

Student Growth Models for  
Hard-to-Measure Course Content Areas  
(Performing Arts, Visual Arts, and Physical Education):  
A Review of the Literature, Survey of U.S. Practices, and Recommendations

**Florida Department of Education**

Division of Accountability,  
Research and Measurement

Office of Race to the  
Top Assessments





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Final Report

Prepared for:

**Florida Department of Education  
Division of Accountability, Research and Measurement  
Office of Race to the Top Assessments**

Project Number: 171-RG111-4C001

TAPS Number: 14AT47

April 30, 2014

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## Executive Summary

The proceeding report is compiled into three parts to address the assessment of hard-to-measure content areas of performing arts, visual arts, and physical education.

**Part I:** This section includes a literature review on the background of assessments and its current role in the U.S. education system. Also summarized is the use of value-added models and performance evaluations. This information is then related to teacher effectiveness and evaluation. Next, the current state of hard-to-measure content areas is discussed including curriculum, instruction, and assessment of performing arts, visual arts, and physical education.

**Part II:** Part II contains the research results from a survey conducted on the curriculum, instruction, and assessment of these areas in all fifty U.S. states and the District of Columbia. To conduct this research, multiple representatives from each state's department of education were contacted via phone and email to respond to survey questions concerning performing arts, visual arts, and physical education content areas and use of value-added-models. The results of this survey are summarized and additional information is reported concerning the federal government's framework for student assessment.

**Part III:** This section draws from the data gathered in Parts I and II to provide general recommendations for assessment. Comprehensive assessment, including both quantitative and qualitative data and multiple assessment methods, is emphasized. Additionally, issues such as involvement of stakeholders, continuous monitoring and improvement, issues of validity and reliability (e.g., rubric-driven assessment), are emphasized. Value-added models are also discussed. In addition to general assessment implications, Part III includes recommendations specific to assessment of performing arts, visual arts, and physical education.

## Part I: Literature Review

### Background on Assessment and Accountability

The purpose of this report is to identify the current practices used throughout the United States for assessing performance-based courses (e.g., visual arts, music, physical education). Information was obtained through two sources: (1) a review of the professional and academic literature; and (2) structured interviews/surveys conducted with Department of Education representatives in each of the 50 state offices (and District of Columbia). However, before reviewing the assessment practices of specific performance-based disciplines, a brief review of practices and issues associated with the assessment of core subject areas was conducted. This review was used to help inform the investigators and provide some context for the reader in terms of issues pertaining to K-12 assessment that are not core discipline-specific. That is, identifying best practices that have worked for assessing core academic disciplines, and obstacles to avoid that have hindered assessment, can help inform the development of new assessment practices for performance-based courses.

Assessment serves multiple purposes for various stakeholders in education. Assessment provides a means for students to reflect on their knowledge, including their strengths and weaknesses. Assessment also provides information that teachers may use in their instructional planning. Finally, administrators use assessment data to make personnel and resource decisions.

Unfortunately, the various connotations associated with the term assessment create dilemmas for stakeholders. One dilemma faced by stakeholders is the fact that the term assessment is often used within different contexts and with different meanings (Garfield, 1994). Further, assessment practices have evolved to reflect the various motivations of the different external stakeholders. Despite this, Harlen (2007) described the term assessment as a process by

which evidence is collected for the purpose of understanding what students know and to determine whether students can make judgments about their own achievements.

Past research indicates that such beliefs about assessment impact the way teachers instruct and the way students learn (Brown, 2004; Struyven, Dochy, & Janssens, 2005). Teachers' attitudes toward assessment impact the way they implement their own assessments in their classrooms. Students' attitudes toward assessment also impact the learning process by affecting their personal approach to learning and their beliefs toward future successes as learners (Fletcher, Meyer, Anderson, Johnston, & Rees, 2011).

### **K-12 Educational Landscape in the U.S.**

*Accountability in Education.* Accountability exists for teachers, students, administrators, and other stakeholders. Additionally, assessments are often used to make high-stakes decisions in the United States. In fact, over the past several decades, educational policymakers in the United States have implemented many federal and state mandates requiring the use of assessments to meet external accountability demands.

These demands are addressed by increasing accountability through educational policy decisions regarding assessment. Policymakers often require the use of assessment data to determine if, and how much, student learning has occurred. Consequently, these increases in accountability most often are addressed by the use of various assessments that have high-stakes implications.

*Standards-Based Education.* Educational reform is an ongoing topic among policymakers. National standards and reform efforts focus on evaluation and accountability of teachers with a current emphasis on outputs or outcomes of education rather than inputs including curriculum and pedagogy (DiLoreto, 2013). This shift is evident in education reform

from the late 1990s into the early 2000s wherein the focus turned to student learning outcomes. Specifically, Goals 2000, a key education initiative of the Clinton administration, encouraged states to develop content- and performance-based standards that were demanding, shifting the focus to outcomes of education.

Curriculum standards have become a formidable force affecting the evolution of education reform since the publication of the document *A Nation at Risk* (National Commission on Excellence in Education [NCEE], 1983) and even more recently with the adoption of the Common Core Standards Initiative. The Common Core Standards were written with an emphasis on experiences (processes) and outputs (outcomes). Using these curriculum standards as a major measure, educators began to adopt and use research-based teaching methods that began a trend toward a hands-on constructivist approach to student learning, wherein the learning process is emphasized (Gordon, 2009).

Although many educators agree that standards-based education is the central driving force in educational reform today, there remains much debate on the meaning of standards-based education. For the most part, educators agree that content standards are subject-matter descriptions of what students should know or be able to do within specific grade levels; however, these are often confused with performance standards that are typically interpreted as expected proficiency on a test (Shepard, Hannaway, & Baker, 2009). Although policymakers emphasize systematic reform in K-12 education, it is unclear how standards-based reforms are expected to work (Anderson, Moore, Anaya, & Bird, 2005). State and federal policymakers implement educational reform hoping to improve students' academic achievement (Schiller & Muller, 2003). Indeed, policymakers and other stakeholders are calling for higher achievement in both teaching and learning without a clear idea of how to best assess student learning. Consequently,

the reality of the implementation of standards-based education has resulted in a familiar policy of test-based accountability (Hauser, Koenig, National Academies Press, National Research Council, & National Academy of Education, 2011). However, such test based practices may not adequately capture student growth in terms of performance-based curriculum.

*K-12 Assessment.* Assessing students' knowledge and skills requires the use of tools such as tests, projects, etc. The administration of such assessment techniques can be affected by the beliefs and conceptions of teachers who administer them (i.e., beliefs about teaching, learning, assessment, curriculum, and teacher efficacy). Furthermore, past research indicates that students' approach to learning and what they achieve may be affected by the assessments administered by educators (Brown, 2004). Various stakeholders then view the results of these assessments through the lens developed and shaped by their own personal belief system.

A necessary component in the learning process is ongoing or sustainable assessment (DiLoreto, 2013). Holt and Willard-Holt (2000) indicated the importance of dynamic assessment – a way to assess the true potential of learners that differs from conventional tests. The interactive nature of the dynamic assessment process requires that the assessor, or instructor, engage in a meaningful dialogue with the learner, or student in order to (1) find out the learner's current level of performance or understanding on any given task, and (2) discuss strategies for improving the learner's performance or understanding of future tasks. When viewed this way, it is clear that assessment and learning are two processes that should be considered as a whole. That is, it is difficult to separate assessment from the learning process. When assessment and learning are viewed as two equally necessary components of a dynamic process, the development and implementation of quality instructional practices will naturally be fostered (DiLoreto, 2013).

Although assessment is a term often used to refer to the data collected by tests that are used to meet external accountability demands placed on K-12 educators, Wolf (1990) contended that assessment should include both quantitative and qualitative data. Dwyer, Millett, and Payne (2006) also recommended that assessment be comprehensive with an iterative cycle of measuring progress at multiple points in time. This recommendation may be applied more easily to some performance-based coursework than others. For example, a student's painting or musical performance may be assessed qualitatively by subject matter experts, whereas physical performance in an athletic activity more easily lends itself to quantitative measures. In either example, progress can be measured at different points in the school year to assess student growth.

### **Value-Added Models**

Teacher performance is often estimated using statistical models in which the contributions of teaching (i.e., teacher effects) are conceptualized as "value-added." In order to attempt to measure the value-added to the learning achieved by a particular student, educators often use pretest scores as a predictor for an expected score for a student at a given point in time. That predicted score is then compared to the actual score and the difference becomes the teacher's value-added. The assumptions used in these models, however, are rarely scrutinized. For example, researchers indicated a need to incorporate historical home and school information into the value-added models (Harris, Sass, & Semykina, 2010). Hill and Herlihy (2011) reported that differences in students and student behavior have more to do with the value-added than what the teacher has done. Additionally, student learning persists over time and assumptions about the persistence of prior educational inputs may influence student performance. The persistence of teacher effects on students is also noted. The results of one

study in North Carolina indicated that seven-percent or more of teacher-induced learning is lost within one year (Harris et al., 2010).

Value-added models are designed to account for the various effects on learning, such as class size, student diversity, and aptitude differences. According to a study by Wright, Horn, and Sanders (1997), the most influential factor on student growth across contexts is the teacher. Despite conflicting opinions on how accountable teachers should be for student achievement, it is generally acknowledged that there is a quantifiable effect (Goldhaber, 2010). It is increasingly useful to measure this effect in light of the current political trajectory in education; the question is whether it can be done with accuracy and fairness.

A strength of value-added models is that multiple contributing factors can be included in the analysis. In the past, observation has been the primary source of data used to evaluate teachers. The literature, however, shows that this method is often subject to rater biases and private agendas (Cook, 1995; Ghorpade, Chen, & Caggiano, 1995; Jawahar & Williams, 1997). Rater biases may pertain to both the instructional delivery and evaluation of student outcomes, particularly in performance-based courses such as art and music. To increase objectivity, behavior-based rating scales may be used for observation, providing insight on the effective delivery of instruction in addition to test results (Bowman, 1999; Ghorpade et al., 1995).

### **Performance Evaluations**

Best practices in performance appraisal emphasize transparency and voice as guiding factors (Ghorpade et al., 1995). *Transparency* refers to the degree to which those being evaluated have access to the assessment criteria as well as the necessary feedback to improve their performance. According to best practice, it is the leader's responsibility to communicate what is expected of employees. This attention to clarity is viewed as "informational justice," and

relates to the overall fairness of the evaluation procedure used (Thurston Jr. & McNall, 2010). Catano, Darr, and Campbell (2007) noted that it is not only essential to be fair; it is also necessary that the perception of the individual being evaluated is fair. Indeed, as reviewed by (Erdogan, 2002), perceptions of fairness in performance appraisal have been linked to numerous outcomes including commitment to one's employer (Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991), trust in management, intent to quit, and performance (Konovsky & Cropanzano, 1991; Moorman, 1991). Justice perceptions can buffer the negative effects of low outcome favorability on employee reactions (Brockner & Wiesenfeld, 1996), which may be particularly important in light of the current legal climate surrounding VAMs (see Teacher Effectiveness and Performance Evaluation subsection below).

*Voice* is a matter of giving stakeholders the opportunity to contribute to the criteria by which they are being evaluated. In K-12 education, this means giving teachers some influence over the development of standards by which their students are assessed. Besides alleviating some of the tension associated with the unknown, this practice allows for an expanded knowledge base by involving multiple sources (Mulvaney, McKinney, & Grodsky, 2012). It also serves to encourage alignment between the goals of the organization (e.g., The Department of Education) and its employees, which is shown to result in greater effectiveness (R. S. Ayers, 2013). Research has long documented a relationship between subordinate participation and performance and motivation to improve (Burke, Weitzel, & Weir, 1978; Burke & Wilcox, 1969; Cedarblom, 1982; Nemeroff & Wexley, 1979). Therefore, as assessment of performance-based courses are developed, lending voice to the stakeholders may be vital to ensuring that such practices are accepted as being fair.

## Teacher Effectiveness and Performance Evaluations

In 2010, the National Education Association (NEA) noted that the main goal of assessing teacher performance should be to positively impact that educator's knowledge, skills, everyday teaching practices, and dispositions. This multi-faceted goal is meant to positively impact student learning and growth while encouraging professional educators to remain classroom teachers. The focus of teacher evaluation should not be on terminating or penalizing those educators who are ranked at the bottom and rewarding those who are ranked at the top, as these practices have failed to produce positive results with regards to both teaching practices and student learning (Leone & Whitson, 2013; Tuytens & Devos, 2012). Instead, the focus should be on implementing a comprehensive system of continuous teacher education that promotes growth and content mastery; critical analysis of self-performance and student performance; and needed changes for the improvement of teaching and learning (NEA, 2010).

Despite the limitations, practical and logistical challenges associated with incorporating value-added models into teacher evaluations, it may be worthwhile to do so. Performance appraisals are viewed as employment "tests" covered by the *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission [EEOC], 1978), which encourages employers to validate employment tests, as well as Title VII of the Civil Rights Act of 1964, which seeks to prevent employment discrimination. The courts favor accuracy and due process in judging the job-relatedness of an employment test (Werner & Bolino, 1997). Relatedly, these also apply to teacher performance assessments, which have come under legal scrutiny (See J. E. Ryan, 2008 for more information on the legal perspective of performance-based pay for teachers). Rigorous, job-related teacher performance appraisals have been shown to be valid and withstand judicial review (Milanowski, 2004; Pullin, 2013). Although the use of

objective, job-related criteria is professionally appropriate, it is not specifically legally required (Zirkel, 2003). Recent court cases have focused on due process and accurately weighing student test scores in the teacher evaluation process (New York State United Teachers Association v. Board of Regents of the University of the State of New York, 2011) . Teachers may cite due process and equal protection violations if they are not given adequate time to adjust their curriculum to meet new requirements (Pullin, 2013). Although there are many factors to consider, due process and the perception of fairness and justice in performance appraisals is imperative (Erdogan, 2002).

There are a number of student learning and teacher effectiveness measures that are beneficial for evaluating teacher efficacy (NEA, 2010). According to Hammerman (2005), Scott (2012), and Stiggins and Chappuis (2005), student growth should be based on more than standardized test scores. Formative and summative assessments, local and district-wide achievement test results, oral and written presentations, and student work that shows evidence of growth should also be considered (McTighe & O'Connor, 2005; Stiggins & Chappuis, 2005). Student learning data should not be considered the most significant determinant of teacher success. Other sources of evaluating teacher efficacy include the use of classroom observations and administrator evaluations based on comprehensive standards of practice, including portfolios, evidence binders, instructional items that show attainment and implementation of knowledge and skills, information derived from peer reviews and professional learning communities, self-assessment and student reflections, and various measures of student knowledge and performance (NEA, 2010).

All suitable performance assessment systems, although different, will have many features in common (Almy, 2011). Among the most common are observations made in the classroom

and objective measurements of student learning. According to Almy (2011), classroom observations should be conducted on a regular basis and completed by evaluators who are well trained. Additionally, a rubric should be used that is both comprehensive and applicable in a wide variety of school settings when conducting observations. Such a rubric-driven observation provides clear and appropriate feedback that the observed teacher can use to improve (Almy, 2011). It is through these observations that school administrators will have a clear representation of how teachers function in the classroom environment and at the same time provide teachers with the feedback they need to become better teachers. When measuring student learning, it is imperative that administrators use several data points consisting of various sets of data to determine a teacher's effectiveness (Baker et al., 2010). In an effort to create a more valid estimate of teaching ability, some districts include parent and student surveys as well as measures of a teacher's involvement in the community (Almy, 2011).

## **Hard-to-Measure Content Areas**

### **Performing and Visual Arts: Curriculum and Instruction**

National standards regarding both visual (e.g., painting, sculpture) and performing arts (e.g., music, theatre) guide instruction through stages of expression (National Coalition for Core Arts Standards [NCCAS], 2014). In early grade levels, a foundation of understanding is built through exposure, exploration, and the identification of theory. As students progress through 8<sup>th</sup> grade, expression of the arts shifts toward creativity and interpretation. Emphasis is also placed on understanding the relationship between the arts and other domains, such as how they fit into cultural and historical contexts (National Association for Music Education [NAfME], 2014). For high school students, NCCAS (2014) applies the language of “novice” to “advanced” status to describe progression. Furthermore, the focus is on improving skill and cultivating originality.

The Arts Education Partnership (2014) summarized state policies and illustrated the wide variation in programs across the nation. While the majority of states regard visual and performing arts programming as core curriculum, not all of them require assessment. At the state level they may adapt national standards, as Ohio does by moving students through early perceptual stages in kindergarten toward production and reflection in upper grade levels (Ohio Department of Education [ODOE], 2014). Others such as Maryland (Maryland Department of Education [MDOE], 2014) and Massachusetts (Massachusetts Department of Elementary and Secondary Education [MDESE], 2011) make specific curriculum frameworks and lesson plans available that include assessments used in the hard-to-measure areas.

Though methods for teaching the arts differ, it is recognized that a “learn-by-doing” model is appropriate, as described in the Massachusetts State Department of Elementary and Secondary Education framework (MDESE, 2011). The manner in which art education students are assessed as they progress through their programs may need to be adjusted to reflect their artistic development. Indeed, this is the case in many states wherein a sequential process is used, reflecting the progression of skills and knowledge outlined in the national standards.

Alternatively, schools may choose to integrate (embed) the curriculum and assessment of the arts with that of the core academic domains. Maryland’s curriculum suggests that this is a common practice for that state, combining the standards for fine arts with those for another subject in featured lesson plans (MDOE, 2014). Examples of this include utilizing vocabulary words to describe a piece of music or visual art, or illustrating the significance of a piece in relation to the culture and historical context in which it was created. Such an approach accommodates different interest levels and scheduling issues that occur in these disciplines by linking them with other sources of learning. Further, the acquisition of skills associated with the

visual and performing arts may also provide students with the motivation to develop abilities (e.g., visual-spatial) that are often the cornerstone of core academic domains, such as math, science, and reading (Gardiner, Fox, Knowles, & Jeffrey, 1996). Direct effects, including the development of phonological awareness, reading fluency, mathematical competency, and attention capacity, have also been demonstrated (Posner, Rothbart, Sheese, & Kieras, 2008; Wandell, Dougherty, Ben-Shachar, Deutch, & Tsant, 2008).

***Music Education.*** The National Association for Music Education (NAFME) advocates the promotion of music education by ensuring that all students have access to a comprehensive music education program taught by qualified teachers. NAFME purports that agreement on what students should know and be able to do is a central component to an effective program in any of the arts, including music. NAFME (2014) recommended the following nine national standards as the basis for any effective program in music education: (1) singing, alone and with others, a varied repertoire of music, (2) performing on instruments, alone and with others, a varied repertoire of music, (3) improvising melodies, variations, and accompaniments, (4) composing and arranging music within specified guidelines, (5) reading and notating music, (6) listening to, analyzing, and describing music, (7) evaluating music and music performances, (8) understanding relationships between music, the other arts, and disciplines outside the arts, and (9) understanding music in relation to history and culture.

Through a consortium of multiple stakeholders, NAFME is currently facilitating the process of updating the National Core Music Standards. Historically, factors such as attendance, participation, and attitude were considered important non-achievement data sources for determining grades in music (Russell & Austin, 2010). However, Russell and Austin (2010) noted that national standards are shifting the focus of assessment to achievement data, making

less use of these non-achievement data. This shift is evident in the recommendations for the new music standards (NAfME, 2014). The 2014 draft standards focus on students' ability to create, perform, respond, and connect to music in order to deepen understanding. These draft standards emphasize the opportunity-to-learn for all students by recommending that all students "receive substantive, sequential, standards-based music instruction from expert music educators throughout grades PreK-8 as part of their core curriculum; have opportunities to elect additional music classes, such as ensembles, beginning in the intermediate grades; and have opportunities and encouragement to pursue one or more music course sequences for four years at the high school level" (*The National Visual Arts Standards*, 1994, p. 2).

**Art Education.** Educators agree that art education benefits students because it cultivates the whole child by developing intuition, reasoning, imagination, and dexterity into unique forms of expression and communication (*The National Visual Arts Standards*, 1994). The National Art Education Association (NAEA) purports that art education can make a difference in the lives of children and by having standards associated with these programs, art educators can profess the quality of their programs and meet the external demands of accountability. Standards in art education help ensure that the curricula are focused and that students can be assessed on their knowledge and skills. Using the proper standards, art educators can shift from defending the need for art programs to emphasizing the quality of art programs (*The National Visual Arts Standards*, 1994). NAEA recommended two areas of competence for students: (1) content standards emphasizing what students know and can do in the arts, and (2) achievement standards focusing on the levels of achievement students demonstrate at the completion of various grade levels (*The National Visual Arts Standards*, 1994).

NAEA recommended that students in the early grades should be taught the differences between materials, techniques, and processes as well as the difference between visual characteristics and purposes of art in order to convey ideas (*The National Visual Arts Standards*, 1994). The state of California used these recommendations as the foundation to develop both visual and performing art education standards. Specifically, California's standards outline the expectation for students to perceive and respond to works of art, objects in nature, events and the environment; apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art; and analyze the role and development of the arts in past and present cultures, noting human diversity as it relates to the arts and the artists. NAEA recommended that students in the higher grades should be able to communicate proficiently with respect to at least one form of art, including the ability to define and solve artistic problems with insight, reason, and technical proficiency (*The National Visual Arts Standards*, 1994). They should also have a basic understanding of historical development in the arts as a whole as well as within specific cultures.

### **Student Assessment in Performing and Visual Arts**

*Visual Arts.* Although assessing knowledge, skills, and performance in the arts can be done in various ways, the goal of assessing the arts for academic achievement is challenging. As is the case in many disciplines, the use of formative assessment is crucial to the success of students within the arts. For example, NAEA recommended that formative assessments should occur within the learning process as opposed to separate from the learning process (*The National Visual Arts Standards*, 1994). In addition to the use of objective and standardized tests, students should be assessed using performance-based assessments. Several specific examples of performance-based assessments that NAEA encourages are: research/investigation, direct

observational/compositional sketching, and digital photo reference. It is imperative that students receive prompt feedback on their products. Constructive feedback will enable students to improve their products as well as become more proficient before other types of assessments are used, including those classified as high-stakes.

In accordance with recommendations from NAEA, researchers encourage the use of portfolios (Castiglione, 1996; Dorn, 2003; Dorn & Sabol, 2006). These portfolios should contain artifacts that include project-based assessments over time as well as student reflections (Dorn, 2003). Brandt (1988) suggested that self-assessment can deepen students' involvement in the learning process as well as increase their aptitude in the arts. For example, one district in the state of Connecticut used a variety of methods to assess students in the arts. Specifically, they used portfolios and students' drawings as well as student written reflections. Harvard's Project Zero seeks the most useful strategies for measuring creativity. Harvard's researchers posit that production remains central to art instruction, while perceptive and reflective skills should be utilized in its assessment. Congruent with the current literature, they recommend portfolios as well as exercises that test perception such as comparing a piece of artwork to a subtly altered copy and assessing whether the student can tell the difference after learning techniques (Brandt, 1988).

National performance assessment in the arts was first administered by the National Assessment of Educational Progress (NAEP) in 1971 to find out what students knew, what they were able to do with that knowledge, and how interested they were in the subject (Fisher, 2008). The results indicated high interest yet low performance. Subjective methods may be favored over large scale data collection in these disciplines, but as legislation moves forward in accepting the arts as core curriculum this may change (Russell & Austin, 2010). The U.S. Department of

Education completed a project entitled Models for Assessing Arts Performance (MAPP), with the aim to help teachers in the arts identify useful assessment methods. The portfolio method for visual arts appeared successful in measuring student growth over a period of time regardless of the starting point, but experimental procedures were not employed to verify portfolios as preferable to other forms of assessment (Dorn, 2003).

Differences in assessment are likely to depend on its role, as perceived by both the student and teacher. Scott (2012) depicted at least three views as being “assessment *of* learning” (done to the student), “assessment *for* learning” (done for the student), and “assessment *as* learning” (done by the student him/herself) (p. 32). In music, multiple forms are recommended to obtain information about each student’s skill level, product, learning process, and relationship to the performance (Scott, 2012). These forms include performance assessments with rubrics, observation with behavioral checklists, and self-reflections using tools such as rehearsal logs. The consideration of appraising the process rather than focusing solely on the product is eminent because it allows for various outcomes (Lam & Schaubroek, 1999).

One of the methods of assessment emerging in visual arts is the use of portfolios with collaboratively established criteria (MDESE, 2011). The rationale for incorporating students’ input is that by giving them a share in the process, they are more likely to engage. Indeed, stakeholder participation in performance assessment is shown to facilitate communication and yield greater goal alignment between parties (R. S. Ayers, 2013; G. E. Roberts, 2003).

***Performing Arts.*** Music is typically viewed as a performance art, so assessment should be accomplished mainly through performance evaluations (NAfME, 2014). Instrument and voice performance evaluations should include teacher observations that incorporate a checklist or rating scale. Additionally, for a more in-depth evaluation, a detailed rubric could be used.

Knowledge of theory can be tested through traditional written exams. NAFME (2014) emphasized that paper-and-pencil tests alone should not be relied on for thorough music assessment, although the funding and time needed for performance-based assessments are often concerns for schools. In response to these concerns, in addition to recommendations for national standards, the consortium team coordinated by NAFME is working toward a comprehensive assessment plan for educators. The intent is that educators will adopt this plan and use it for assessing knowledge, skills, and performance in music education. Descriptions of appropriate assessments aligned to specific grade level expectations are included in the draft standards. For example, it is recommended that students engage in self-assessment, reflect upon their composition and its presentation, and demonstrate an understanding of the compositional structure within a cultural and historical context. Using both self-assessment and teacher assessment of their performance are recommended practices for effective assessment models in music (NAfME, 2014).

NAfME (2014) recommended that students in the upper grades digitally record their performance at the beginning of the assessment period then re-record at the end of the assessment period. Indeed, current research is exploring the use of such digital portable devices and electronic portfolios as recommended by NAFME (2014). The recordings of individual and group performances stored digitally, along with immediate peer- and self-evaluations, comprise an electronic portfolio (Bergee, 2007; Long, 2011; McCall, 2006). Portability allows music teachers to record singing or instrument performances by collecting individual samples during group performances. The use of these devices during these performances allows the music educator to maximize instructional time as well as address issues related to class size. These same portable devices allow students to also record their own rehearsals, when resources allow.

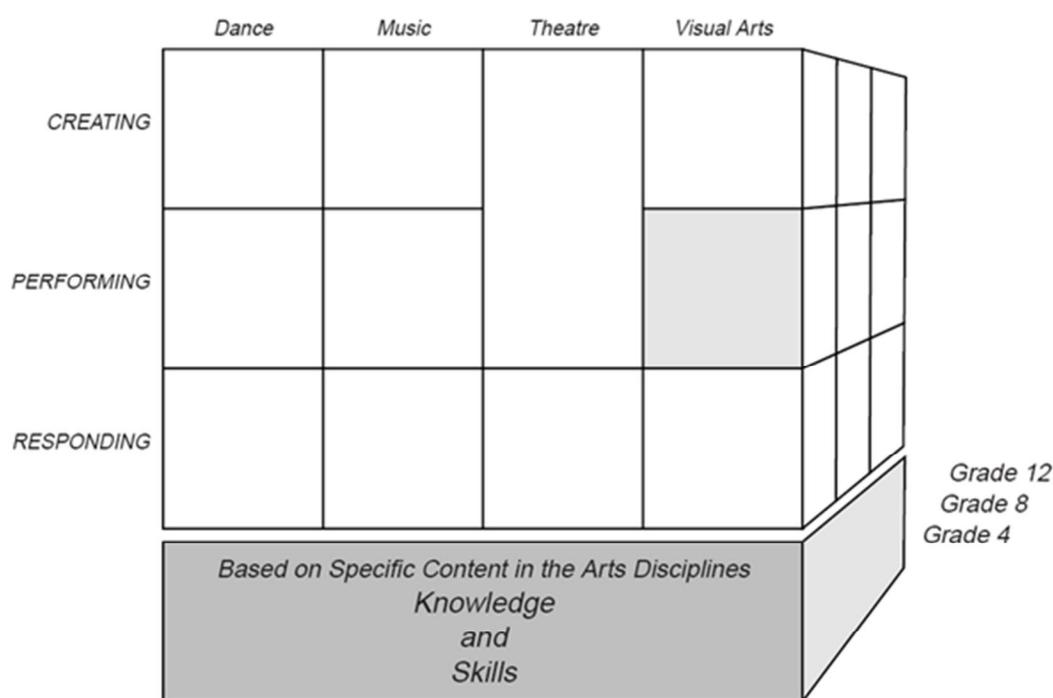
McCall (2006) found that this form of assessment appealed to both students and teachers. Students found it useful because it helped them develop critical listening skills. Teachers found that it provided an external reference for grading that could be evaluated by more than one person.

The risks of subjective grading are minimized when both peer- and self-assessment are included (Bergee, 2007). Blom and Encarnacao (2012) supported the rationale for using student reflections in music by showing that the involvement of student opinion develops a variety of skills including both interpersonal and communication skills. For teachers seeking purely objective measures, Long (2011) piloted SmartMusic® software and found that it is possible to digitally assess concrete performance criteria, but found the outcomes to be unforgiving of common errors that human raters would treat differently. In Russell and Austin (2010) survey of assessment practices, performance was found to be a significant source of grading material that could showcase both student growth and teacher effectiveness, lending itself to the assurance of a quality music education program.

***Federal Model.*** In addition to the visual and performing art frameworks presented, above, the federal government has created a framework for assessing the Arts. The assessment model that serves as an underpinning is summarized in Figure 1. The model distinguished between skills-based and knowledge-based content. As shown, art areas include: dance, music, theatre, and visual arts. The relevant processes include: creating, performing, and responding for each art. As depicted, art forms and processes are treated as two fully crossed dimensions with two caveats. For music, the creative process is writing or improvisation; the process of performing is singing or playing one's instrument. For visual art, the creative process is the actual act of painting, drawing, sculpting, etc. The process of responding for both music and

visual art is perceptual, interpretive, and critical; the student identifies, analyzes, and judges the nature and quality of the music or visual art. The first caveat is that in theatre, creating and performing cannot be distinguished. The second caveat is that in the visual arts, the process of performing is not applicable. For more information and specific examples see

<http://www.nagb.org/content/nagb/assets/documents/publications/frameworks/arts-framework08.pdf>. Federal assessment is also discussed in Part II of this report (see Additional Findings from the Federal Government subsection).



**Figure 1.** Assessment model used by the federal government (*National Assessment of Educational Progress; Winick, Avallone, & Crovo, 2008*). Reprinted with permission.

### Physical Education: Curriculum, Instruction, and Assessment

Effective physical education teachers are more than willing to share information about the physical education programs at their schools and how positively their students view physical education (Ennis, 2011). However, there is little consensus on specifically what students should

know and be able to do related to physical education (Rink, 2013). The result of this dilemma is that physical education teachers are often uncertain about what they should teach. Although, historically speaking, much of the research in physical education has focused on motor learning and motor skills development, current literature suggests a departure from these skills (Metzler, McKenzie, van der Mars, Barrett-Williams, & Ellis, 2013; Rink, 2013). In fact, according to NASPE (2007), a high quality physical education program should include four foci as its framework:

1. Opportunity to Learn;
2. Meaningful Content;
3. Appropriate Instruction;
4. Student and Program Assessment.

*The National Standards and Grade-level Outcomes for K-12 Physical Education* (American Alliance for Health, Physical Education, Recreation and Dance [AAHPERD], 2014) are recommendations identified by a task force that included membership from discipline experts from both higher education and K-12 education. These standards and grade-level outcomes for K-12 physical education emphasize the importance of children becoming physically literate by learning the skills necessary to participate in a variety of physical activities, knowing the implications of and the benefits from involvement in various types of physical activities, participating regularly in physical activity, being physically fit, and valuing physical activity and its contributions to a healthful lifestyle.

Clearly, it is the case that an effective physical education curriculum should be based on national standards that describe what students should know and be able to do. The teaching methods for physical education seem to involve direct instruction, demonstration, and practice

(S. F. Ayers, Housner, Gurvitch, & Pritchard, 2005). The Department of Health and Human Services Centers for Disease Control and Prevention (CDC) in partnership with physical education experts developed the *Physical Education Curriculum Analysis Tool* [PECAT]. This tool is designed to assist physical education leaders when evaluating their existing programs or choosing a specific curriculum based on national recommendations from the CDC and NASPE. One specific recommendation from the CDC is that instruction should take place using multiple motor skills used to enhance development – both physically and socially. Furthermore, the appropriate sequencing of learning activities is imperative in order to have a successful physical education program. Specifically, activities should reflect appropriate developmental levels of the students involved in the program. This allows requisite basic level motor and movement skills to be mastered before more advanced motor and movement skills are introduced which promotes physical literacy (Pennsylvania State Department of Education, 1976).

Policies that affect both physical education activities and the environment in which they take place can impact desired student outcomes related to physical activity and health (Ennis, 2011; Sallis et al., 1999). For example, according to the CDC, instruction should foster inclusive environments that are appropriate for all children and educators should make adaptations when necessary to accommodate children with disabilities. Physical education teachers are recommended to have both substantial pedagogical and content knowledge. Furthermore, they should base their teaching on the national standards for K-12 physical education (NASPE, 2007). The amount of instructional time spent on physical education is a necessary component to an effective physical education program. Silverman, Devillier, and Ramírez (1991) found that the amount of time students spent in physical education classes engaged in physical activities increased student learning outcomes. It should be noted that recommendations of NASPE (2007)

suggested a minimum of 150 minutes per week for elementary-aged students and 225 minutes per week for middle and high school students for all physical education programs. Interestingly, Dills, Morgan, and Rotthoff (2011) found statistically significant improvements in reading when time spent on physical education increased. While the mechanism associated with such an improvement is unclear, research has indicated that regular exercise may increase the rate of adult stem cell division, which may lead to the creation of new brain cells and improved cognitive ability (Kempermann & Gage, 2002). Additionally, according to NASPE (2007), physical education teachers should not only establish high levels of expectations related to psychomotor, cognitive, and affective domains, but should also view assessment as an integral part of teaching and learning. NASPE (2007) also included recommendations suggesting that engaging in reflection is imperative for physical education teachers.

Rink (2013), through a synthesis of multiple past studies, concluded that time on-task, while an integral component of an effective physical education program, is not the only variable for consideration. Indeed, teaching is a complicated, dynamic profession that cannot be measured easily by linking student outcomes to teacher input. A paradigm shift from teacher input to process-product has become an integral component of the recent literature (Rink, 2013). It is known that variables such as classroom and socio-economic status, school climate, instruction, self-efficacy, curriculum, student motivation, affect, and assessment practices in addition to one's beliefs about these variables can impact student achievement (Brown, 2004; Rhodes, Fiala, & Conner, 2009; Sun & Chen, 2010; Wright et al., 1997). Rink (2013) contended that one way for untested disciplines to become more prevalent and less marginalized is to have them become accountable. By including physical education programs into the assessment arena, the programs can become part of the reform movement, which may prevent program erosion.

Indeed, an unintended outcome of the assessment movement is the emphasis placed on content that is currently not assessed because in the current climate what is not tested is typically not taught and becomes marginalized.

Assessment recommendations from NASPE (2007) included: skill tests, peer observations, self-assessments, student reflections (connect learned skills or concepts to personal fitness goals, daily life, or other sports), and student fitness/activity logs. Furthermore, assessment of physical education should include ongoing opportunities for students to conduct self-assessments and self-monitoring of physical activity (Rice, 2013). Consequently, parental and student involvement in the assessment process as well as the results is encouraged. According to Scruggs, Beveridge, Watson, and Clocksin (2005), the use of pedometers is one effective way to measure student activity levels to ensure a physically active lifestyle. Wang, Pereira, and Mota (2005) found, through the use of heart rate monitors, that children are spending too much time being physically inactive during their physical education classes in schools. They emphasized the importance of physical activity both inside and outside school and they suggested that the use of these heart rate monitors is one effective way to assess the activity level of children and adolescents. NASPE (2007) recommended that multiple observations of entire class periods should be included in the assessment of physical educators. In addition to multiple, comprehensive observations of the teacher, both student performance and achievement data should be analyzed. Many studies emphasized the importance of student self-reported motivation and attitudes to assess physical education (Patridge, King, & Bian, 2011; Rice, 2013) because these self-determination factors are positive predictors of physical activity intentions (R. M. Ryan, Huta, & Deci, 2008; Standage, Duda, & Ntoumanis, 2003).

The American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD, 2014) indicated the importance that physical education programs address fitness as a health concept. In those programs personal and social responsibility are emphasized, which contribute to a value system that includes physical health. This effort corresponds with the National Health Education Standards (Center for Disease Control and Prevention [CDC], 1995) which stresses lifestyle adjustment as a priority. This is accomplished through instruction on disease and injury prevention and assessment of health attitudes, followed by self-analysis. Students are encouraged to become advocates of their own health by contemplating social and environmental influences. Cognitive aspects such as decision-making abilities and goal-setting are also included.

Optimal characteristics of physical education teachers are described in detail by the National Association of Sports and Physical Education (NASPE, 2007). They are expected to employ similar strategies as academic instructors, with the extension of an overall lifestyle component. This holistic approach means that in addition to using multi-modal instructional and assessment methods to accommodate diverse learners, they are meant to connect with students beyond the classroom. This may be done through coaching and sports involvement, becoming a role model or mentor, and reflecting healthy self-care both in and out of school. In this manner, ideal physical education teachers associate the cognitive, affective, and psychomotor domains for students by demonstrating it in their own personal lives. Addressing these different areas provides more information as to how students' health attitudes are formed and maintained. For instance, having students write about how they feel (both emotionally and physically) after exercising serves to increase their body consciousness (NASPE, 2007).

More objective assessment methods in physical education have been problematic due to the multiple external factors (T. Roberts, Evans, & Ormond, 2006). The issue has been whether to assess knowledge, performance, or both (Scruggs et al., 2005). Grading creates a conflict due to the wide assumption that participation should be equal to a satisfactory score (Patridge et al., 2011). NASPE (2007) mentioned that teachers should utilize available technology to gain objective results, and efforts have been made to incorporate monitoring devices. However, they receive mixed feedback from students. In a study by Patridge et al. (2011), heart monitors revealed whether high school students reached the desired active heart rate as determined by national gender and age standards. Because some did not, they were unhappy with their lower grades. Scruggs et al. (2005) had a more positive response with pedometers for elementary age students, and found them to be a reliable measure of activity. Though the ethical issues surrounding the fairness of these techniques needs to be explored, they have potential to become options for physical assessment and are used by some municipalities already (Lee, Nihiser, Fulton, Borgogna, & Zavacky, 2013).

Currently, educators reported dividing assessment among written knowledge testing, skill performance, and fitness tests that may be compared to district, state, and national scores (Lee et al., 2013). Collier (2011) suggested that the use of five dimensions of assessment in order to successfully implement an effective assessment model: (1) clear purpose, (2) clear targets, (3) sound design, (4) effective communication, and (5) student involvement. Langton (2007) encouraged setting realistic goals for both the curriculum and assessment of physical education. Langton (2007) purported that often these goals become too broad and that physical educators try to be all things to all people. If the curricula have specific goals, then appropriate assessments can be developed and used to measure performance against these goals. Part of an effective

model of assessment should also include prompt, extensive feedback that is used to encourage students to both experience and appreciate physical movement (Langton, 2007).

## **Part II: Summary of Practices across States**

The emphasis on accountability has resulted in an era of assessment. These assessments, however, take on different forms and functions as the meaning of the term itself is laden with many connotations. Even so, the various connotations of assessment cause a dilemma for stakeholders in education. This dilemma seems to affect the way in which teachers, students, and other stakeholders view assessment. Indeed, research has shown that the meaning of assessment held by a stakeholder impacts both the type of assessment given as well as the use of the assessment data. Added to this is the present need to assess areas such as the arts and physical education. As can be seen in the above review, these hard-to-measure areas already have received much attention with mixed success. The present study aimed to shed light on the methods of and reasons for assessing these areas by state-level educational stakeholders. Specifically, it sought to provide an in-depth comprehensive review of the current state of assessment in each of the United States.

### **Methodology**

#### **Design**

Representatives associated with assessment in each of the 50 states and the District of Columbia were identified via internet search. Letters were sent to each state to establish contact and introduce the study (see Appendix A). In some cases, the information first identified via internet search was incorrect and was updated based on phone or mail contact with the state. Appendix B contains the contact information for each of the main points of contact. It is important to note, however, that the contacts listed are not necessarily the individuals who participated in the survey. In many cases, the contact listed delegated the survey to one or more experts within their states who would best answer the questions.

Data were collected via structured phone interviews. Six graduate research assistants were trained and tasked with conducting these structured interviews. Research assistants were each assigned specific states to research via the internet and become familiar with their assessment practices. Appendix C contains a list of online resources that served as initial data for the various states. Research assistants used these data as background information when conducting phone interviews with the state. The goal of this background search procedure was to boost response rate by providing initial information that could be confirmed via interview so as to avoid burdening participants. However, as an added benefit, searching background information provided a sense of validation of the information collected.

As research assistants interviewed participants, they entered data into an internet-based survey that was hosted via Qualtrics. The online version of the survey is available at the following link: [https://acsurvey.qualtrics.com/SE/?SID=SV\\_7a0uGUGoq0d59fT](https://acsurvey.qualtrics.com/SE/?SID=SV_7a0uGUGoq0d59fT). The survey can also be found in Appendix C. As noted in the appendix, presentation of questions depended upon responses to preceding questions.

The present study was approved by the Institutional Review Board at the University of West Florida (IRB 2014-084). See Appendix D for the approval. Participation was voluntary. Because the study represents public policies rather than individual opinions, performance, or personal information, informed consent was not necessary and the results are not confidential.

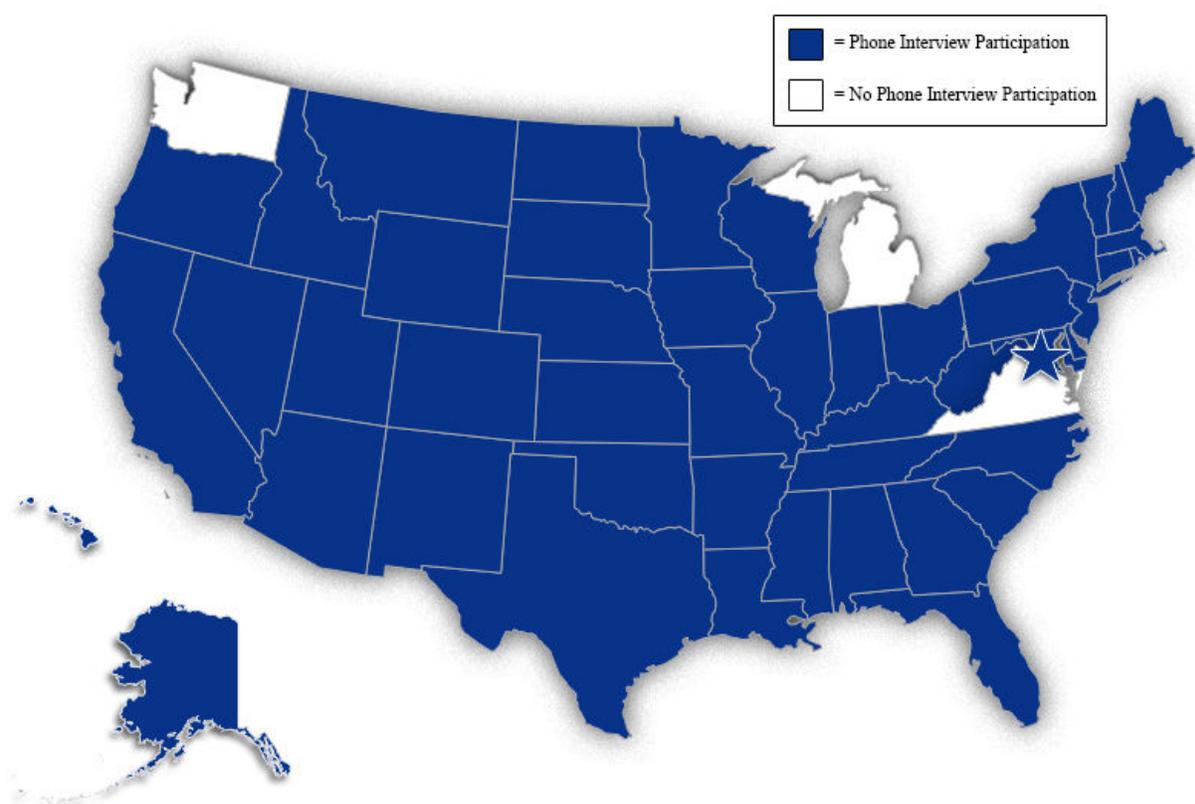
### **Sample Demographics**

Data were recorded for 50 states plus the District of Columbia. Interview responses were recorded from 48 of the municipalities<sup>1</sup>, with the exception of Michigan, Washington and Virginia, from which data were gathered from online state resources. Figure 2 depicts the states

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<sup>1</sup> The term municipalities is defined here as the 50 states and the District of Columbia.

who participated (a high response rate). Approximately 85% of data was acquired via interview and 15% was acquired via internet sources. Because there were multiple representatives from each municipality, a total of 87 representatives participated in the phone interviews. The number of contacts per state ranged from zero to four, but the majority of states had one point of contact. Titles for our points of contact varied greatly. Of the contacts, the most common title ( $N = 11$ ) was a variation of the title “Director of Assessment” (e.g., Director of Assessment and Accountability, Director of Education Assessment, Director of Assessment Design).



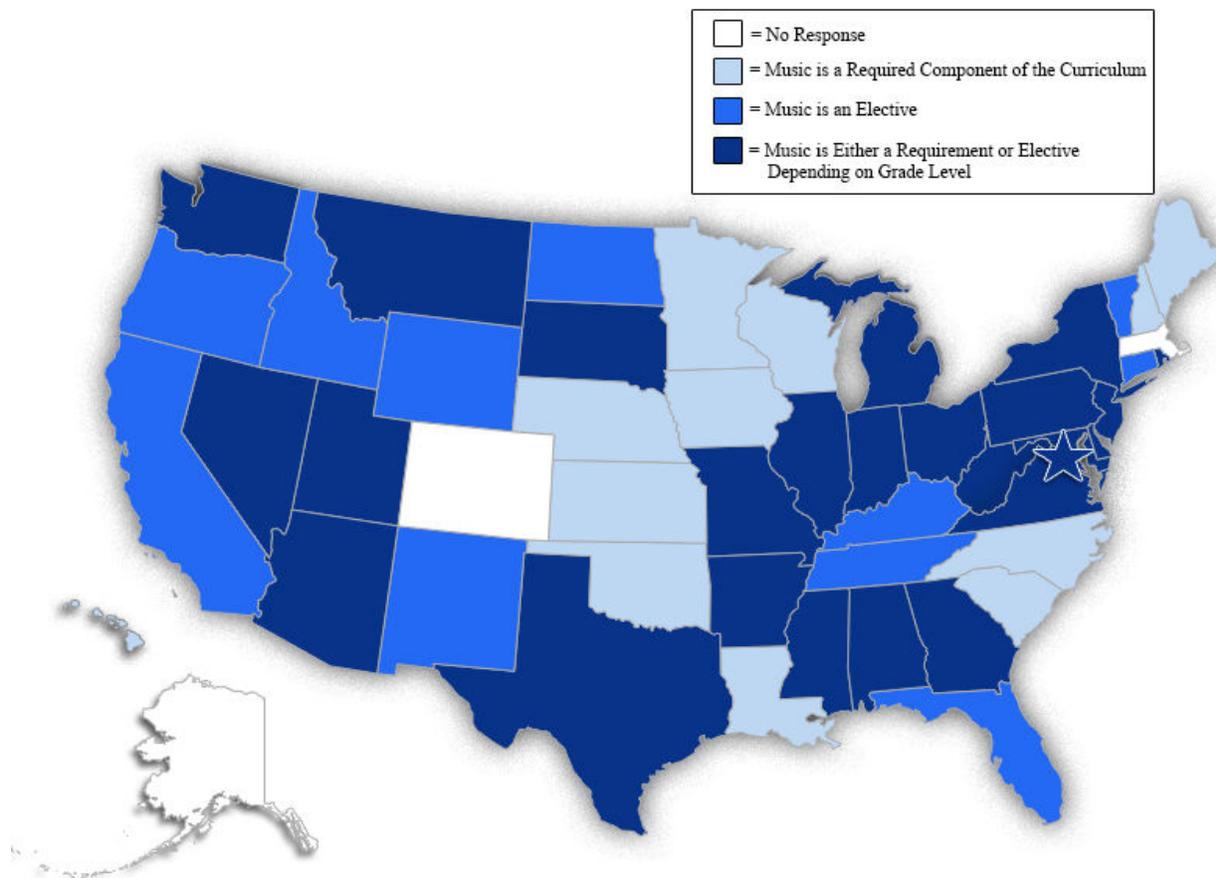
**Figure 2.** The above map depicts states with representatives completing the survey via phone interview ( $N = 51$ ).

## Results

### Performing Arts

*Formal Instruction.* Formal instruction of music was offered in all 51 municipalities. In 48 municipalities, music was either a required component of the curriculum ( $N = 12$ ), an elective ( $N = 11$ ), or both a requirement and an elective ( $N = 25$ ), depending upon grade level. See Figure 3 for a map of the results. Music requirements or electives differed by grade level in the majority of these municipalities ( $N = 39$ ), but some state music requirements or electives did not differ across grades K-12 ( $N = 9$ ).

From the qualitative responses concerning formal instruction practices, common themes emerged, including grade level differences (e.g., K-5, K-8, 6-8, 9-12). State practices in K-8 music instruction generally included a time standard (e.g., one class per week, 40 minutes per week). In high schools, a common requirement was to offer music courses as electives or to define a specific number of credits for graduation.



**Figure 3.** The above map depicts state differences in music education. These data represent responses to the question, “Is music a required component of the curriculum or is it an elective?” ( $N = 48$ ).

**Standards.** Many municipalities had not adopted national music standards ( $N = 44$ ). Of the 5 municipalities who had adopted them, the standards used included the National Association for Music Education (NAFME), the National Coalition for Core Arts Standards (NCCAS), and the National Standards for Arts Education (NSAE). One state used the NAFME as a framework for creating its own state standards. All 51 municipalities created their own standards for music education such as the Indiana Academic Standards for Music, the Mississippi Visual and Performing Arts Framework, and the Oregon Arts Content Standards.

*Data Reporting.* This set of questions referred to the assessment of music education. The majority of municipalities did not require schools to assess music education ( $N = 36$ ). Of these municipalities, most did not plan to assess music in the future ( $N = 29$ ). However, five municipalities planned to assess music education in the next two years. Within the six municipalities that planned on assessing music education in the future, one municipality intended to require that data be submitted to the state department of education.

Municipalities that required the assessment of music education ( $N = 14$ ) utilized multiple types of assessment tools. The most commonly endorsed methods included teacher-constructed assessments ( $N = 10$ ) and instrument performance tests ( $N = 8$ ). If the state required the assessment of music education, some required that the data be submitted to the state ( $N = 5$ ), but half did not require assessment tool data be sent to the state ( $N = 7$ ). Multiple types of assessment tool data were collected within each of these municipalities, such as teacher-constructed assessments ( $N = 3$ ), portfolios ( $N = 1$ ), and observations ( $N = 1$ ; Figure 4).

The data from music education assessment were used for many different purposes. Of the six municipalities that responded, uses varied from assisting in the professional development of educators ( $N = 5$ ) to assessing student performance ( $N = 3$ ) or achievement of music education standards ( $N = 3$ ; Figure 5). Data related to music education were also collected at different grade levels within each of these municipalities (Figure 6).

*Assessment Models.* From the survey responses, it was uncommon for music education data to be used in assessment models, which were described to respondents as formulas frequently used to assess instructional success. Three responses were recorded; of these, two municipalities verified that music education data were used in a formula for making personnel decisions (e.g., compensation, reduction in force, evaluation).

### Types of Assessment Tools Used to Assess Music Education by State

Type of Assessment Tool	# of Municipalities	% of Municipalities
Teacher constructed assessments	10	67%
Other	9	60%
Instrument performance tests	8	53%
Portfolios	6	40%
Singing performance evaluations	6	40%
Observations	5	33%
Standardized/published/pro prietary tests	4	27%
Attitudinal surveys	2	13%
Time Requirements for music education	1	7%

*Figure 4. The table above displays the tools used by municipalities that require the assessment of music education.<sup>2</sup>*

<sup>2</sup> Percentages based on total responses ( $N=15$ ).

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**Use of Music Education Assessment Data Sent to State**

Use of data	# of Municipalities	% of Municipalities
Assist in the professional development of educators	5	83%
Teacher Evaluations	3	50%
Assess student achievement of music education standards	3	50%
Inform Curricular Decisions	3	50%
Assess student performance in music education	3	50%
Public forum to notify stakeholders	3	50%
Other	3	50%
Monitor Student Interest	1	17%

*Figure 5. The table above displays the purposes for which data are used by municipalities that require the assessment of music education.<sup>3</sup>*

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<sup>3</sup> Percentages based on total responses ( $N = 6$ ).

### Grades (K-12) from which Music Education Data are Collected

Grade	# of Municipalities	% of Municipalities
K	3	60%
1	3	60%
2	3	60%
3	4	80%
4	5	100%
5	4	80%
6	4	80%
7	4	80%
8	5	100%
9	3	60%
10	3	60%
11	3	60%
12	4	80%

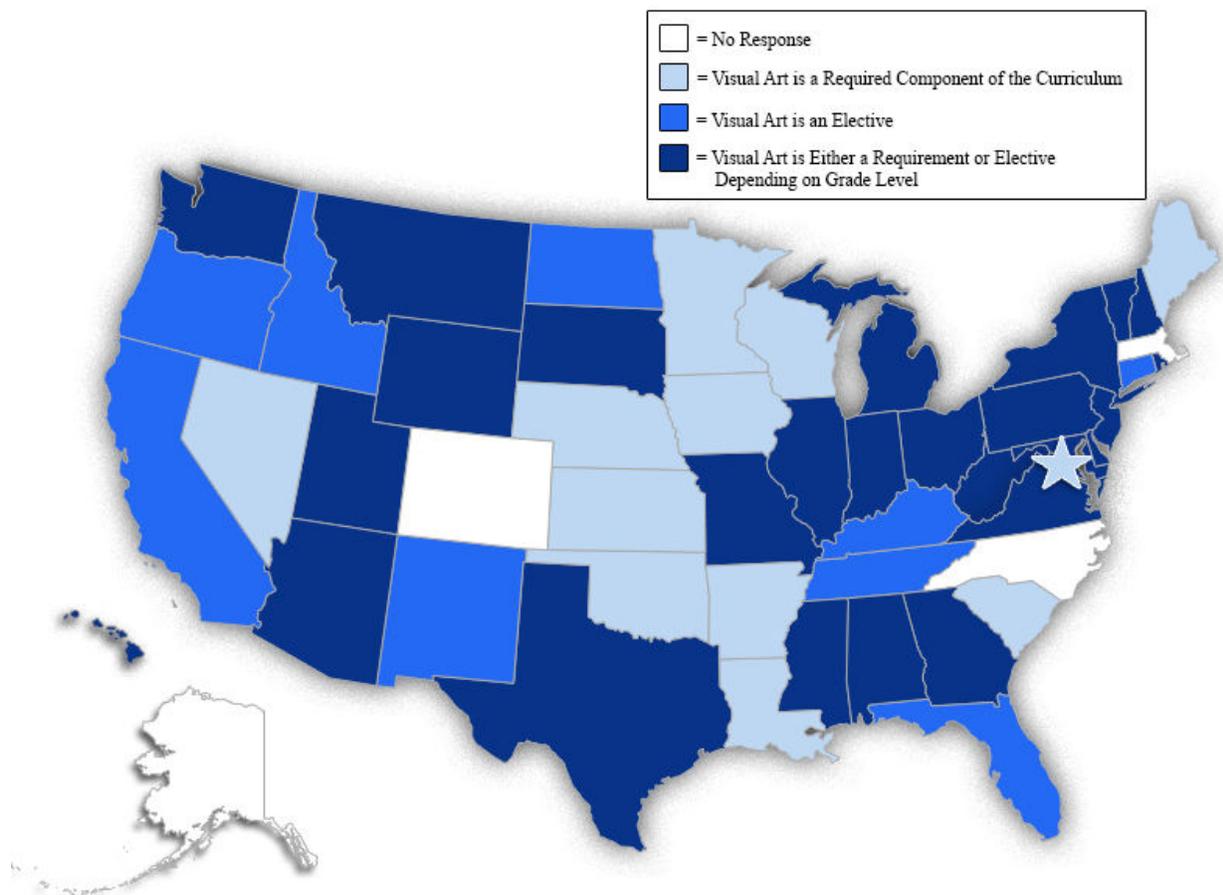
*Figure 6. The table above reflects the grade levels from which music education data are collected.<sup>4</sup>*

<sup>4</sup> Percentages based on total responses ( $N = 5$ ).

## Visual Arts

**Formal Instruction.** Formal instruction of visual arts was offered in 51 municipalities. In 47 municipalities, visual arts was either a required component of the curriculum ( $N = 12$ ), an elective ( $N = 8$ ), or both a requirement and an elective ( $N = 26$ ), depending on the grade level. See Figure 7 for a map of the results. Visual arts requirements or electives differed by grade level in the majority of these municipalities ( $N = 38$ ), but some state visual arts requirements or electives did not differ in grades K-12 ( $N = 8$ ).

From the qualitative responses, common themes emerged, including grade level differences (e.g., K-5, K-8, 6-8, 9-12). State practices in K-8 visual arts instruction were indicated to be required. In high schools, a common requirement was to offer visual arts courses as electives within a set of Fine Arts (music, theater, or visual arts) in order to fulfill graduation requirements.



**Figure 7.** The above map depicts state differences in visual art education. These data represent responses to the question, “Is art a required component of the curriculum or is it an elective?” ( $N = 46$ ).

**Standards.** Many municipalities had not adopted national visual arts standards ( $N = 43$ ). Of the 4 municipalities who had adopted them, the standards used included the National Art Education Association (NAEA), the National Coalition for Core Arts Standards (NCCAS), and the National Standards for Arts Education (NSAE). One state used the NAEFME as a framework for creating state standards. All 50 states created their own standards for visual arts education such as the Colorado Academic Standards in Art, the Arizona Visual Arts Standards, and the Arkansas Fine Arts Curriculum Framework.

**Data Reporting.** This set of questions referred to the assessment of visual arts education. The majority of municipalities did not require schools to assess visual art education ( $N = 36$ ). Of these municipalities, most did not plan to assess visual arts in the future ( $N = 28$ ). However, six municipalities planned to assess visual arts education in the next three years. Within the six municipalities that planned on assessing visual arts education in the future, one municipality reported that they would require that data be submitted to the state department of education.

Municipalities that required the assessment of visual arts education ( $N = 13$ ) had multiple types of assessment tools. The most commonly endorsed methods included teacher-constructed assessments ( $N = 10$ ), visual arts performance tests ( $N = 9$ ) and other assessments ( $N = 9$ ; Figure 8). If the state required the assessment of visual arts education, some required that the data be submitted to the state ( $N = 6$ ), but a slight majority did not require assessment tool data be sent to the state ( $N = 7$ ).

The data from visual arts education assessment were used for many different purposes (Figure 9). Of the six municipalities that responded, uses varied from assessing student performance in art education ( $N = 3$ ) to informing curricular decisions ( $N = 3$ ) or assisting in the professional development of educators ( $N = 3$ ). Data related to visual arts education were also collected at different grade levels within each of these municipalities (Figure 10).

**Assessment Models.** As with the performing arts (i.e., music), it was uncommon for visual arts education data to be used in assessment models. Three responses were recorded; of these, two municipalities verified the use of visual arts education data in a formula for making decisions.

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**Types of Assessment Tools Used to Assess Visual Arts Education by State**

Type of Assessment Tool	# of Municipalities	% of Municipalities
Teacher constructed assessments	10	77%
Other	9	69%
Visual arts performance assessments	9	69%
Portfolios	7	54%
Standardized/published /proprietary tests	6	46%
Observations	5	38%

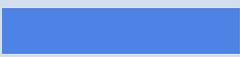
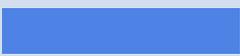
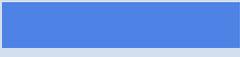
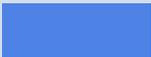
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*Figure 8. The table above displays the tools used by municipalities that require the assessment of visual arts education.<sup>5</sup>*

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<sup>5</sup> Percentages based on total responses ( $N=13$ ).

### Use of Visual Arts Education Assessment Data Sent to State

Use of data		# of Municipalities	% of Municipalities
Assess student performance in art education		3	50%
Assess student achievement of art education standards		3	50%
Inform curricular decisions		3	50%
Assist in the professional development of educators		3	50%
Teacher evaluations		3	50%
Other		3	50%
Public forum to notify stakeholders		2	30%
Monitor student interest		2	30%

*Figure 9. The table above displays the purposes for which data are used by municipalities that require the assessment of visual arts education.<sup>6</sup>*

<sup>6</sup> Percentages based on total responses ( $N = 6$ ).

### Grades (K-12) from which Visual Arts Education Data are Collected

Grade	# of Municipalities	% of Municipalities
K	3	50%
1	3	50%
2	3	50%
3	4	67%
4	5	83%
5	4	67%
6	4	67%
7	4	67%
8	5	83%
9	3	50%
10	3	50%
11	3	50%
12	4	67%

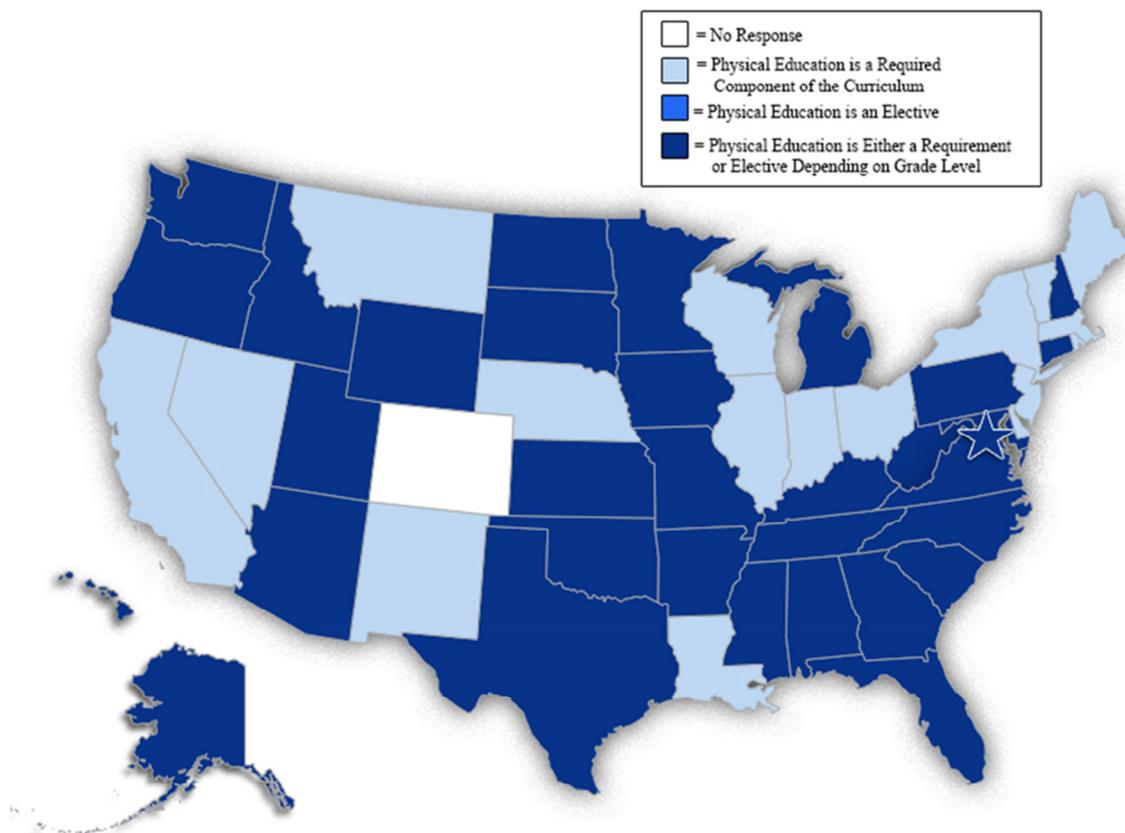
*Figure 10.* The table above reflects the grade levels from which visual arts education data are collected.<sup>7</sup>

<sup>7</sup> Percentages based on total responses ( $N = 6$ ).

## Physical Education

*Formal Instruction.* Formal instruction of physical education was offered in all 51 municipalities. In 50 municipalities, physical education was either a required component of the curriculum ( $N = 16$ ), or both a requirement and an elective ( $N = 34$ ), depending upon grade level. No state reported offering physical education solely as an elective.

Physical education requirements or electives differed by grade level in the majority of these municipalities ( $N = 42$ ), but some state requirements or electives for physical education did not differ across grades K-12 ( $N = 8$ ). See Figure 11 for a map of the results. From the qualitative responses concerning formal instruction practices in physical education, there were multiple themes that were common across municipalities. Grade level differences were similar to that of Music and Art Education (e.g., K-5, K-8, 6-8, 9-12). State practices in K-8 physical education instruction varied. Common themes included weekly time requirements for formalized physical education, and requirements for recess (e.g., 150+ minutes of physical education per week, requirement of daily recess). In high schools, a common requirement was to define a specific number of credits for graduation.



**Figure 11.** The above map depicts state differences in physical education. These data represent responses to the question, “Is physical education a required component of the curriculum or is it an elective?” ( $N = 50$ ).

**Standards.** Most municipalities had not adopted national PE standards ( $N = 38$ ). Of all municipalities that reported adopting national standards ( $N = 11$ ), only Illinois reported adopting a standard other than the Content Standards by the National Association of Sports and Physical Education (NASPE). Illinois reported the adoption of the National Standard for Physical Education. Two of the ten states that reported adopting the NASPE standards used the standards as a framework for their own state standard. The majority of municipalities created their own standards ( $N = 48$ ), examples of these included South Dakota Physical Education Standards,

Georgia Performance Standards for Physical Education, and Kansas School Wellness Policy Model Guidelines.

**Data Reporting.** This set of questions referred to the assessment of physical education. About half of the municipalities did not require that schools assess physical education ( $N = 28$ ). Of those municipalities that did not require assessment, six planned to assess physical education in the future, and four out of the six planned to begin assessing physical education in the next two years. Within the municipalities that planned on assessing physical education in the future, two municipalities reported that they intended to require the data be submitted to the state department of education.

The types of assessment tools used by those states that required the assessment of physical education ( $N = 23$ ) varied. The most commonly used methods included fitness tests ( $N = 16$ ) and teacher constructed assessments ( $N = 12$ ; Figure 12). Most municipalities that required the assessment of physical education also required the submission of data to the state department of education ( $N = 15$ ). The most common types of assessment data collected within each municipality included fitness tests ( $N = 9$ ), followed by standardized tests ( $N = 2$ ). The data from physical education assessments were used for multiple purposes. The most common purposes reported by municipalities were to monitor student fitness levels ( $N = 7$ ), to assess student achievement of physical education ( $N = 6$ ), and to inform curricular decisions ( $N = 5$ ). Other frequently reported purposes included the collection of data to monitor student obesity rates ( $N = 4$ ), to assess student performance in PE ( $N = 4$ ), to report in public forums to notify stakeholders ( $N = 4$ ), and to assist the development of professional educators ( $N = 4$ ; Figure 13). Data related to physical education were also collected at different grade levels within each of

these municipalities (e.g., fitness test in grades 5, 7, 9, aggregate data sent every year for grades 3-12).

*Assessment Models.* Seven Municipalities reported that the data collected for physical education were used in assessment models. However, there were no common themes between any of the response regarding the use the data.

Delaware reported the use of the Charlotte Danielson Framework for its assessment model. Louisiana reported analyzing the data at the state level to award schools, based on performance; they use these data to evaluate and assess school personnel on a yearly basis. Consequences of evaluations for Louisiana included those such as reductions in force, intensive assistance plan for struggling teachers, and change in compensation. One municipality used these data in an education report card for each school. Of the seven municipalities, three municipalities were unable to provide detail about their assessment model.

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**Assessment Tools Used to Assess Physical Education by State**

Types of Assessment Tools	# of Municipalities	% of Municipalities
Fitness tests	16	73%
Teacher constructed assessments	12	55%
Other	12	55%
Performance assessments	7	32%
Measurements of body mass index (BMI)	7	32%
Portfolios	5	23%
Standardized tests	4	18%
Time requirements for physical education	3	14%
Observations	3	14%

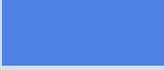
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*Figure 12.* The table above displays the tools used by municipalities that require the assessment of Physical Education.<sup>9</sup>

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<sup>9</sup> Percentages based on total responses ( $N = 23$ ).

### Use of Physical Education Assessment Data

Use of data		# of Municipalities	% of Municipalities
Other		9	60%
Monitor student fitness levels		7	47%
Assess student achievement of physical education standards		6	40%
Inform curricular decisions		5	33%
Monitor student obesity rates		4	27%
Assess student performance in physical education		4	27%
Public forum to notify stakeholders		4	27%
Assist in the development of educators		4	27%
Teacher evaluations		1	7%

*Figure 13.* The table above displays the purposes for which data are used by municipalities that require the assessment of physical education.<sup>10</sup>

<sup>10</sup> Percentages based on total responses ( $N = 15$ ).

## Achievement Measures, Value-Added Models, and Growth Models

**Achievement Data.** Of the 49 municipalities that responded, including 48 states and the District of Columbia, 42 municipalities (86%) reported collecting standardized achievement data. Of these, only 23 (47%) reported using achievement data in value-added models. The most commonly assessed disciplines included mathematics ( $N = 23$  municipalities; 100%), reading ( $N = 19$  municipalities; 83%), science ( $N = 16$  municipalities; 70%), social studies ( $N = 11$  municipalities; 48%), and language arts ( $N = 18$  municipalities; 78%). Disciplines, including history, civics, performing arts/music education, visual arts, and physical education, were much less likely to be evaluated using standardized assessment methods. The most commonly used assessment methods were state based, standardized measures.

**Growth Models.** When asked whether the standardized achievement data were used to measure student growth, 86% ( $N = 42$ ) of those municipalities who responded indicated that growth models were used and that measures of standardized achievement played an important role in estimating student growth. Of the 14% ( $N = 7$ ) municipalities that did not report using achievement data to measure the growth of students, 86% ( $N = 6$ ) of the municipalities indicated that they have plans to do so in the near future, with 71% ( $N = 5$ ) municipalities indicating that they will commence with the assessment of standardized student achievement data and the use of student growth models within the next two years.

Of the 42 municipalities that reported using growth models, 10% ( $N = 4$ ) municipalities endorsed the use of status model growth models (i.e., single year of student performance), while 29% ( $N = 12$ ) reported using simple growth models (i.e., multiple years of student performance) and 12% ( $N = 5$ ) reported using a variation of the simple growth model. Interestingly, 50% ( $N = 21$ ) municipalities reported using growth models developed within individual municipalities,

including the Colorado Growth Model. A number of municipalities (43%) reported employing growth models that incorporate covariate measures, such as prior student achievement scores, and a number of municipalities reported using value-added models to assess teacher performance. Of those municipalities that did report the use of value-added models to assess teacher performance, many reported that over 15% of the evaluation is based on student growth.

### **Additional Findings from the Federal Government**

In addition to the information regarding each of the 51 municipalities discussed above, our search for assessment practices revealed that the Federal Government assesses the nation's students via the National Assessment of Educational Progress (NAEP); the results are used to create the National Report Card. Part of that National Report Card is an arts assessment that is the result of a rigorous process wherein a pair of committees containing stakeholders were selected, major issues were identified, six public hearings were held, guidelines were established, and finally, the Arts Education Assessment Framework was developed according to those guidelines (Winick et al., 2008). The framework is used as a basis for developing an assessment instrument that is sent to a sample of students in each state.

The framework was established in 1994 and used in 1997 and 2008. As discussed in the prior section (Visual and Performing Arts: Federal Model subsection), knowledge- and skills-based content is expressed by the student through the processes relevant to each art including creating/performing and responding given a challenging performance exercise that is an accurate representation of how that art is performed (Winick et al., 2008). The framework document also addresses how specific problems concerning the assessment of each art-form might be overcome. The problem to be overcome in music assessment is the fact that not every student knows the same pieces of music. This lack of uniformity is a limiting factor when identifying appropriate

activities. The solution to this is the use of sight-reading, rote imitation or performance of a practiced piece from the student's repertoire in order to ensure equivalent assessment from student to student (Winick et al., 2008). Regarding the visual arts, the problem concerns the authenticity of the creative process; i.e. providing ample time, direction, etc. (Winick et al., 2008). This level of assessment requires that the facilitators of the assessments have particular knowledge and abilities within the art assessed.

The students are assessed by trained observers at grades four, eight, and twelve, and are rated as expressing their art at levels that are deemed basic, proficient, or advanced based on standardized achievement criteria specific to each art form and grade level (Winick et al., 2008). A "basic" level of expression is defined as a partial mastery of the content expected at the student's current grade level. "Proficient" mastery of the content indicates that students can express their knowledge and skills at a level commensurate with the national standards, whereas an "Advanced" level of mastery would only be expected from the best of students (Winick et al., 2008). Achievement at each of these levels, and for each art form is described in terms of what students should know and be able to do at grade levels four, eight, and twelve, respectively. According to Winick et al. (2008), it is also important to consider the relative level of time spent in each of the processes.

Assessments are weighted according to the amount of time spent in each of the different processes at different grade levels in the different arts. For instance, in fourth grade dance students spend 40% of their time on creating and 30% each on performing and responding. In contrast, twelfth graders spend only 30% of their time on creating and 30% and 40% respectively on performing and responding (Winick et al., 2008). Thus, the fourth grader's assessment is weighted more toward creating whereas the twelfth grader's assessment is weighted more toward

performing and responding. Additional information on the NAEP or the National Report Card can be found at <https://nces.ed.gov/nationsreportcard/>.

This framework, and the standards expressed within it are used as the basis for many of the States' own arts standards, however the NAEP is not the only source for arts assessment standards. The National Coalition for Core Arts Standards (NCCAS) is a large group of stakeholders funded mainly by the State Education Agency Directors of Arts Education (SEADAE) that have been working since 2009 to update the standards first introduced in 1994 (NCCAS, 2014). Their updated framework for arts assessment is titled the "National Core Arts Standards: A Conceptual Framework for Arts Learning" (NCCAS, 2014). The biggest difference between this framework and the former is the inclusion of the media arts as an art form. Another important difference is the NCCAS's emphasis on current literature and modern developments in assessment policy such as the common core and the twenty-first century skills movement (NCCAS, 2014). More information regarding this most recent framework and its standards can be found at <http://nccas.wikispaces.com/>.

## **Part III: Discussion/Suggestions**

### **Recommendations for Assessment**

Recommendations for accurate assessment involve multiple factors. Based on the review of the literature in Part I, it should include both quantitative and qualitative data. This allows for different methods to be included, which can address diverse ways that information is used by the students (Baker et al., 2010; Maki, 2002; McTighe & O'Connor, 2005). Stiggins and Chappuis (2005) go so far as to state that neither is as useful by itself, so it can be worthwhile to examine the relationship between both forms of data. Presently, some states are already using both quantitative and qualitative data. For example, results of our survey revealed that Oklahoma combines outcomes from portfolios, performance evaluations, written exams, and teacher-constructed testing to generate a percentage of students who were able to achieve the visual and performing arts standards. Collecting data at multiple points in time is another way to ensure a comprehensive view of student growth (Baker et al., 2010) by establishing performance improvements over individual student baselines.

It is important to consider the effect of systematically measuring teacher performance in this field, where evaluation has not traditionally been linked to high-stakes decisions until now. In general, assessments are more tolerable to stakeholders (e.g., teachers and parents) when stakeholders have been involved in the selection of criteria. According to Mulvaney et al. (2012), stakeholder involvement gives “voice” to those that are greatly impacted by assessment outcomes. Procedural justice is perceived by employees when they are provided with specific, behavioral criteria against which they are evaluated (Catano et al., 2007; Thurston Jr. & McNall, 2010). Moreover, teachers are more likely to be accepting of assessment procedures when their

voice has been heard in the development of the criteria, and when valid and reliable testing methods are used to assess students on appropriate and attainable standards of performance.

States that have implemented these principles have encountered fewer obstacles from the employees, though no implementation is likely to be problem-free. As just a few examples, representatives from South Carolina, Ohio, and Oklahoma noted that forming coalitions to revise state standards is an effective means of including stakeholders in the collaboration. These teams were made up of approximately 30 or more subject matter experts from around the state, most of whom were teachers and other education professionals. By having representatives participate in the formation of standards, teachers' comfort with using them as objective instructional expectations was increased. In the current study, representatives responding to our survey revealed that some states expanded this approach by posting proposed standards in a public forum (e.g., their state's Department of Education website) and accepting comments made by the community before undergoing a final revision.

To focus on continual improvement, teachers should be able to conduct a critical analysis of student performances and reflections. In observations, this is commonly addressed through use of a rubric, which increases objectivity and provides an external focus for communication. Portfolio assessments have the advantage of tracking progress over time and being viewed by multiple evaluators, including the students themselves. From the perspective of Ohio's Department of Education, Fine Arts Consultant Nancy Pistone discussed the importance of creating "artifacts of learning" through reflective assessments, because in hard-to-measure content areas the experience of learning is a useable source of information. Students' self-perceptions inform teachers about the cognitive effects of the assignment, including how well their learning was supported by environmental factors.

The outcomes of a year of education are readily evidenced by achievement, as seen in assessment results. Portfolios and project-based assessments show whether or not the student has grown in technique, skill, and understanding. These gains in student knowledge and performance are an indicator of teacher effectiveness, though they are not the sole determinant (Baker et al., 2010). A comprehensive formula, such as the one used in South Carolina, evaluates teachers from several perspectives in addition to student growth. Feedback from the students, parents, peers, and supervisors can be considered, as well as the degree of professionalism demonstrated through attitude, appearance, and behavior. That is, a complete view of teacher effectiveness should include both measures of student outcomes and teacher inputs.

According to Glen Henry of Oklahoma State Department of Education, the information collected identifying weaknesses may be helpful for knowing how to provide teachers with the support they need (e.g., coaching, workshops) and opportunities for professional development. In addition, it has been found that identifying commendable strategies through incentive programs is motivating to employees (Tuytens & Devos, 2012). The strategies can then be shared with other educators. Rather than focusing only on how assessment is used to make high stakes decisions (e.g., raises, terminations), value-added models can be designed to incorporate developmental factors to help educators develop teaching strategies and improve their pedagogical skills.

Some frameworks already exist on which one can build an assessment model. For example, the Charlotte Danielson Framework for teaching, which is used by the state of Delaware, consists of a research-based set of instructional components. These components comprise the domains of (1) planning and preparation; (2) classroom environment; (3)

instruction; and (4) professional responsibilities. The framework can be used for the evaluation of teachers, professional development, and coaching. Evaluating teachers using this framework is based on these principles: (1) linking the evaluation to the mission of the school and school district; (2) linking the evaluation and professional development to continuous improvement processes; (3) emphasizing multiple curriculum-based, formative and summative measures of student outcomes, to inform professional conversations and coaching; and (4) providing schools with the necessary resources to allow new systems to succeed. Danielson opposes the evaluation of teachers based on students' performance on standardized tests. Additionally, the evaluation system should be implemented in a three tier system to ensure that teachers are evaluated at different stages of their career. Emphasis for early career teachers should be on mentoring and other support to ensure professional development, whereas the emphasis for more experienced teachers should concentrate on self-evaluation, collaboration, and individual goal-setting.

The current survey identified that a majority of states do not assess performing and visual arts (approximately 72%). Assessment of physical education was somewhat more common, with approximately half of the municipalities conducting assessment. Multiple assessment methods for each content area are recommended in the literature and are currently used by a majority of those states that assess these areas. Teacher-constructed assessments and performance tasks were common across all three hard-to-measure areas. We discuss specific recommendations for each of the three content areas below.

### **Specific Performing Arts Assessment Recommendations**

The current survey results indicate that the content area of music is considered core curriculum from pre-kindergarten to 8<sup>th</sup> grade in many states. In addition to the general recommendations for assessment, including music as a core subject is viewed as giving the

students adequate time to explore its cultural and personal impact. For example, in Maryland, music is frequently integrated with other subjects to demonstrate its relevance to multiple topics (MDOE, 2014). Maryland's standards provide teachers with examples of this cross-discipline integration, such as using written impressions of a piece of classical music that included vocabulary from a recent lesson (MDOE, 2014).

In music-based courses, both self and teacher assessments are suggested because of the subjective nature of the work (Bergee, 2007). Multiple evaluations broaden the viewpoint of the performance and allow room for some interpretation. The current availability of technology in most settings also makes it more practical to store electronic recordings of performances; the recording can then be incorporated into a portfolio method of assessment. Because recordings have proven useful for the arts, it is recommended as a way to document progress and evaluate how effectively students have reached objectives.

### **Specific Visual Arts Assessment Recommendations**

Our literature review and survey of U.S. practices revealed several implications for assessment of the visual arts. Students should be encouraged to respond to works of art, objects in nature, events, and the environment. Based on the review of the literature, students should be able to apply artistic processes and skills to their work as well as use different media to communicate artistically. Students should analyze the role of art in various cultures and describe their impact. According to the NAEA, students in middle and high school should be encouraged to communicate with more than one form of art, solve artistic problems, and understand the historical development of the arts (*The National Visual Arts Standards*, 1994).

Formative assessments should be conducted throughout and fully integrated within the learning process including performance based assessments and the timely provision of

constructive feedback to students in middle and high school. Other effective forms of assessment within an effective visual arts education program include portfolios of students' work with clear, established criteria with grading rubrics and the development of students' ability to compare art with altered copy (*The National Visual Arts Standards*, 1994).

### **Specific Physical Education Assessment Recommendations**

Various recommendations were found to be successful in a good physical education assessment program. Students should be assessed on their development and understanding of exercise skills and their knowledge of the benefits of physical activity. Additionally, they should be assessed on their participation in physical fitness activities and their understanding of the components of a healthy lifestyle (AAHPERD, 2014).

NASPE (2007) recommended the use of physical skill tests in the assessment of physical education students. In our survey, among the states that assessed physical education, fitness tests emerged as a common assessment technique. Additionally, students should be encouraged to perform objective peer observations and self-assessments of said physical skills. Student reflections and fitness logs of planned and attained physical fitness goals and activity levels serve as effective formative assessments that encourage student involvement in their physical education (NASPE, 2007). Instruction on disease and injury and prevention is another important aspect of a good physical education assessment program (CDC, 1995).

### **Conclusions**

This report provided a literature review and summary of current practice within the municipalities of the U.S. regarding assessment of performing art, visual art, and physical education. While each of the three content areas is unique and must be matched with a tailored assessment, some of the measurement principles described provide a starting point for effective

assessment. While relatively few states are systematically assessing the hard-to-measure disciplines at the state level, recommendations on how to do so effectively and fairly were gleaned from the literature reviewed in Part I of this report and the survey results obtained from interviews with the individual state departments of education. These strategies must be developed in accordance with the practices described in the current report, including giving voice to the stakeholders, using qualitative data (e.g., student self-reflections, peer judgments) as well as quantitative data (e.g., performance measures, activity logs), utilizing measures of student outcomes (i.e., student growth over time) as well as teacher inputs (e.g., classroom rubric-driven observations, pedagogy), and they must be implemented in a just manner in order to enable teachers to develop professionally. Given that assessment of these three hard-to-measure areas was found to be a relatively uncommon practice among the states, Florida is poised to be among the leaders in assessment of student growth in the hard-to-measure areas.

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## Appendices

### Appendix A: Contact Letter Sent to State Representatives



**School of Psychological and Behavioral Sciences**  
**College of Arts and Sciences**  
11000 University Parkway  
Pensacola, FL 32514-5751

January 21, 2014

Xxxx  
Assessment Director  
Street  
City, State Zipcode

Dear Mr./Ms. Xxxxx,

I am contacting you because you have been identified as the person responsible for K-12 assessment in your state. I am working with a team of researchers from the University of West Florida on a grant to help the Florida Department of Education identify any current assessment practices for "hard to measure" disciplines in K-12 education; specifically, Art, Music, and Physical Education. In our effort to identify these practices, graduate research assistants will be contacting you by phone within the next couple of weeks to ask you questions about the assessment practices used in your state for the hard to measure disciplines. We realize that not every state assesses these disciplines, but even if your state does not, we hope that you will be willing to provide your valuable insight about the process. If you have been incorrectly identified as the contact person for this information, I apologize and would greatly appreciate it if you could direct me to the correct contact person. If you would like to identify a preferred date and time for one of our graduate research assistants to contact you or if you have any questions please contact me at [skass@uwf.edu](mailto:skass@uwf.edu) or (850) 474-2107. We anticipate having a final report documenting the hard to measure assessment practices of all 50 states completed by the end of April 2014. If you would like a copy of that report, please let me know and one will be sent to you. I greatly appreciate your assistance in this project.

Sincerely,

Steven J. Kass, Ph.D.  
Department Chair / Principal Investigator

## Appendix B: Contact Information for All 51 Municipalities Participating

State	Contacts	Titles		State DOE Address	State Specific Links
Alabama	Nancy Ray	Educational Specialist		50 North Ripley Street P.O. Box 302101 Montgomery, AL 36104	<a href="http://www.alsde.edu/Pages/home.aspx">http://www.alsde.edu/Pages/home.aspx</a>
Alaska	Elizabeth Davis	Assessments Administrator		801 West 10th Street, Suite 200  PO Box 110500  Juneau, AK 99811	<a href="http://akartsed.org/new/education/on-thin-ice/">http://akartsed.org/new/education/on-thin-ice/</a>  <a href="http://education.alaska.gov/">http://education.alaska.gov/</a>
Arizona	Lyn Tuttle	Director of Arts Education		1535 West Jefferson Street  Phoenix, AZ 85007	<a href="http://www.azed.gov/">http://www.azed.gov/</a>
Arkansas	Tracy Tucker  Ivy Pfeffer	Director of Curriculum  Director of Educator Evaluation		Four Capitol Mall, Room 403-A  Little Rock, AR 72201	<a href="http://www.arkansased.org/">http://www.arkansased.org/</a>
California	Eric Zilbert, Ph.D.	Ed Res & Ed Admn 1		1430 N Street  Sacramento, CA 95814	<a href="http://www.CCSESAarts.org">www.CCSESAarts.org</a>  <a href="http://www.cde.ca.gov/ta/tg/pf">www.cde.ca.gov/ta/tg/pf</a>  <a href="http://star.cde.ca.gov/">http://star.cde.ca.gov/</a>  <a href="http://www.cde.ca.gov">www.cde.ca.gov</a>
Colorado	Margo Allen	Business Process Manager		201 East Colfax Ave.  Denver, CO 80203	<a href="http://www.cde.state.co.us/accountability/coloradogrowthmodel">http://www.cde.state.co.us/accountability/coloradogrowthmodel</a>  <a href="http://www.cde.state.co.us/">http://www.cde.state.co.us/</a>

<b>Connecticut</b>	Scott C. Shuler, Ph.D.	Arts Consultant		165 Capitol Avenue, Hartford, CT 06106	<a href="http://www.sde.ct.gov/sde/site/default.asp">http://www.sde.ct.gov/sde/site/default.asp</a>
<b>Delaware</b>	Deborah Hansen	Education Associate for Visual and Performing Arts		401 Federal Street  Dover, DE 19901	<a href="https://www.doe.k12.de.us/">https://www.doe.k12.de.us/</a>
<b>Florida</b>	Todd Clark	Director of Assessment		Turlington Building, Suite 1514  325 West Gaines Street  Tallahassee, FL 32399	<a href="http://www.fldoe.org/arra/racetothetop.asp">www.fldoe.org/arra/racetothetop.asp</a> <a href="http://www.fldoe.org/">http://www.fldoe.org/</a>
<b>Georgia</b>	Michele Purvis  Cindy Saxon	Evaluation Systems Specialist  Associate Superintendent		205 Jesse Hill Jr. Drive SE  Atlanta, GA 30334	<a href="http://www.gadoe.org/Pages/Home.aspx">http://www.gadoe.org/Pages/Home.aspx</a>
<b>Hawaii</b>	Brian Reiter  Glenn Nochi, Ph.D.	Test Development Specialist  Evaluation Specialist		1390 Miller St. Honolulu, HI 96813	<a href="http://www.hawaiipublicschools.org/Pages/home.aspx">http://www.hawaiipublicschools.org/Pages/home.aspx</a>
<b>Idaho</b>	TJ Bliss, Ph.D.	Director of Assessment and Accountability		650 West State Street, PO Box 83720 Boise, ID 83720	<a href="http://www.sde.idaho.gov/site/postleg/2012Tour/2012%20Laws%20and%20Rule%20Book.pdf">http://www.sde.idaho.gov/site/postleg/2012Tour/2012%20Laws%20and%20Rule%20Book.pdf</a>  <a href="https://www.sde.idaho.gov/">https://www.sde.idaho.gov/</a>
<b>Illinois</b>	Diana Zaleski, Ph.D.	Principal Consultant and Specialist		100 N. 1st Street • Springfield, IL 62777	<a href="http://www.isbe.net/rules/archive/pdfs/50ARK.pdf">http://www.isbe.net/rules/archive/pdfs/50ARK.pdf</a>  <a href="http://www.isbe.net">www.isbe.net</a>

<b>Indiana</b>	Eric Oval	CTE Specialist		South Tower, Suite 600 115 W. Washington Street Indianapolis, IN 46204	<a href="http://alex.k12.in.us/centraloffice/Growth_WebEx.pdf">http://alex.k12.in.us/centraloffice/Growth_WebEx.pdf</a> <a href="http://www.riseindiana.org/sites/default/files/files/RISE%20Handbook%20%200%20final(4).pdf">http://www.riseindiana.org/sites/default/files/files/RISE%20Handbook%20%200%20final(4).pdf</a> <a href="https://learningconnection.doe.in.gov/GrowthModel/ModelFAQs.aspx">https://learningconnection.doe.in.gov/GrowthModel/ModelFAQs.aspx</a> <a href="http://www.doe.in.gov/">http://www.doe.in.gov/</a>
<b>Iowa</b>	Coleen Anderson Rosanne Malek Ed Thomas, Ph.D. Tom Deeder	State Assessment Consultant Gifted and Talented Consultant Physical Education Consultant Program Evaluation Consultant		400 E. 14th Street   Des Moines, IA 50319	<a href="https://www.educateiowa.gov/sites/files/ed/documents/0708_pk12_lowa-NCLB-%20Growth-%20Model-%20Revised-%20May-1-2007-%20(2).pdf">https://www.educateiowa.gov/sites/files/ed/documents/0708_pk12_lowa-NCLB-%20Growth-%20Model-%20Revised-%20May-1-2007-%20(2).pdf</a> <a href="https://www.educateiowa.gov/">https://www.educateiowa.gov/</a>
<b>Kansas</b>	Joyce Huser Mark Thompson	Education Program Consultant Project Director		900 SW Jackson St.   Topeka, KS 66612	<a href="http://www.ksde.org/Home">http://www.ksde.org/Home</a>
<b>Kentucky</b>	Robert Duncan	Arts and Humanities Consultant		Capital Plaza Tower 500 Mero St. Frankfort, KY 40601	<a href="http://education.ky.gov/Pages/default.aspx">http://education.ky.gov/Pages/default.aspx</a>
<b>Louisiana</b>	Hannah Dietsch	Assistant Super Intendent		1201 North Third Street Baton Rouge, LA 70802	<a href="http://www.louisianabelieves.com/">http://www.louisianabelieves.com/</a>
<b>Maine</b>	Rachelle Tome	Cheif Academic Officer		23 State House Station Augusta, ME 04333	<a href="http://www.maine.gov/doe/">http://www.maine.gov/doe/</a>
<b>Maryland</b>	Mike Mason James Tucker, Ph.D.	Specialist of Physical Education Fine Arts Coordinator		200 West Baltimore Street • Baltimore, MD 21201	<a href="http://mdk12.org/toolkit/vsc/arts_lesson_seeds/share/Intro_to_Ludwig_Van_Beethoven.pdf">http://mdk12.org/toolkit/vsc/arts_lesson_seeds/share/Intro_to_Ludwig_Van_Beethoven.pdf</a> <a href="http://marylandpublicschools.org/">http://marylandpublicschools.org/</a>

<b>Massachusetts</b>	Susan Whelple  Rebecca Bennett	Director of office of Literacy and Humanities  Massachusetts NAEP State Coordinator		75 Pleasant Street  Malden, MA 02148	<a href="http://www.doe.mass.edu/">http://www.doe.mass.edu/</a>
<b>Michigan</b>	N/A			608 W. Allegan Street  P.O. Box 30008  Lansing, MI 48909	<a href="http://www.michigan.gov/mde">http://www.michigan.gov/mde</a>
<b>Minnesota</b>	Jeff Pridie  Deb Lloyd	State Arts Specialist		500 Minnesota 36, Roseville, MN 55113	<a href="http://publichealthlawcenter.org/sites/default/files/resources/ship-fs-physicaleducationlaw-2010.pdf">http://publichealthlawcenter.org/sites/default/files/resources/ship-fs-physicaleducationlaw-2010.pdf</a>  <a href="https://www.revisor.leg.state.mn.us/statutes/?id=124D.955&amp;format=pdf">https://www.revisor.leg.state.mn.us/statutes/?id=124D.955&amp;format=pdf</a>  <a href="http://juststand.org/portals/3/literature/compendium-of-physical-activities.pdf">http://juststand.org/portals/3/literature/compendium-of-physical-activities.pdf</a>  <a href="http://www.house.leg.state.mn.us/hrd/pubs/ss/ssk12stan.pdf">http://www.house.leg.state.mn.us/hrd/pubs/ss/ssk12stan.pdf</a>  <a href="http://education.state.mn.us/mde/index.html">http://education.state.mn.us/mde/index.html</a>
<b>Mississippi</b>	Limeul Eubanks  Dale Diekman  Jo Ann Malone	Visual and Performing Arts Division Director  Physical Education and Comprehensive Health  Education Division Director  Director of Accountability Systems		359 North West Street  P.O. Box 771  Jackson, MS 39205	<a href="http://orshome.mde.k12.ms.us/ors/accountability/2009/MSAS-U.pdf">http://orshome.mde.k12.ms.us/ors/accountability/2009/MSAS-U.pdf</a>  <a href="http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/music.pdf?sfvrsn=2">http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/music.pdf?sfvrsn=2</a>  <a href="http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/genintro.pdf?sfvrsn=2">http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/genintro.pdf?sfvrsn=2</a>  <a href="http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/mississippi-physical-education-framework.pdf?sfvrsn=0">http://www.mde.k12.ms.us/docs/curriculum-and-instructions-library/mississippi-physical-education-framework.pdf?sfvrsn=0</a>  <a href="http://www.mde.k12.ms.us/docs/teacher-center/teacher-evaluation-implementation-timeline.pdf?sfvrsn=0">http://www.mde.k12.ms.us/docs/teacher-center/teacher-evaluation-implementation-timeline.pdf?sfvrsn=0</a>  <a href="http://www.mde.k12.ms.us/">http://www.mde.k12.ms.us/</a>

<b>Missouri</b>	Michael Muenks	Director of Assessment		PO Box 480 Jefferson City, MO 65102	<a href="http://dese.mo.gov/divimprove/curriculum/GLE/documents/cur-music-gle-0607.pdf">http://dese.mo.gov/divimprove/curriculum/GLE/documents/cur-music-gle-0607.pdf</a> <a href="http://dese.mo.gov/standards/documents/Show_Me_Standards_Placemat.pdf">http://dese.mo.gov/standards/documents/Show_Me_Standards_Placemat.pdf</a> <a href="http://dese.mo.gov/">http://dese.mo.gov/</a>
<b>Montana</b>	Susan Court  Emily Kohring	Health/Physical Education Program Specialist  Arts Education Director		P.O. Box 202501 Helena, MT 59620	<a href="http://opi.mt.gov/pdf/standards/ContStd-s-Arts.pdf">http://opi.mt.gov/pdf/standards/ContStd-s-Arts.pdf</a> <a href="http://opi.mt.gov/Curriculum/MontCAS/index.html">http://opi.mt.gov/Curriculum/MontCAS/index.html</a>
<b>Nebraska</b>	Valerie Foy, Ph.D. Julane Hill Donlynn Rice	Director of Assessment Director of School Health Curriculum Director		301 Centennial Mall South  P.O. Box 94987  Lincoln, NE 68509	<a href="http://www.education.ne.gov/FineArts/Standards/Jan%2022%20FAS%20Music%20Dec%206.highlightedShald.pdf">http://www.education.ne.gov/FineArts/Standards/Jan%2022%20FAS%20Music%20Dec%206.highlightedShald.pdf</a> <a href="http://www.education.ne.gov/FineArts/Standards/Jan%2022%20FAS%20Visual%20Arts%20Dec%206%20DDeF.highlighted.Wisdom.pdf">http://www.education.ne.gov/FineArts/Standards/Jan%2022%20FAS%20Visual%20Arts%20Dec%206%20DDeF.highlighted.Wisdom.pdf</a> <a href="http://www.education.ne.gov/PE/PDFs/NePEEL.pdf">http://www.education.ne.gov/PE/PDFs/NePEEL.pdf</a> <a href="http://www.education.ne.gov/documents/TeacherPrincipalPerformanceFramework11-11.pdf">http://www.education.ne.gov/documents/TeacherPrincipalPerformanceFramework11-11.pdf</a> <a href="http://www.education.ne.gov/assessment/">http://www.education.ne.gov/assessment/</a>
<b>Nevada</b>	Richard Vineyard	Assistant Director of Assessment		700 E. Fifth Street  Carson City, NV 89701	<a href="http://www.doe.nv.gov/">http://www.doe.nv.gov/</a>
<b>New Hampshire</b>	Keith Burke Marcia McCaffrey	Assessment Consultant Arts Consultant		101 Pleasant Street   Concord, NH   03301	<a href="http://www.education.nh.gov/instruction/curriculum/arts/documents/handbook.pdf">http://www.education.nh.gov/instruction/curriculum/arts/documents/handbook.pdf</a> <a href="http://www.education.nh.gov/">http://www.education.nh.gov/</a>

<p><b>New Jersey</b></p>	<p>Robert Fisicaro, Ph. D.  Dale Schmid  Brendan O'Reilly</p>	<p>Lead Implementation Manager  Visual and Performing Arts  Comprehensive Health and Physical Education Consultant</p>		<p>PO Box 500, Trenton, NJ 08625</p>	<p><a href="http://www.education.nj.gov/assessment/">http://www.education.nj.gov/assessment/</a>  <a href="http://www.state.nj.us/education/cccs/standards/1/1-1-D.htm">http://www.state.nj.us/education/cccs/standards/1/1-1-D.htm</a>  <a href="http://www.state.nj.us/education/assessment/">http://www.state.nj.us/education/assessment/</a></p>
<p><b>New Mexico</b></p>	<p>Michelle Osowski  Pete Goldschmidt, Ph. D.</p>	<p>Secondary Assessment Coordinator  Director of Assessment and Accountability</p>		<p>300 Don Gaspar  Santa Fe, NM 87501</p>	<p><a href="http://www.ped.state.nm.us/standards/">http://www.ped.state.nm.us/standards/</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.K-5.pdf">http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.K-5.pdf</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.6-8.pdf">http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.6-8.pdf</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.9-12.pdf">http://www.ped.state.nm.us/standards/Arts/Art.MUSIC.9-12.pdf</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.K-5.pdf">http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.K-5.pdf</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.6-8.pdf">http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.6-8.pdf</a>  <a href="http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.9-12.pdf">http://www.ped.state.nm.us/standards/Arts/Art.Visual%20Arts.9-12.pdf</a>  <a href="http://ped.state.nm.us/ped/TTFDocuments/NM%20TTF%20Report%20FINAL.826.pdf">http://ped.state.nm.us/ped/TTFDocuments/NM%20TTF%20Report%20FINAL.826.pdf</a>  <a href="http://www.nmlegis.gov/lcs/lfc/lfcdocs/perfaudit/Public%20Education%20Department%20%E2%80%93%20Promoting%20Effective%20Teaching%20in%20New%20Mexico.pdf">http://www.nmlegis.gov/lcs/lfc/lfcdocs/perfaudit/Public%20Education%20Department%20%E2%80%93%20Promoting%20Effective%20Teaching%20in%20New%20Mexico.pdf</a>  <a href="http://ped.state.nm.us/ped/index.html">http://ped.state.nm.us/ped/index.html</a></p>

<b>New York</b>	Leslie Yolen Darryl Daily	Associate in Arts Education Associate in Physical Education		52 Chambers Street New York, NY 10007	<a href="http://www.p12.nysed.gov/ciai/arts/assessment.html">http://www.p12.nysed.gov/ciai/arts/assessment.html</a> <a href="http://www.p12.nysed.gov/ciai/arts/pub/sumart.html#programre">http://www.p12.nysed.gov/ciai/arts/pub/sumart.html#programre</a> <a href="http://www.p12.nysed.gov/ciai/arts/pub/artlearn.pdf">http://www.p12.nysed.gov/ciai/arts/pub/artlearn.pdf</a> <a href="http://www.p12.nysed.gov/ciai/pe/toolkit.html">http://www.p12.nysed.gov/ciai/pe/toolkit.html</a> <a href="http://www.nysed.gov/">http://www.nysed.gov/</a>
<b>North Carolina</b>	Jennifer DeNeal  Burt Jenkins  Christie Lynch Ebert	Race to the Top Project Coordinator for Teacher and Leader Effectiveness  Health/Physical Education/Athletics Consultant  Arts Education Consultant		301 N. WILMINGTON ST., RALEIGH, NC 27601	<a href="http://www.ncpublicschools.org/docs/effectiveness-model/student-growth/measuring-growth-guide.pdf">http://www.ncpublicschools.org/docs/effectiveness-model/student-growth/measuring-growth-guide.pdf</a> <a href="http://www.dpi.state.nc.us/">http://www.dpi.state.nc.us/</a>
<b>North Dakota</b>	Ryan Townsend	Director of Academic Standards		600 E. Boulevard Ave., Dept. 201  Floors 9, 10, and 11  Bismarck, ND 58505	<a href="https://www.dpi.state.nd.us/">https://www.dpi.state.nd.us/</a>
<b>Ohio</b>	Nancy Pistone	Fine Arts Consultant		25 South Front Street  Columbus, OH 43215	<a href="http://education.ohio.gov/">http://education.ohio.gov/</a>
<b>Oklahoma</b>	Glen Henry Kayla Hindman	Director of Arts Education Director of Early Childhood and Family Education		2500 North Lincoln Boulevard  Oklahoma City, OK 73105	<a href="http://www.ok.gov/sde/">http://www.ok.gov/sde/</a>

<b>Oregon</b>	Josh Rew Derek Brown Theresa Richards	Research Analyst Director of Assessment Director of Teaching and Learning		255 Capitol Street NE Salem, OR 97310	<a href="http://www.ode.state.or.us/teachlearn/subjects/arts/standards/sample-scoring-guide.pdf">http://www.ode.state.or.us/teachlearn/subjects/arts/standards/sample-scoring-guide.pdf</a>  <a href="http://www.ode.state.or.us/home/">http://www.ode.state.or.us/home/</a>
<b>Pennsylvania</b>	Dave Deitz, Ph.D.	Consultant to the Pennsylvania Department of Education's Educator Effectiveness Team		333 Market Street Harrisburg, PA 17126	<a href="http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965">http://www.portal.state.pa.us/portal/server.pt/community/state_assessment_system/20965</a>
<b>Rhode Island</b>	Phyllis Lynch Midge Sabatini, Ed.D.	Director of the Office of Instruction, Assessment, and Curriculum  Manager of Coordinated School Health		255 Westminster Street Providence, RI 02903	<a href="https://www.ride.ri.gov/">https://www.ride.ri.gov/</a>
<b>South Carolina</b>	Scot Hockman  Christine Beyer, Ph.D.	Education Associate for Visual and Performing Arts  Ed Associate		1429 Senate Street Columbia, SC 29201	<a href="http://ed.sc.gov/agency/se/Instructional-Practices-and-Evaluations/documents/AcademicStandardsforVisualArts.pdf">http://ed.sc.gov/agency/se/Instructional-Practices-and-Evaluations/documents/AcademicStandardsforVisualArts.pdf</a>  <a href="https://ed.sc.gov/">https://ed.sc.gov/</a>
<b>South Dakota</b>	Sam Shaw Sarah Cook Karen Keyser	Science Curriculum Specialist N/A Health and Physical Education coordinator		800 Governors Drive, Pierre, SD 57501	<a href="http://doe.sd.gov/">http://doe.sd.gov/</a>
<b>Tennessee</b>	Tony Plunkett Courtney Seiler	Director of Assessment Design Deputy Director of Research Policy		710 James Robertson Parkway Nashville, TN 37243	<a href="http://www.state.tn.us/education/">http://www.state.tn.us/education/</a>

<b>Texas</b>	Tony Wilson Jessica Snyder Tomoko Traphagan Barney Fudge	Analysis and Reporting Staff Member Analysis and Reporting Staff Member Enrichment Education Program Coordinator Statewide Coordinator of Health and Safety		1701 N. Congress Avenue Austin, TX, 78701	<a href="http://www.tea.state.tx.us/">http://www.tea.state.tx.us/</a>
<b>Utah</b>	Cathy Jensen Aaron Brough Linda Mayne	BTS Specialist Data Quality Manager Drivers Education Health and PE (K-12) Specialist		250 East 200th Street Salt Lake City, UT 84114	<a href="http://www.schools.utah.gov/main/">http://www.schools.utah.gov/main/</a>
<b>Vermont</b>	Lindsay Simpson Ben Doyle Michael Hock	Physical Education Consultant Arts Education Program Manager Director of Educational Assessment		Vermont Agency of Education 219 North Main Street, Suite 402 Barre, VT 05641	<a href="http://education.vermont.gov/">http://education.vermont.gov/</a>
<b>Virginia</b>	Eric Rhodes Vanessa Wigand	Director of Office of Science and Health Education Principal Specialist: Health, PE, DE, Athletics		PO Box 2120 Richmond, VA 23218	<a href="http://www.doe.virginia.gov/instruction/fine_arts/visual_arts/strategies_correlations/grade_k_visual_arts_sol_strategies.pdf">http://www.doe.virginia.gov/instruction/fine_arts/visual_arts/strategies_correlations/grade_k_visual_arts_sol_strategies.pdf</a> <a href="http://www.doe.virginia.gov/instruction/physed/physed_guidelines_elem_middle.pdf">http://www.doe.virginia.gov/instruction/physed/physed_guidelines_elem_middle.pdf</a> <a href="http://www.doe.virginia.gov/instruction/physed/technical_assistance_guide/physedk-12.pdf">http://www.doe.virginia.gov/instruction/physed/technical_assistance_guide/physedk-12.pdf</a> <a href="http://www.doe.virginia.gov/">http://www.doe.virginia.gov/</a>
<b>Washington</b>	Ann Banks Lisa Rakoz	Arts Program Supervisor Health and Fitness Education Supervisor		P.O. Box 47600, Olympia, WA 98504	<a href="http://www.ecy.wa.gov/">http://www.ecy.wa.gov/</a>

<b>Washington D.C.</b>	Heather Holaday Amanda Boggs Ben Hall	Title IX Coordinator Director of Art Director of Music		1200 First Street, NE, Washington, DC 20002	<a href="http://dcps.dc.gov/DCPS/In+the+Classroom/Ensuring+Teacher+Success/IMPACT+%28Performance+Assessment%29/IMPACT+Guidebooks">http://dcps.dc.gov/DCPS/In+the+Classroom/Ensuring+Teacher+Success/IMPACT+%28Performance+Assessment%29/IMPACT+Guidebooks</a>  <a href="http://dcps.dc.gov/DCPS/Files/downloads/In-the-Classroom/Ensuring-Teacher-Success/Measuring%20Value%20Added%20in%20DC%202012-2013.pdf">http://dcps.dc.gov/DCPS/Files/downloads/In-the-Classroom/Ensuring-Teacher-Success/Measuring%20Value%20Added%20in%20DC%202012-2013.pdf</a>  <a href="https://www.ed.gov/category/location/district-columbia">https://www.ed.gov/category/location/district-columbia</a>
<b>West Virginia</b>	Camper Moore, Ph.D. Joey Wiseman	Cooridnator of Arts Assistant Director of the Office of Secondary Learning		1900 Kanawha Boulevard East, Charleston, WV 25305	<a href="http://wvde.state.wv.us/policies/p2520.10.pdf">http://wvde.state.wv.us/policies/p2520.10.pdf</a>  <a href="http://wveis.k12.wv.us/Teach21/public/cso/popUp.cfm">http://wveis.k12.wv.us/Teach21/public/cso/popUp.cfm</a>  <a href="https://wvde.state.wv.us/">https://wvde.state.wv.us/</a>
<b>Wisconsin</b>	Lynette Russell Rebecca Vail	Assistant State Superintendent Director of Content and Learning		125 S. Webster Street • P.O. Box 7841, Madison, WI 53707	<a href="http://www.dpi.state.wi.us/">http://www.dpi.state.wi.us/</a>
<b>Wyoming</b>	Deb Lindsey Julie McGee	Director of Assessment Director of Content and Accountability		2300 Capitol Ave, Cheyenne, WY 82001	<a href="http://edu.wyoming.gov/">http://edu.wyoming.gov/</a>

## Appendix C: Links to National Resources for Assessment Information

### Arts

- <http://www.aep-arts.org/wp-content/uploads/2012/07/State-of-the-states-2012-FINAL.pdf>
- <http://mb2.ecs.org/reports/Report.aspx?id=780>
- <https://artsedge.kennedy-center.org/educators/standards.aspx>
- [http://www.croc-lab.org/uploads/7/9/9/8/7998314/cpb.creativity\\_pb\\_working\\_outline\\_v8\\_low.file.size\\_copy.pdf](http://www.croc-lab.org/uploads/7/9/9/8/7998314/cpb.creativity_pb_working_outline_v8_low.file.size_copy.pdf)

### Music

- <http://advocacy.nafme.org/teacher-evaluation/>
- <http://nccas.wikispaces.com/>
- [http://arts.ncwiseowl.org/curriculum\\_instruction/national\\_standards\\_for\\_arts\\_education](http://arts.ncwiseowl.org/curriculum_instruction/national_standards_for_arts_education)
- <http://musicstandards.org/>

### Physical Education

- [http://www.nasbe.org/healthy\\_schools/hs/bytopics.php?topicid=1110](http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=1110)
- <http://www.aahperd.org/naspe/publications/upload/2012-Shape-of-the-Nation-State-Standards-for-PE-Chart.pdf>

### Growth Models

- [http://www.ccsso.org/Documents/2010/State\\_Growth\\_Models\\_2010.pdf](http://www.ccsso.org/Documents/2010/State_Growth_Models_2010.pdf)

## Appendix D: Survey for Recording Interview Data

Q1.1 Hi, my name is \_\_\_\_\_ and I am a graduate student at the University of West Florida. I am working on a grant from the Florida Department of Education and I am hoping that you can answer some questions related to your state requirements for assessing music, art, and physical education. Hopefully you received a letter in the mail a couple of weeks ago indicating that I would be calling you. Your participation is voluntary, and, as such, you may conclude your participation at any time. I really appreciate your time in helping me collect some information about your state's requirements.

Q1.2 Date?

Q1.4 State name?

- Alabama (1)
- Arizona (2)
- Arkansas (3)
- California (4)
- Colorado (5)
- Connecticut (6)
- Delaware (7)
- District of Columbia (8)
- Florida (9)
- Georgia (10)
- Idaho (11)
- Illinois (12)
- Indiana (13)
- Iowa (14)
- Kansas (15)
- Kentucky (16)
- Louisiana (17)
- Maine (18)
- Maryland (19)
- Massachusetts (20)
- Michigan (21)
- Minnesota (22)
- Mississippi (23)
- Missouri (24)
- Montana (25)
- Nebraska (26)
- Nevada (27)
- New Hampshire (28)
- New Jersey (29)

- New Mexico (30)
- New York (31)
- North Carolina (32)
- North Dakota (33)
- Ohio (34)
- Oklahoma (35)
- Oregon (36)
- Pennsylvania (37)
- Rhode Island (38)
- South Carolina (39)
- South Dakota (40)
- Tennessee (41)
- Texas (42)
- Utah (43)
- Vermont (44)
- Virginia (45)
- Washington (46)
- West Virginia (47)
- Wisconsin (48)
- Wyoming (49)
- Puerto Rico (50)
- Alaska (51)
- Hawaii (52)
- I do not reside in the United States (53)
- Washington, DC (54)

Q1.5 State representative name?

Q1.6 State representative title?

Q2.1 Do K through 12 (K-12) students in your state receive formal instruction in music?

- Yes (1)
- No (2)

Answer If: Do K through 12 students in your state receive formal instruction in music? Yes Is Selected

Q2.2 Is music a required component of the curriculum or is it an elective?

- Required (1)
- Elective (2)
- Both (depends upon level) (3)

Answer If: Do K through 12 students in your state receive formal instruction in music? Yes Is Selected

Q2.3 Do the music requirements or electives differ by level or grade?

- Yes (1)
- No (2)

Answer If: If students receive format instruction in music, does it differ by level or grade? Yes Is Selected

Q2.4 How does it differ by level or grade?

Q2.5 Has your state adopted national standards in music?

- Yes (1)
- No (2)

Answer If: Has your state adopted national standards? Yes Is Selected

Q2.6 What is the name of the national organization (e.g., National Association for Music Education--NAfME)?

Q2.7 Has your state created its own standards for Music Education? \*\*\*

- Yes (1)
- No (2)

Answer If: Does your state have its own state standards for Music Education? Yes Is Selected

Q2.8 What is the name of your state standards (e.g., Next Generation Sunshine State Standards)?

Q2.9 Does your state require that schools within your state assess Music Education?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Music Education? No Is Selected

Q2.10 Because you indicated that your state currently does not require that schools assess Music, does your state plan to begin assessing music?

- Yes (1)
- No (2)

Answer If: If your state does not require that schools assess Music Ed., does your state plan to implement assessments of Music Education? Yes Is Selected

Q2.11 In what year will this requirement be implemented?

- 2013/2014 (1)
- 2014/2015 (2)
- 2015/2016 (3)
- 2016/2017 (4)
- beyond 2017 (5)

Answer If: If your state does not require that schools assess Music Ed., does your state plan to implement assessments of Music Education? Yes Is Selected

Q2.12 Once the new requirement of assessing music ed. standards is implemented, will your state require the data be submitted to the state DOE?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Music Education? No Is Selected

Q2.13 Although you indicated that your state does not currently require the assessment of Music Education, can you name any district(s) and/or provide contact information for those that may assess Music Education informally?

Answer If: Does your state require that schools within your state assess Music Education? Yes Is Selected

Q2.14 What types of assessment tools are used in your state to assess Music Education? Check all that apply and please describe them, including the type of scores and/or level of mastery that are used.

- Instrument performance tests (1) \_\_\_\_\_
- Standardized/published/proprietary tests (2) \_\_\_\_\_
- Singing performance evaluations (3) \_\_\_\_\_
- Attitudinal surveys (4) \_\_\_\_\_
- Teacher constructed assessments (5) \_\_\_\_\_
- Time Requirements for music education (6) \_\_\_\_\_
- Portfolios (7) \_\_\_\_\_
- Observations (8) \_\_\_\_\_
- Other (9) \_\_\_\_\_

Answer If: Does your state require that schools within your state assess Music Education? Yes Is Selected

Q2.15 Because your state requires the assessment of Music Education, does your state require that the data are sent to the state?

- Yes (1)
- No (2)

Answer If: If yes, does your state require that the data are sent to the state? Yes Is Selected

Q2.16 From which assessment tool(s) are data reported to the state? (e.g., portfolio, standardized tests, etc.)

- Instrument performance tests (1)
- Standardized/published/proprietary tests (2)
- Singing performance evaluations (3)
- Attitudinal surveys (4)
- Teacher constructed assessments (5)
- Time Requirements for music education (6)
- Portfolios (7)
- Observations (8)
- Other (9) \_\_\_\_\_

Answer If: If yes, does your state require that the data are sent to the state? Yes Is Selected

Q2.17 For what purposes does your state use the data that are sent to the state? (check all that apply)

- Monitor student interest (1)
- Assess student performance in music education (2)
- Assess student achievement of music education standards (3)
- Inform curricular decisions (4)
- Public forum to notify stakeholders (5)
- Increase attendance in chorus (6)
- Increase attendance in playing an instrument (7)
- Assist in the professional development of educators (8)
- Teacher evaluations (9)
- Other (10) \_\_\_\_\_

Answer If: If yes, does your state require that the data are sent to the state? Yes Is Selected

Q2.18 For what grades (K through 12) does your state collect data related to Music Education? (check all that apply)

- K (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)
- 7 (8)
- 8 (9)
- 9 (10)
- 10 (11)
- 11 (12)
- 12 (13)

Answer If: If yes, does your state require that the data are sent to the state? Yes Is Selected

Q2.19 Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect for Music Education go into a formula for making decisions?

- Yes (1)
- No (2)

Answer If: Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect go into a formula for making decisions? Yes Is Selected

Q2.20 Describe the overall assessment model/formula used in your state to measure proficiency in Music Education.

Q3.1 Do K through 12 (K-12) students in your state receive formal instruction in visual arts?

- Yes (1)
- No (4)

Answer If: Do K through 12 (K-12) students in your state receive formal instruction in visual arts? Yes Is Selected

Q3.2 Is art a required component of the curriculum or is it an elective?

- Required (1)
- Elective (2)
- Both (depends upon level) (3)

Answer If: Do K through 12 (K-12) students in your state receive formal instruction in visual arts? Yes Is Selected

Q3.3 Do the art requirements or electives differ by level or grade?

- Yes (1)
- No (2)

Answer If: If students receive formal instruction in art, does it differ by level or grade? Yes Is Selected

Q3.4 How does it differ by level or grade?

Q3.5 Has your state adopted national standards in art?

- Yes (1)
- No (2)

Answer If: Has your state adopted national standards in art? Yes Is Selected

Q3.6 What is the name of the national organization (e.g., National Art Education Association [NAEA])?

Q3.7 Has your state created its own standards for Art Education?

- Yes (1)
- No (2)

Answer If: Has your state created its own standards for Art Education? Yes Is Selected

Q3.8 What is the name of your state standards?

Q3.9 Does your state require that schools within your state assess Art Education?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Art Education? No Is Selected

Q3.10 Because you indicated that your state currently does not require that schools assess Art, does your state plan to begin assessing art?

- Yes (1)
- No (2)

Answer If: If your state does not require that schools assess Art Education, does your state plan to implement assessments of Art Education? Yes Is Selected

Q3.11 In what year will this requirement be implemented?

- 2013/2014 (1)
- 2014/2015 (2)
- 2015/2016 (3)
- 2016/2017 (4)
- beyond 2017 (5)

Answer If: Because you indicated that your state currently does not require that schools assess Art, does your state plan to begin assessing art? Yes Is Selected

Q3.12 Once the new requirement of assessing art standards is implemented, will your state require the data be submitted to the state DOE?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Art Education? No Is Selected

Q3.13 Although you indicated that your state does not currently require the assessment of Art Education, can you name, can you name any district(s) and/or provide contact information for those that may assess Art Education informally?

Answer If: Does your state require that schools within your state assess Art Education? Yes Is Selected

Q3.14 What types of assessment tools are used to assess Art Education? Check all that apply and please describe them, including the type of scores and/or level of mastery that are used

- Standardized/published/proprietary tests (1) \_\_\_\_\_
- Visual arts performance assessments (2) \_\_\_\_\_
- Attitudinal surveys (3) \_\_\_\_\_
- Teacher constructed assessments (4) \_\_\_\_\_
- Time requirements for art education (5) \_\_\_\_\_
- Portfolios (6) \_\_\_\_\_
- Observations (7) \_\_\_\_\_
- Other (8) \_\_\_\_\_

Answer If: Does your state require that schools within your state assess Art Education? Yes Is Selected

Q3.15 Because your state requires the assessment of Art Education, does your state require that the data are sent to the state?

- Yes (1)
- No (2)

Answer If: If your state requires the assessment of Art Education, does your state require that the data are sent to the state? Yes Is Selected

Q3.16 From which assessment tool(s) are data reported? (e.g., portfolio, standardized tests, etc.)

- Standardized/published/proprietary tests (1)
- Visual arts performance assessments (2)
- Attitudinal surveys (3)
- Teacher constructed assessments (4)
- Time requirements for art education (5)
- Portfolios (6)
- Observations (7)
- Other (8) \_\_\_\_\_

Answer If: If your state requires the assessment of Art Education, does your state require that the data are sent to the state? Yes Is Selected

Q3.17 For what purposes does your state use the data that are sent to the state? (check all that apply)

- Monitor student interest (1)
- Assess student performance in art education (2)
- Assess student achievement of art education standards (3)
- Inform curricular decisions (4)
- Public forum to notify stakeholders (5)
- Increase attendance in visual arts activities (6)
- Assist in the professional development of educators (7)
- Teacher evaluations (8)
- Other (9) \_\_\_\_\_

Answer If: If your state requires the assessment of Art Education, does your state require that the data are sent to the state? Yes Is Selected

Q3.18 For what grades (K through 12) does your state collect data related to Art Education? (check all that apply)

- K (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)
- 7 (8)
- 8 (9)
- 9 (10)
- 10 (11)
- 11 (12)
- 12 (13)

Answer If: If your state requires the assessment of Art Education, does your state require that the data are sent to the state? Yes Is Selected

Q3.19 Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect for Art Education go into a formula for making decisions?

- Yes (1)
- No (2)

Answer If: Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect for Art Education go into a formula for making decisions?  
Yes Is Selected

Q3.20 Describe the overall assessment model/formula used in your state to measure proficiency in Art Education.

Q4.1 Do K through 12 (K-12) students in your state receive formal instruction in Physical Education?

- Yes (1)
- No (4)

Answer If: Do K through 12 (K-12) students in your state receive formal instruction in Physical Education? Yes Is Selected

Q4.2 Is PE a required component of the curriculum or is it an elective?

- Required (1)
- Elective (2)
- Both (depends upon level) (3)

Answer If: Do K through 12 (K-12) students in your state receive formal instruction in Physical Education? Yes Is Selected

Q4.3 Do the Physical Education requirements or electives differ by level or grade?

- Yes (1)
- No (4)

Answer If: If students receive formal instruction in Physical Education, does it differ by level or grade? Yes Is Selected

Q4.4 How does it differ by level or grade?

Q4.5 Has your state adopted national standards for Physical Education?

- Yes (1)
- No (2)

Answer If: Has your state adopted national standards for Physical Education? Yes Is Selected

Q4.6 What is the name of the national organization (e.g., National Association for Sport and Physical Education [NASPE])?

Q4.7 Has your state created its own standards for Physical Education?

- Yes (1)
- No (2)

Answer If: Has your state created its own standards for Physical Education? Yes Is Selected

Q4.8 What is the name of your state standards?

Q4.9 Does your state require that schools within your state assess Physical Education?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Physical Education? No Is Selected

Q4.10 Because you indicated that your state currently does not require that schools assess Physical Education, does your state plan to begin assessing Physical Education?

- Yes (1)
- No (2)

Answer If: If your state does not require that schools assess Physical Education, does your state plan to implement assessments of Physical Education? Yes Is Selected

Q4.11 In what year will this requirement be implemented?

- 2013/2014 (1)
- 2014/2015 (2)
- 2015/2016 (3)
- 2016/2017 (4)
- beyond 2017 (5)

Answer If: If your state does not require that schools assess Physical Education, does your state plan to implement assessments of Physical Education? Yes Is Selected

Q4.12 Once the new requirement of assessing physical education standards is implemented, will your state require the data be submitted to the state DOE?

- Yes (1)
- No (2)

Answer If: Does your state require that schools within your state assess Physical Education? No Is Selected

Q4.13 Although you indicated that your state does not currently require the assessment of Physical Education, can you name any district(s) and/or provide contact information for those that may assess Physical Education informally?

Answer If: Does your state require that schools within your state assess Physical Education? Yes Is Selected

Q4.14 What types of assessment tools are used? Check all that apply and please describe them, including the type of scores and/or level of mastery that are used.

- Fitness tests (1) \_\_\_\_\_
- Standardized tests (2) \_\_\_\_\_
- Performance assessments (3) \_\_\_\_\_
- Measurements of body mass index (BMI) (4) \_\_\_\_\_
- Attitudinal surveys (5) \_\_\_\_\_
- Teacher constructed assessments (6) \_\_\_\_\_
- Time requirements for physical education (7) \_\_\_\_\_
- Portfolios (8) \_\_\_\_\_
- Observations (9) \_\_\_\_\_
- Other (10) \_\_\_\_\_

Answer If: Does your state require that schools within your state assess Physical Education? Yes Is Selected

Q4.15 Because your state requires the assessment of Physical Education, does your state require that the data are sent to the state?

- Yes (1)
- No (2)

Answer If: If your state requires the assessment of Physical Education, does your state require that the data are sent to the state? Yes Is Selected

Q4.16 From which assessment tool(s) are data reported to the state? (e.g., portfolio, standardized tests, etc.)

- Fitness tests (1)
- Standardized tests (2)
- Performance assessments (3)
- Measurements of body mass index (BMI) (4)
- Attitudinal surveys (5)
- Teacher constructed assessments (6)
- Time requirements for physical education (7)
- Portfolios (8)
- Observations (9)
- Other (10) \_\_\_\_\_

Answer If: If your state requires the assessment of Physical Education, does your state require that the data are sent to the state? Yes Is Selected

Q4.17 For what purposes does your state use the data that are sent to the state? (check all that apply)

- Monitor student fitness levels (1)
- Monitor student obesity rates (2)
- Assess student performance in physical education (3)
- Assess student achievement of physical education standards (4)
- Inform curricular decisions (5)
- Public forum to notify stakeholders (6)
- Assist in the development of professional development for educators (7)
- Teacher evaluations (8)
- Other (9) \_\_\_\_\_

Answer If: If yes, does your state require that the data are sent to the state? Yes Is Selected

Q4.18 For what grades (K through 12) does your state collect data related to Physical Education? (check all that apply)

- K (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)
- 7 (8)
- 8 (9)
- 9 (10)
- 10 (11)
- 11 (12)
- 12 (13)

Answer If: If your state requires the assessment of Physical Education, does your state require that the data are sent to the state? Yes Is Selected

Q4.19 Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect for Physical Education go into a formula for making decisions?

- Yes (1)
- No (2)

Answer If: Assessment models are formulas that are frequently used to assess instructional success. Do the data that you collect for Physical Education go into a formula for making decisions? Yes Is Selected

Q4.20 Describe the overall assessment model/formula used in your state to measure proficiency in Physical Education.

Q5.1 Does your state have a value-added model?

- Yes (1)
- No (2)

Answer If: Does your state have a value-added model? Yes Is Selected

Q5.2 For what discipline(s) does your state currently collect standardized student achievement data? (check all that apply)

- Mathematics (1)
- Reading (2)
- Science (3)
- Social studies (4)
- Language arts (5)
- History (6)
- Civics (7)
- Performing arts/Music education (8)
- Visual arts (9)
- Physical education (10)
- Other (11) \_\_\_\_\_
- None (12)

Q5.3 Does your state currently use student achievement data to measure growth over time?

- Yes (1)
- No (2)

Answer If: Does your state currently use student achievement data to measure growth over time? No Is Selected

Q5.4 If your state does not currently use data to measure growth over time, does your state plan to begin collecting data in order to measure student growth over time?

- Yes (1)
- No (2)

Answer If: If your state does not currently use data to measure growth over time, does your state plan to begin collecting data in order to measure student growth over time? Yes Is Selected

Q5.5 If your state plans to begin to collect student achievement data in order to measure growth over time, in what year does your state plan to implement this requirement?

- 2013/2014 (1)
- 2014/2015 (2)
- 2015/2016 (3)
- 2016/2017 (4)
- beyond 2017 (5)

Answer If: Does your state currently use student achievement data to measure growth over time? Yes Is Selected

Q5.6 If your state currently measures student growth, what types of assessments are used to measure growth? (check all that apply)

- Statewide standardized assessments (1)
- District-wide standardized assessments (2)
- Teacher-constructed assessments (3)
- Performance assessments (4)
- Observations (5)
- Other (6) \_\_\_\_\_

Answer If: Does your state currently use student achievement data to measure growth over time? Yes Is Selected

Q5.7 Does your state allow districts flexibility in implementing growth models?

- Yes (1)
- No (2)

Answer If: Does your state currently use student achievement data to measure growth over time? Yes Is Selected

Q5.8 If your state currently measures growth, what type of model is current used?

- Status model (single year of student performance data) (1)
- Simple growth (compare one year to the next) (2)
- Difference between predicted performance and actual performance (3)
- Other (4) \_\_\_\_\_

Answer If: Does your state currently use student achievement data to measure growth over time?  
Yes Is Selected

Q5.9 If your state currently measures growth, are covariates used in the model?

- Yes (1)
- No (2)

Answer If: If your state currently measures growth, are covariates used in the model? Yes Is Selected

Q5.10 If covariates are used, which are used? (check all that apply)

- Prior achievement scores (1)
- Students with disability status (2)
- English language learner status (3)
- Free and reduced lunch status (4)
- Gifted status (5)
- Student attendance (6)
- Student mobility (number of transitions) (7)
- Age (8)
- Class size (9)
- Teacher's years of experience (10)
- Other (11) \_\_\_\_\_

Answer If: Does your state currently use student achievement data to measure growth over time?  
Yes Is Selected

Q5.11 If growth models are used for teacher performance, what percentage of the teacher's evaluation is accounted for by student growth?

Q5.12 What are the name(s) and contact information of individuals we may contact for additional information?

Q96 This concludes all of my questions. Thank you so much for taking your time to answer these questions. The information you've provided will be extremely helpful as we summarize assessment information provided by various states around the nation. Please feel free to contact me if you have questions or if you'd like additional information about this study.

Q6.1 Were there any issues related to "mechanical subject loss" (problems related to phone or computer)?

- Yes (1)
- No (2)

Answer If: Were there any issues related to "mechanical subject loss" (problems related to phone or computer)? Yes Is Selected

Q6.2 If there were issues related to mechanical subject loss, please describe.

Q6.3 Were there any issues related to "selective subject loss" (problems related to interviewee, notably lack of willingness to participate)?

- Yes (1)
- No (2)

Answer If: Were there any issues related to "selective subject loss" (problems related to interviewee participation)? Yes Is Selected

Q6.4 If there were issues related to selective subject loss, please describe.

Q6.5 Please describe any miscellaneous information you feel may be important to the investigation.

## Appendix E: Approval from Institutional Review Board



Research and Sponsored Programs  
11000 University Parkway, Bldg. 11  
Pensacola, FL 32514-5750

### MEMORANDUM

February 03, 2014

TO: Dr. Valerie Morganson  
School of Psychological and Behavioral Sciences

FROM: Dr. Richard S. Podemski, Associate Vice President for Research  
And Dean of the Graduate School

Dr. Carla J. Thompson, Chair, IRB for Human Research Participant Protection

SUBJECT: IRB Approval

The Institutional Review Board for Human Research Participants has completed its review of your proposal entitled "IRB 2014-084, Florida Department of Education K-12 Assessment" as it relates to the protection of human participants used in research, and has granted approval for you to proceed with your study. Please be aware of the following:

- \* You acknowledge and accept your responsibility for protecting the rights and welfare of human research participants and for complying with all parts of 45 CFR Part 46, the UWF IRB Policy and Procedures, and the decisions of the IRB. You may view these documents on the Office of Research and Sponsored Programs web page at <http://research.uwf.edu/internal/integrity/irb.cfm>. You acknowledge completion of the IRB ethical training requirements for researchers as atested in the IRB application.
- \* You will ensure that legally effective informed consent is obtained and documented. If written consent is required, the consent form must be signed by the subject or the subject's legally authorized representative. A copy is to be given to the person signing the form and a copy kept for your file.
- \* You will promptly report any proposed changes in previously approved human subject research activities to the Office of Research and Sponsored Programs. The proposed changes will not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
- \* **You are responsible for reporting progress of approved research to the Office of Research and Sponsored Programs at the end of the project data gathering period approved from February 03, 2014 thru February 03, 2015. Federal regulations permit a one-year maximum approval without review.**
- \* You will immediately report to the IRB any injuries or other unanticipated problems involving risks to human subjects.

Good luck in your research endeavors. If you have any questions or need assistance, please contact the Office of Research and Sponsored Programs at 850-857-6378 or 850-473-7111.

CC: Steven Kass

Phone 850.474.2824 Fax 850.474.2082

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