school for the last twenty-one years. Since participating in this study he has retired from his school district and taken a full-time faculty position at an area university. At the time of the study he was the lead instrumental music teacher in his school where he directed all of the school’s bands and co-taught where possible with the schools second instrumental music teacher. He is a Nationally Board Certified teacher and has a Master’s degree in educational leadership. His ensembles consistently appear at the region concert band festival and have been invited to participate in the New Jersey State Gala.
concert numerous times under his direction. In addition to the bands Kent directs he also teaches the school’s music theory courses.

Kent has served the state music educators association in various roles ranging from president of the region to state president. He has also been responsible for running many different programs we offer to students in the region. Kent shared that individual assessment is the centerpiece of their band program as it is crucial to differentiation of instruction on the various instruments of the concert band.

When asked about how he uses assessment to individualize program he said, “I've been doing a portfolio assessment within individual assessments since I started teaching 26 years ago. It's always something that we've been doing and it's even more crucial in instrumental music, I think, than any other music class or even any other academic class because the kids are so diversified on different instruments and pedagogy even within the woodwind family can be so different.” He views assessment as an opportunity for the students to display their skills and to enhance the overall music program. Students work together to achieve success in his program and they all maintain a set of records assessment documents, recordings, scale checklists and various other items. When students leave his program they have a thorough record of their accomplishments and growth over the course of their high school years.

**Research Question 1: What forms of Assessment are being utilized by Band Directors?**

The first research question allows the researcher to look at the different types of assessments currently being utilized by in-service band directors. In addition to standard assessment practices required by individual schools teachers in the state of New Jersey are required to complete a Student Growth Objective for their classes to demonstrate student growth
over time. This SGO is then used to calculate a teacher’s effectivity score as part of their yearly summative evaluation.

Assessments Used

- Portfolio
- Performance (Scale/Sight-reading/Rhythm)
- Self-Assessments
- SmartMusic

Portfolio. Each of the schools utilized the concept of portfolio assessment in some form as a means to record student growth over time. Kent’s schools portfolio system was the most developed and detailed as he included multiple benchmarks for students to strive for during the course of their study. Figure 1 shows the items necessary to complete the first of five benchmarks in Kent’s Portfolio Program. Through the use of portfolio assessment each band director collects artifacts or recordings that demonstrate a student’s learning and growth over the course of time. Melissa uses SmartMusic to keep track of recordings students submit for review. She also uses Edmodo for written assignments such as critiques and reactions, which also keeps record of student work. Kent spoke to the fact that his portfolios have undergone numerous iterations and are changing based on student need. He developed the portfolio assessments based around skill that we needed to be successful in his concert band program. He developed the system based around skill sets that he felt his students needed in order to achieve success.
Performance. All three schools include performance-based assessments to evaluate student progress. As part of the mid-term and final exam process Lauren assesses her students based on rhythmic ability as well as sight-reading and scales. Students complete their mid-term exams in person with the instructor. At Melissa’s school she also uses a mid-term exam assessment based on the audition procedures of the region honor band. Students are evaluated using a rubric on their ability to perform scales, sight-read and a prepared section of a solo.

Self-Assessments. Kent’s school uses student self-assessment on a regular basis as part of the student assessment process. He uses self-assessment to have his students engage in reflective practice and to encourage them to take responsibility for their learning. Students are given a clear rubric to assess themselves as part of the process and all of these items remain in
the student’s portfolio. See Figure 2 for an example of the self-assessment rubric he uses with his students. The other two teachers did not formally use self-assessment in a written format like Kent’s.

![Figure 2. Student self-assessment scale used](image)

**SmartMusic.** SmartMusic software is used at two of the three schools as a means of assessment. This commercially available software assesses students on whether or not notes and rhythms are played correctly and a visual representation as well as a number grade is assigned. Students perform excerpts of band music, scales, rhythmic patterns, or sight-reading and are given immediate feedback from the computer in both visual and numeric formats. The software also maintains recordings of every assignment submitted for teacher and student review. Students are able to listen to their recordings before and after submitting to the teacher for a grade. See Figure 3 for an example assessment given using SmartMusic software. SmartMusic
also generates student grade reports following the submission of assignments with information such as grade earned, amount of time spent on assessment, and date assignment was submitted for review. Figure 4 is an example of a detailed grade report from Smart Music.

![SmartMusic assessment](image1)

**Figure 3.** SmartMusic assessment.

<table>
<thead>
<tr>
<th>Title</th>
<th>Due</th>
<th>Grade</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Exercises (Concert Ab)</td>
<td>Feb 17</td>
<td>B-</td>
<td>80 / 100 80 %</td>
</tr>
<tr>
<td>Submitted: Feb 06</td>
<td></td>
<td></td>
<td>Time Spent: 0.48 minutes</td>
</tr>
<tr>
<td>Technical Exercises (Concert Ab)</td>
<td>Feb 17</td>
<td>B-</td>
<td>81 / 100 81 %</td>
</tr>
<tr>
<td>Submitted: Feb 06</td>
<td></td>
<td></td>
<td>Time Spent: 0.22 minutes</td>
</tr>
<tr>
<td>Technical Exercises (Concert Ab)</td>
<td>Feb 17</td>
<td>C-</td>
<td>71 / 100 71 %</td>
</tr>
<tr>
<td>Submitted: Feb 06</td>
<td></td>
<td></td>
<td>Time Spent: 0.47 minutes</td>
</tr>
</tbody>
</table>

**Figure 4.** SmartMusic progress report excerpt.

Lauren’s school completes most of their assessments either face to face or with the use of recordings graded with a rubric. These recordings can be saved and accessed by a student at any point that they would like to compare samples. Two of the sites utilize the music software SmartMusic, which provides students immediate feedback in the areas of notes and rhythms. This software allows a student to see whether or not they are playing the correct notes and
rhythms but does not assess artistry, such as dynamics, tone quality, phrasing or other more advanced musical concepts. In order to assess these concepts a teacher must create a rubric. SmartMusic itself also maintains the student recordings creating a digital portfolio of student assessment.

Each band director used a variety of assessments that seem to complement each other, as some were subjective in nature to assess concepts such as musicality and general musicianship and others were mostly objective to assess concepts such as notes and rhythms. Not one of the band directors relied solely on one type of assessments, however, the all agreed that assessment should provide students with valuable feedback they could use in the future to progress. All of the assessments that were used can also show growth over time to a student, parents, or other educational colleagues. Each school made use of some type of scale assessment as part of the student’s experience. Rubrics were used to assess more subjective musical concepts such as articulation, intonation, tone quality, and phrasing.

Lauren relies more on an audition type of assessment that are completed annually in which a student plays scales, completes a sight reading exercises and some portion of a solo they have prepared. These assessments are completed as part of a mid-term and a final assessment completed at the middle and end of the school year. Students are given the data after the assessments are completed. This type of assessment is subjective, as the listener has to interpret the students’ performance, however, this assessment allows the band director to give students specific feedback on what to work on as well as how to accomplish it. Throughout the course of the year student’s complete scale objective assignments submitted either face to face or via electronic recording. Most assessments in this program are done on a daily basis as part of the ensemble class to not take too much time away from instruction. Instruction is focused on the
skills needed to complete not only the assessments but also the band literature currently being performed. An example of the rubric used for these performance assessments is included in Figure 5.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scales</td>
<td>Technique - Play correct notes including accidentals, correct fingerings are in place</td>
<td>/20</td>
</tr>
<tr>
<td></td>
<td>Intonation - Able keep sustained pitches in tune</td>
<td>/10</td>
</tr>
<tr>
<td></td>
<td>Tone - Warmth of tone, no overplaying, steady continuous breath</td>
<td>/10</td>
</tr>
<tr>
<td></td>
<td>Scales Total - Additional Comments</td>
<td>/40</td>
</tr>
<tr>
<td>Excerpt</td>
<td>Technique</td>
<td>/20</td>
</tr>
<tr>
<td></td>
<td>Intonation</td>
<td>/10</td>
</tr>
<tr>
<td></td>
<td>Tone</td>
<td>/10</td>
</tr>
<tr>
<td></td>
<td>Solo Total</td>
<td>/40</td>
</tr>
<tr>
<td>Sight Reading</td>
<td>1 2 3</td>
<td>/20</td>
</tr>
<tr>
<td></td>
<td>Total Score</td>
<td>/100</td>
</tr>
</tbody>
</table>

Student Pref: **WE - Yes _____ No _____**

Key: **10/20 - No errors. Very well done.**

Scale based on 10/20 pts.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-7/12-15</td>
<td>Demonstrates knowledge and use of skill, but has more frequent errors.</td>
</tr>
<tr>
<td>4-5/8-11</td>
<td>Skills need improvement throughout. Minimal understanding of concepts.</td>
</tr>
<tr>
<td>2-3/4-7</td>
<td>Unable to play excerpt through in its entirety. Major problems with skills.</td>
</tr>
<tr>
<td>1/3</td>
<td>Unidentifiable</td>
</tr>
</tbody>
</table>

**Figure 5.** Example of rubric used

Melissa uses a variety of assessments throughout the year incorporating the use of available technology. Students use an online blogging site to complete written assignments throughout the course of the year pertaining to vocabulary, YouTube video reactions, post-performance critiques and vocabulary usage. This school also utilizes SmartMusic software for students to complete a variety of scale and band literature assignments throughout the course of
the year. They also utilize an audition type assessment as a mid-term and a final exam in which students perform for one of the faculty members. They receive feedback based on their performance to help guide their individual instruction and to prepare them for state and region auditions. Assignments that are completed are leveled based on individual student ability so each student’s assessments are tiered according to how long they have been in the program on their particular instrument and to their ability level. SmartMusic creates a digital portfolio for the student and the instructor as it maintains student audio files from year to year to establish growth.

As part of the portfolio assessment process being used, Kent Thompson students maintain documents such as self-assessments, lesson attendance records, and scale achievement. Through the use of the portfolio students can see their progress as well as share their own thoughts of their progress or areas of weakness with the band director. Each time a student attends one of their lessons they use the portfolio to document what skills or pieces of music they have worked on in the lesson as well as set goals for future improvement. The portfolio that is created follows the student the whole time they are involved in the program and provides an accurate picture of where the student is in their musical development as well as documents areas of continued growth and improvement. SmartMusic assignments are also tiered to create a model in which students do not feel discouraged and they can all be working independently on different skills that are directly pertinent to them. In Figure 6 you will see an example of the scale assessment sheet used as part of Kent’s portfolios. These scale sheets serve as both a teaching tool and the assessment of learning. Students complete she scale sheets and then use it as a practice tool for the completion of their scale assessments.
Figure 6. Scale assessment sheet

Research Question 2: How are these assessments useful to the instructor as perceived by band directors?

After speaking to each band director it is clear that they all use student assessment to individualize student instruction. They all stated that assessment data is used to create individual plans for each student. They all shared the view that assessment is necessary to understand student progress and to plan for the future of their ensembles. Assessment data allows for the band directors to see the deficiencies and strengths in their ensembles, which allows them to program appropriately for them to allow for the greatest amount of growth. Through the use of these assessments band directors are also able to share data with colleagues in the form of their rubrics or computer testing data.

A careful review and analysis of the interview transcripts resulted in two themes across the three Band Directors. These are presented in Table 2 and discussed below.
Table 2

*Themes identified in response to Research Question 2*

<table>
<thead>
<tr>
<th>Themes identified in response to Research Question 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual assessment is important to the progress of their students and is used to modify the educational program</td>
</tr>
<tr>
<td>Assessments evolve over time</td>
</tr>
</tbody>
</table>

**Individual assessment is important to the progress of their students.** As such they all valued the data they were able to gather from these assessments as a way to plan for future instruction. Each one valued assessment as being helpful to their programs and attributed part of their success to the assessment practices they had in place. Lauren shared that student assessment data is valuable to gauge exactly where each student is developmentally. This information allows for more directed instruction and the tailoring of an educational program for each child. She continued by sharing that assessment is not only to justify a student’s progress, as it is also helpful to guide the instruction students receive. Especially in a program where individual lessons are not available and all instruction needs to be delivered in a large or small group setting. The assessment creates feedback that is then shared with students so they have an idea of what skills they need to work on by themselves.

Ultimately though the process of individual practice students help raise the level of accomplishment of the ensemble. In this particular program there is not much time for one on one instruction so the only real individual information I get on a student is the assessment recordings or the face-to-face interaction. All of the other assessments are group based and occur in the ensemble setting. Information from their midterm assessment allows the directors to detect any sight-reading deficiencies and we can adjust the spring program accordingly. The
example that was provided was if it is detected that reading in compound meter is an issue than perhaps a piece could be programmed in the spring that is in a compound meter to assist students in understanding how that particular meter feels.

Melissa and Kent both utilize SmartMusic software that provides immediate feedback to a student on rhythmic and pitch concepts. A student can perform an excerpt or exercise for the computer and the software shows them where any mistakes were made and provides them with a numeric grade based on the ratio of correct to incorrect notes and rhythms. A student can choose when to submit an assignment based on the feedback the software has provided. Once the student submits the assignment to the teacher the teacher then gets a recording and has the ability to alter the score to add in other musical concepts that are too subjective for the computer to provide feedback on. Band directors can also submit written feedback to the student that provides them information on how to improve in the future. Both of the schools that utilize this software do so for scales and select band pieces when they are available. They both tailor individual assignments based on the ability of the students so they are not discouraged. They find the data provided from these computer assessments to be helpful in planning for small group lesson instruction. They also feel that the assessment data provided by SmartMusic is invaluable when sharing it with administrators who are untrained in music as it assigns a numeric value to a student’s performance that all administrators can understand. It also removes some level of subjectivity from the assessments and provides an unbiased analysis of a student’s performance.

Each of the three band directors use student assessment data to modify the program for either the entire ensemble or on an individual student basis. One of the band directors noted that the assessments themselves are mostly a formality and the focus in their program is on the teaching that occurs in between the assessments. Overall, the view was that teaching is the
guiding force of assessment practices and the assessments themselves were simply used to help them to see where the students are developmentally and what they can do as teachers to help them be successful. Student success was a major theme that was identified through this research. This factor was the driving force in each of the three programs included in this case study. Assessment in each of the three schools was used to development and implement teaching programs for each student when areas of concern were uncovered through the assessment process. Each band director included in this study expressed concern over student learning as opposed to the student’s performance on assessments.

Each director provided students with feedback after an assessment, which would allow each student the ability to make adjustments in their own practice. Band director three noted that the assessments were used to encourage students to participate in reflective practice and every two weeks they participate in self-assessments that are completed in class. This allows for the director to get a picture of what the student feels their strengths are as well as any areas of concern they may have. Each school varies their assessments in order to utilize those that are beneficial to their students and their programs. Each band director noted that the assessments used all provide meaningful data to the teachers and to the students. When asked about the role assessment played in his program Kent stated:

It's the centerpiece of our program and I know maybe a lot of programs don't have individual student assessments very often. A lot of times it might just be a classroom rehearsal type atmosphere, but I think it has been changing over the recent years as there's been more of a focus because of SGO's and because of teacher evaluations and the evaluation models that's put more an importance on teaching all the individuals in your class in any subject area. It has been transferring to the music classes. I've been doing a
portfolio assessment within individual assessments since I started teaching 26 years ago. It's always something that we've been doing and it's even more crucial in instrumental music, I think, than any other music class or even any other academic class because the kids are so diversified on different instruments and pedagogy even within the woodwind even there are similarities

Overall, Kent is very passionate about assessment and the effect it has on his program. After reviewing the materials he provided it was clear a lot of effort was put into developing his assessment process and ensuring that it was aligned to the appropriate state and national standards. The process he has developed is certainly concerned with developing the entire musician through a series of benchmarks and achievement standards.

**Assessments Evolve over Time**

Another important theme that arose was the need to assessment practices to evolve over time. Band director three openly shared that the assessment tools they currently use are different than they were just a few years ago and it is anticipated that in a year or two they will look different again. As technology changes and students develop it is important for the assessment tools to change as well in order to accommodate the student of today. The other two band directors while not openly stating this do seem to share similar beliefs when you look at all of their answers as a whole.

The three band directors all brought up the concept of meaningful assessment in the sense that if they were going to take valuable time away from their teaching to perform assessments they too had to be some kind of learning experience for the students. The directors all developed their assessment systems to be an efficient use of classroom time as well as crafting them to be beneficial to the overall learning process of their band programs. Overall, all of the band
directors felt that assessment is a necessary part of a student’s learning experience and should be utilized by teachers in such a way that would allow all students to grow in their programs.

**Research Question 3: How do these assessments benefit students, parents, and the educational community as perceived by band directors?**

A careful review of the transcripts resulted in the identification of two themes in response to research question 3, as presented in Table 3 and discussed below.

Table 3

*Themes in response to Research Question 3*

<table>
<thead>
<tr>
<th>Assessments need to allow for student growth</th>
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</thead>
</table>
| Quality Feedback describing strengths and weaknesses

**Assessments need to allow for student growth.** Through the course of this study it became apparent that the three sites all required their assessments be beneficial to all of the parties involved. Each band director spoke to the need for assessments that allowed for students to grow as part of the assessment process. Quality feedback was necessary in order to facilitate the maximum amount of student growth. Student’s benefit from being provided with ongoing feedback that they can use to guide their own learning. Each school provided students with items to work on as well as areas of strength for each student.

Lauren utilized midterm rhythmic assessments to provide the student with data that allowed them to see areas for rhythmic growth and the ability to decode musical patterns. These patterns are leveled by grade so those that have been in the program longer are tested on more difficult rhythmic concepts. These concepts are taught and reinforced in the ensemble setting and if a grade level is lacking the band director uses ensemble time to solidify that rhythmic concept. It is the band directors intent to have the students benefit from the cohesiveness of
instruction and assessment. The band director also made it clear that students benefit from being able to help each other in the ensemble setting with these rhythmic concepts.

Students in this program also benefit from the use of Edmodo assessments, which allow the students to complete written assignments online and submit to their teacher. These assessments typically require students to analyze recordings and provide written feedback of a concert performance or other type of recording. This director uses the Edmodo assignments to encourage the students to do more listening in an attempt for them to have a better concept of the quality of sound they should strive to have when performing.

Melissa shared that assessments need to be beneficial to the students if we want them to continue in music. Retaining students in instrumental music is incredibly important to this director. The assessments in this school are designed not only to show weaknesses or areas for improvement but also to highlight areas of strength for the students. Students are given the opportunity to see their growth and the potential for the future as well. The assessment data maintained over time can show the public as well as the student how much growth has been displayed over the course of multiple school years.

**Quality feedback describing strengths and weaknesses.** Melissa utilized music assessment software as part of the process that provides student with immediate feedback regarding their performance. Students are given a visual representation of their performance, a numeric grade and a recording of themselves performing the assessment. That band director felt that the data provided to the student allows for an incredible amount of student growth as well as allows the student to self-diagnose issues. The director also felt that the numeric grade provided allows the student an easy frame of reference in a grading system that they are already accustomed to. The use of the computer assessments seems to make the students work harder
then they normally would without it. Overall, they have seen an increase in the amount of student practice time as it relates to the SmartMusic assessments.

Kent utilized multiple forms of assessment: portfolio, SmartMusic software and use of mid-term exams. Students complete assessments valid to what is expected of them in the real world as a musician. This school views assessment as the centerpiece of their band program and utilizes it in such a way to create individualized instruction for every student. Students receive feedback designed to assist them with the attainment of necessary skills. It is the feeling of this band director that student assessment should certainly focus on growth and attainment of various skills. Students in this program learn as a result of the assessments and are encouraged to develop a plan for the future with the feedback they are given. This school was also animate that he students participate in the learning process and learn how to utilize the concept of reflective practice in order to learn at a deeper level.

Summary of Findings

The findings of this study were collected through a qualitative study in which the researcher conducted three interviews with instrumental music teachers currently working in New Jersey Public Schools all of which have ensembles that score consistently well at state and region bend festivals. Individual interviews as well as assessment documents collected illustrate current practices in instrumental music education as well as the thoughts and feelings as to the benefits of the assessments to students and the usefulness to the instructor.

- Each director varied the types of assessments used.
- Each director used the assessments to provide feedback to students
- Data collected was used to modify a student’s educational program.
- Assessments used were relevant to skills being taught in the classroom.
All of the instructors interviewed expressed that a variety of assessments were necessary and the assessments need to be a part of the learning process. It is also important to note that the instructors all held the view that instruction should be individualized based on the needs of each student and the assessments were created out of that viewpoint. Individual student success is a guiding force in these teachers practice and each teacher requires students to take part in the learning process by taking responsibility for their own learning.
Chapter V: Discussion of the Research Findings

Revisiting the Problem of Practice

In the area of instrumental music there is a lack of standardized assessment strategies. If a clear strategy for assessment in this area existed, the general public would be able to identify the correlation between high performing arts education and the other academic subject areas. Baum, Oreck, and Owen (2003) state there is a lack of valid, research based methods of assessment in the performing arts. As we move forward it is essential for educators to continue to develop and create meaningful assessments for their students. Through this study I was able to collect information regarding the assessment practices of directors of programs with a track record of success.

Various assessment strategies were shared through the course of these interviews as well as the directors’ thoughts and feelings on assessment as well as the impact they have on their students’ success. Assessment is necessary in today’s world of accountability and as teachers we are responsible for creating usable and effective assessment strategies to give students and teachers a good picture of student growth.

Discussion of Key Findings

Through the completion of this study four key findings were discovered regarding the assessments currently used by the three participating band directors. All three shared similar ideas regarding the assessments they use and how they used their assessments to benefit their students’ learning. From this analysis four key findings have been identified as seen in Table 4 and discussed below.
Table 4

*Key Findings identified in this Study*

<table>
<thead>
<tr>
<th>Each director varied the types of assessments used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each director used the assessments to provide feedback to students</td>
</tr>
<tr>
<td>Data collected was used to modify a student’s educational program</td>
</tr>
<tr>
<td>Assessments used were relevant to skills being taught in the classroom</td>
</tr>
</tbody>
</table>

**Each director varied the types of assessments used.** Each participant gave a picture of many different assessment styles and concepts. The assessments were varied from school to school but each school used multiple methods of assessments. Students are being asked to write, evaluate themselves, record, use computer software, and make corrections as they practice. Kent utilizes a portfolio method that encompasses all of his different strategies for assessment and combines them all into one document that follows a student through high school. The portfolio itself is modeled after the national standards in arts education and includes several benchmarks for students to attain. In Melisa’s school assessments are modeled after region band auditions combining preparation of a prepared piece, scales and sight-reading. She also utilized written Edmodo assignments to assess student’s skills in evaluation. Laurens focus was on daily assessment with a few summative assessments as not to take away from rehearsal time for students. All three directors used many different methods to assess students and display student growth throughout the course of the year. Each director varied their assessments between skill based assessments such as scales and sight-reading and more abstract student self-reflection assignments.

**Each director used the assessments to provide feedback to students.** All of the directors who participated were agreed that the assessments used had to provide adequate
feedback to students so they may improve their skills as musicians. Feedback needed to be clear and concise as in the form of SmartMusic, which immediately lets a student know with a visual representation what they played correctly and what was incorrect. The portfolio model used at Kent’s school allows students to maintain a record of that feedback throughout their high school years. Through the use of rubrics directors let students know what areas they need to improve on and where the room for growth is.

The directors felt that the feedback was the most helpful for students to encourage them to improve. Overall, their students need to know what areas to work on and how best to improve those skills. Through the assessments used the directors are able to share that feedback with students directly. After every assessment Kent gives feedback to student in order to ensure that each student reaches their maximum potential and knows what areas they need to work on. Throughout the course of the year each students attend lessons of which each has a focus. Each lesson is also used as an assessment tool and they keep record of each lesson and what material or skills are worked on in each one. After the midterm evaluations at Lauren’s school each student receives the rubric with their scores and feedback from the teacher on areas to focus on for improvement. She then takes that data and incorporates it into the rehearsal setting. For example, if she finds a common deficiency among her students she will program literature to address that issue in the ensemble setting. Melissa uses the data she collects for her assessments to individualize the lesson program as well as decide on what literature to play with her ensembles. In all three schools the assessment data is used to place students in the appropriate level of ensemble.

Data collected was used to modify a student’s educational program. The directors in this study all shared that the assessment data they collected was used to modify the educational
program for students. Kent uses the assessment data to help his students create goals for themselves as they work in their small group lessons. Kent also makes it the responsibility of the student to keep track of their achievements in their individual portfolios. They use these portfolios to display that they have met certain benchmarks that correlates with the state and national standards. Melissa and Lauren both use the assessment data to program pieces for their ensembles that will help students solidify the concepts that they struggle with. They all use the data they collect to help make classes more productive for their students. If students struggle with a concept such as compound meter then Lauren programs a piece of music on a concert in compound meter for the group so they can all work on the concept simultaneously.

Assessments used were relevant to skills being taught in the classroom. Students at these schools were being assessed on skills that were directly related to what was being performed in the classroom. In addition to this the students know how the skills they are assessed on impact the future of their program as they progress to the upper level bands. All of the directors incorporate skills the students need for future success, such as audition preparation or scales and sight-reading. In addition the directors shared that by having the assessments directly related to what is happening in the classroom they take away less time from group activities to administer and it makes the process more efficient. SmartMusic is used by Melissa to evaluate student progress on band music. She feels by using the software for this purpose encourages her students to spend more time learning their individual parts, which in turn makes the ensemble stronger. She believes it is a good indicator of whether or not her students truly understand the material being taught in the classroom. All three of the band directors assess student’s abilities to play major scales and rhythmic patterns, which are essential to learning to
read and decode musical notation. These skills are also practiced in the ensemble setting as well to create plenty of opportunities for student success.

Discussion of the Findings in Relation to the Theoretical Framework

The Learning for Mastery framework introduced by Benjamin S. Bloom (1968) was the appropriate lens for this study. The learning for Mastery framework deals directly with students mastering concepts as presented. As Bloom (1968) states “Most students (perhaps over 90 percent) can master what we have to teach them, and it is the task of instruction to find the means which will enable our students to master the subject under consideration”. The teachers in this study used their assessments to display student mastery of the concepts being assessed. Each assessment they developed was based around a skill that was required for the students to be successful. The skills that are being assessed by each director are sight-reading, scales, and musical selections. All of these skills are required for a musician to achieve mastery in music. Bloom (1968) goes on to discuss the impact of displaying mastery has on a student’s future learning and the level of confidence it creates. This is certainly true in Melissa’s school where students who master rhythmic concepts in their freshman year and move into the Wind Ensemble are more confident and able to read pieces of a much more difficult nature. Students in her program become much more willing to make mistakes as they progress as well which enable them to take more chances and attain a higher level of mastery.

This lens worked well for this study as each Band Director spoke at length about the focus on increasing their students’ mastery of a variety of skills and how their use of a number of assessments was in service of supporting their students’ mastery of targeted skills. It helped frame too how each of the Band Director’s thought that these assessments benefited their students over the course of their academic career. In the performing arts, and specifically music,
mastery is something that is expected of our students. For music students to perform a piece of music in public their knowledge and understanding of both the music and their individual instruments must be of a high level. As an instrumental music teacher assessing mastery of different skills is necessary throughout the playing career of a student to ensure a student is prepared to move on to study at the next level. All of the teachers used skill mastery as an indicator of readiness for higher-level ensembles.

Learning for mastery holds that students learn and develop at different rates. In instrumental music this is certainly true as students typically come from all of the grade levels and are not bound to a set of objectives based on those levels. In each of the three schools in this study the teachers took into account that students all learn things at their own rate and they are permitted to progress at that rate. You can certainly see this displayed in Kent’s portfolio assessment process, as his students are able to continue working on benchmarks as they progress. Through speaking with him the importance of students continually working towards a goal was apparent.

**Discussion of the Findings in Relation to the Literature Review**

A review of associated literature, presented in chapter 2, presents a thorough investigation of the role various forms of assessment have in the teaching profession. The following discussion examines the results of this study against the topics reviewed in the second chapter. The sections are broken down into the topics covered in the literature review presented in the second chapter.

**Assessment strategies.** Shiqi and Hao (2013) state that the manner in which assessments are conducted have an influential outcome on learning outcomes for students. The directors interviewed all utilized assessments that were directly related to their content and administered
them in a setting that would be similar to what is expected of students outside the classroom. Students in these programs experience success on the assessments and the success they experience encourages more success. Shiqi and Hao presented that assessments should be varied to have the greatest impact on student learning. The directors in this study all utilized various modes of assessment for students in their classrooms.

**Portfolio assessment.** Wolfe (1997) describes the issues surrounding the use of portfolio assessment in high schools. It was his hope to identify these barriers so teachers who wish to develop these types of assessments on a large scale can find it easier to do so, and the biggest barrier identified by this study was the amount of time it would take teachers to develop these assessments. Portfolio assessment was relied on heavily at Kent’s school, and Kent indeed has put an extensive amount of time into developing the portfolio process used at his school. The portfolios represent the necessary skills for students to have achieved and serve as a documentation of student abilities in combination with the benchmarks set for his students. Now that his system is in place he can maintain it by making modifications each year depending on the needs of his students and the program. In addition, Wortham (2005) states that educators must make an honest effort to embrace exactly what it is that portfolio assessment seeks to accomplish. Again, Kent uses the portfolios to keep his students on track for success and as a reminder of all the work they have already put in to themselves as they move forward in the program. Through the use of the portfolios Kent has an accurate record of what his students have done and it also serves as documentation of student growth.

**Use of alternative and self-assessments.** Chang et. al (2013) discuss alternative assessment and what has been learned since 2003. These alternative types of assessments have been utilized in the arts and other non-tested subjects as a way to display student achievement
and growth. All band directors have to develop alternate assessments to the standardized tests that are available for their colleagues in other disciplines. The three directors in this study all developed a system of assessment that include student self-assessment, performance objectives, rubrics, and skill development. Kent regularly used self-assessment in his portfolios as the students write an assessment every two weeks in his classes. These self-assessments consist of a rubric for self-scoring and an explanation of how and what the student is currently working on. Melissa uses Edmodo at her school for students to write critiques of recordings and assess themselves. At Lauren’s school students complete audition based assessment complete with scoring rubrics that are based on the region music association’s band auditions. Each school incorporates alternative types of assessments differently as part of their classes to allow students to display both growth and success in a variety of ways.

**Computer-based assessments.** Computer-based assessments were used at two of the three schools involved. The software, SmartMusic can be used to provide students to see immediate feedback and maintains recording of them that they are able to download and maintain themselves. Kelly Parkes (2010) describes the difficulty of assessment in the higher education setting within the confines of the music studio. She focuses on applied music teaching, which is typically one on one and looks to describe quality ways of assessing student achievement. She states that written assessments are not applicable to the instrumental music studio and it is important for us to take the strategies developed by our colleagues to develop quality assessments in our studios, within the article she presents a rubric that can be used by both the teacher and the performer to assess performance. This style of assessment is easily incorporated into the assessment abilities of SmartMusic used at the two schools. The software allows for the creation of rubrics based on criteria that teachers can create. The directors shared
that they like using the software because students receive feedback every time they use it. It also allows for them to play the recordings back so they can hear themselves play. Each director that used the software noted that it encourages their students to spend more time practicing their individual parts and allows for them to listen to what it should sound like. Students use this information to become more proficient on their individual parts. At Kent’s school he uses SmartMusic to assess student’s technical abilities by assigning them major scales in all keys. Students complete these assignments and submit for a grade when they have mastered the content. At Melissa’s school they use SmartMusic to assess individual progress on their band music. This kind of assessment allows her to evaluate what additional help her students need because she is able to listen to each child individually. She noted that these types of assessments take far too long to do in the classrooms setting as each child would need to play individually. SmartMusic allows her to save a lot of valuable instruction time that she can devote to helping her students.

**Limitations**

The findings of this study are worthwhile and useful for educators; however, there are limitations that should be noted. The sample size of this study was small and limits any large-scale conclusions that could be drawn. There are many other contributing factors that could impact the success of these programs. Scheduling, schools size, availability of instruction are all factors to consider when drawing conclusions. Socioeconomic status and availability of instruments and resources are also a factor that was not taken into consideration for the purposes of this study. Assessment practices in public schools change frequently and with the potential for changes in leadership at the state level may undergo an overhaul at any point.
Another limitation to the study could be my own personal bias as a researcher. I could have made assumptions in the positive to consider each of the participants as experts in the area of assessment. Also, my own experiences as a high school band director for the last eleven years could also have an impact on the way that I interpret the data that was collected.

**Conclusion**

The purpose of this research was to gain insight into assessment strategies used in other areas as they apply to instrumental music as a means to evaluate student learning and teacher effectiveness. Based on the goals of the research proposal, the theoretical framework adopted for the study and the methodology of the study, the following three research questions were developed:

1. What forms of assessment are being utilized by band directors?
2. How are these assessments useful to the instructor as perceived by band directors?
3. How do these assessments benefit students, parents, and the educational community as perceived by band directors?

In answering these questions data was collected by conducting interviews with each of the three band directors selected for participation and document analysis. Once collected the transcripts were analyzed and coded using values coding.

The result of this study shows four key findings as it relates to the current practices of these band directors:

- Each director varied the types of assessments used.
- Each director used the assessments to provide feedback to students
- Data collected was used to modify a student’s educational program.
- Assessments used were relevant to skills being taught in the classroom.
All of the band directors were in agreement on the quality of assessments used and how they used the data to impact student instruction. The results also display the band directors’ willingness to make changes to the student’s educational program based upon the data collected through the assessments.

**Significance of the Study**

This study is important to the field of music education as it highlights some key points that could be applied to any school. As the State of New Jersey continues to require teachers to develop Student Growth Objectives as part of teacher evaluation this study brings to light several different types of assessment as well as some very valuable insights into the philosophy behind creating assessments for students and how to use the data that is collected. Assessment is something that is unavoidable in public education as we all have to show that we are completing the jobs that we were all hired to do. With increased levels of accountability it is important to develop assessments that adequately display student growth as it relates to your content area.

The ideas shared by the participating band directors can be integrated into any program with the time available to do so. Teachers could implement as many of the ideas that would work for them in their given situation. The assessment ideas and practices shared with in this study would certainly be useful to any music teacher as they develop their own systems for assessment in their classrooms. Each teacher can use this information regarding the different types of assessments available and tailor them to their own individual programs. Assessment is an ongoing practice that needs to evolve over time. As educators we must keep having these conversations regarding assessment practices to ensure that the assessments we use are pertinent to the skills necessary for today’s students.
Implications for Practice

In today’s world it is becoming increasingly important to provide students, administrators, and parents with data on student growth. As music teachers it is important to realize the time constraints in our classrooms and develop assessments that not only assess student growth but also can serve as teaching tools that reinforce the concepts we present in class. Students study music for the joy it provides and as educators we cannot lose sight of that as we develop ways to assess their skills and knowledge of the content areas. When teachers do take time out of class for formal assessment it certainly should be a meaningful experience as expressed by some of the participants in this study. In an attempt to help teachers develop these assessments an increase in the availability of professional development would be beneficial to all involved. Simply put, teachers today have very little experience with creating assessments except for those experiences they had themselves in their own schooling. With more professional development opportunities come the potential for more dialogue and the potential to create better and more meaningful assessments.

Validity

As I began this study I was concerned with my own biases as an instrumental music teacher having an impact on the results. In order to ensure validity of the data collected through the interviews each participant was given a copy of the transcript to ensure accuracy. It was my fear that my own opinions could find their way into the study through the interview transcripts if I was not careful. The participants all reviewed the transcripts and were given the opportunity to correct anything they felt was inaccurate. The interview protocol was also important to the validity of the data collected, as it was necessary to stay on topic during the interview. As a music teacher we generally work in isolation, for example, I am the only instrumental music
teacher in my building. Contact with other professionals in the discipline is rare so staying on topic was quite difficult. The interview protocol ensured that the questions and topics discussed were consistent between all of the participants.

**Recommendations for Future Studies**

Based on the results of this study there are several recommendations to evaluate the correlation between quality assessment and student success. This study represents a small number of New Jersey high schools. In the future I would like to see the sample size increased to gain a broader understanding of the assessments currently used and their effect on student achievement. Studies could also focus on the other contributing factors to success in music such as socioeconomic status, scheduling, availability of materials, amount of time allotted to instruction. There are many factors that could potentially affect a student's level of success and in turn the success of the ensemble as a whole.

Other items to consider for future studies could be looking at the types of assessments used to get a sense of their usefulness. Gathering data on the use student self-assessment, portfolio, and computer-assisted assessment would be beneficial. Also, it could be beneficial to expand this study to other grade levels to gather information about the types of assessments used at the elementary and middle school levels.

As a result of this study I would like to see how current teacher preparation programs are presenting the concept of assessment to future teachers. Having information on how future teachers are being prepared for creating assessment could help teachers currently serving in the field as well as prepare for meaningful professional development offerings to assist them in their classrooms.
Personal Reflection

This research project grew out of issues I face in my own classroom. I work in a very unique and extremely small school. We have limited resources and a student body of around 400 students. When I first started teaching here I realized that I needed to develop a system of assessment that incorporate everything I taught in my classes yet fit into the confines of the schedule we run here. The assessment practices also needed to encourage student accountability and assist them with developing good practicing habits. I remember my first experience with the doctoral program begin Introduction to Doctoral Studies where we first developed the problem of practice that we wanted to investigate. Thankfully, my original problem was narrowed with the assistance of my professor to what it eventually became. Through completing this study I was able to converse with some excellent teachers on a topic that is very important to me. The insight they were able to impart me was incredible to say the very least. By being able to speak with them about their thoughts and feelings on student assessment I was able to do some reshaping about my own current practices.

As a result of completing this study it has caused me to look at my own current practices in my classroom. I do currently use a portfolio system, however, it needs to be modified to encourage more individual student growth. I also believe that I personally need to incorporate some type of mid-term and final assessment based on the audition materials used at Melissa and Lauren’s schools. I certainly plan on trying to add these things to my own assessment practices as soon as I am able to as they all seem to be great ways to increase student achievement.

Through the process of completing this research and subsequently writing about it I was able to learn some very valuable lessons. I have been teaching for fifteen years in the public school system and I of course view things through that lens. However, it is important to remove
myself from the situation and listen to what others have to say regarding the topics that face our classrooms. Each and every educator works under different circumstances, whether they be economical, student population, level of resources, or any other limiting factor beyond their control. Even with all of our differences we can still share and learn from each other as individuals we all have different ways of approaching problems and completing necessary tasks. As a teacher of any discipline it is required that we prepare today’s youth for their adult lives. Using assessment to give them the tools and the ability to be successful is very valuable. I have always desired to instill in my students a great work ethic and a desire to succeed at anything that they do. If something is worth doing it is certainly worth giving it everything you have.
References

http://www.state.nj.us/education/AchieveNJ/


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Appendix A: Interview Guide

Thank you for your interest in participating in my research. Before we begin the interview, please review the consent form and sign it if you agree to participate. The consent form provides a short overview of the study and the interview process. The consent form outlines what I will do to protect confidentiality. Please review the consent form carefully to make sure you are comfortable with everything detailed on the form.

Since this study is meant to learn about assessment practices, please provide honest responses based on your experiences. Since I will be recording the interview, please do your best to speak clearly.

We will begin the interview in a few minutes. This process will take between 45 and 60 minutes. I will ask that you share your experiences while working at this school. I encourage you to speak openly about the questions. There is no time limit for specific questions, so it is fine to go into detail with your responses.

The first few interview questions will be background questions, and then we will proceed to questions about your assessments.

Do you have any questions before we begin the interview?

Background Information

I would like to take some time to get to know you and your program before we delve into questions about your assessments:

1. How many years have you been teaching instrumental music in the public schools?
2. How long have you been in your current position?
3. What are your teaching responsibilities?
4. Can you describe the teaching schedule?
5. Is that schedule consistent from year to year?
6. How many faculty members do you have teaching instrumental music in your school?
7. How do you work with those faculty members? (Ie. Co-teach, teach separate classes, …)

At this point I’d like to start talking about your views on student assessment and its importance to learning as well as the role it plays in your program.

1. What role do you feel individual student assessment plays in your program?
2. Do your assessments provide you with concrete data that can be shared with non-musicians?
3. What role does your assessment data play in a student’s instruction?
   a. Do you use the data collected to customize a child’s program?
   b. Do students have access to the data?
4. How important are your assessments to the students learning?
5. What effect do you think they have on the success of your ensemble?

I’d like to take some time now and talk specifically about your individual student assessments.

1. Can you share with me how you grade your students (ie. Participation/preparation/skill…)?
2. What portion of a student’s grade are individual skill based assessments (scales, exercises…)?
3. How do students complete these assessments (Software/smartmusic/face to face)?
4. Is there a rubric used?
   a. What does that rubric look like?
   b. How subjective is the rubric?
5. To the best of your ability can you tell me what percentage of your students typically get a C or above in your band class?
   a. B and Above?
   b. An A?
6. What kinds of skills do you assess students on?
   a. How do these skills correlate to the ensemble success?
   b. How do these skills relate to the students individual success?
7. Finally, is there anything else at all that you’d like to share with me regarding individual student assessment and the effect it has on your program?
Appendix B: Band Director Recruitment Letter

Principal Investigator: Dr. Chris Unger
Student Investigator: Steven Carey

Title of Project: Instrumental Music Student Assessment: Current Practices in Individual Music Assessment

Dear Band Director,

My name is Steven Carey, and I have been working as a high school band director for the last nine years. As a doctoral student at Northeastern University, I am about to begin the data collection phases of my doctoral thesis. I am writing to invite you to participate in the study in an individual interview. The interview will be used to better understand your use of individual student assessment in your classroom. The interview would take place at your school or via video conferencing at a time convenient to you and would last between 45 and 60 minutes. This time would be coordinated and communicated well in advance.

I am interested in your participation in the study because of the displayed success of your instrumental music program and the high quality of your performing ensembles.

The decision to participate in this research process is voluntary. Participation in this study will be completely confidential; names and other personal information will not be used. Please contact me by email if you would like to participate.

If you have any questions about this study, please feel free to contact me at carey.st@husky.neu.edu or Dr. Chris Unger at cunger@neu.edu.

Thank you for your consideration.

Sincerely,

Steven E. Carey, Student Investigator & Northeastern Doctoral Student
Appendix C: Signed Informed Consent Form for Interviews

Principal Investigator: Dr. Chris Unger
Student Investigator: Steven Carey

Northeastern University, College of Professional Studies

Title of Project: Instrumental Music Student Assessment: Current Practices in Individual Music Assessment

Why am I being asked to take part in this research study?
You have been sought out for inclusion in this research study because of your performing ensembles demonstrated success.

Why is this research study being done?
The purpose of this study is to identify current practices in individual music assessment within the instrumental music classroom.

What will I be asked to do?
The researcher will be looking for you to participate in one individual interview.

Where will this take place and how much time will it take?
Individual interviews will take approximately 45-60 minutes. Interviews will take place in a at your school or via online video conferencing at a convenient time for participants. You will also be asked to check the interview transcript for any errors following the interviews.

Will there be any risk or discomfort to me?
There are no significant risks involved in being a participant in this study.

Will I benefit by being in this research?
You will benefit from this study by participation in reflective practice about your own views on assessment.

Who will see the information about me?
Your part in the study will be completely confidential. Pseudonyms will be used for all study participants. Only the researcher will be aware of the participants' identities. No reports or publications will use information that can identify you in any way.

As an interviewee, your part will be confidential. The data collected for this study will be kept by the researcher, including audio tapes, and will not be shared with others.

In rare instances, authorized people may request to see research information about you and other people in this study. This is done only to be sure that the research is done properly. The researcher would only permit people who are authorized by organizations such as Northeastern University to see this information. No identifying information will ever be shared with people at your school.
If I do not want to take part in the study, what choices do I have?
You are not required to take part in this study. If you do not want to participate, you do not have to sign this form.

What will happen if I suffer any harm from this research?
There are no significant risks involved in being a participant in this study.

Can I stop my participation in this study?
Participation in this study is voluntary, and your participation or non-participation will not in any way affect other relationships (e.g., employer, school, etc.). You may discontinue your participation in this research program at any time without penalty or costs of any nature, character, or kind.

Who can I contact if I have questions or problems?
Steven Carey, Student Investigator
Doctoral Student
221 S. 12th St Apt S508
Philadelphia, PA 19107
Cell: (609) 892-8573
Email: Carey.st@husky.neu.edu
Chris Unger, Principal Investigator
College of Professional Studies
360 Huntington Avenue (BV 20)
Northeastern University, Boston, MA
Office: (617) 373-2400
Email: C.unger@neu.edu

Who can I contact about my rights as a participant?
Nan C. Regina, Director
Human Subject Research Protection
490 Renaissance Park
Northeastern University
Boston, MA 02115
(617) 373-4588
n.regina@neu.edu
You may call anonymously if you wish.

Will I be paid for my participation?
There is no compensation for participation in this study.

Will it cost me anything to participate?
There is no cost to participate in this study.

I have read, understood, and had the opportunity to ask questions regarding this consent form. I fully understand the nature and character of my involvement in this research program as a participant and the potential risks. I agree to participate in this study on a voluntary basis.

Research Participant Signature

Research Participant Name ____________________________ Date ____________