Assessment in Music Education: Relationships between Classroom Practice and Professional Publication Topics

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Abstract

The purpose of this study was to investigate the relationship between actual current assessment practices of elementary music teachers and the assessment topics as published in the literature aimed at those teachers. Specifically, this study sought to: 1) identify the current assessment techniques utilized by elementary music teachers; 2) identify the types of assessment techniques included in the current music teacher literature, and 3) identify any relationships between the assessment techniques that are most frequently utilized by teachers and those that are most frequently included in teacher-focused music education publications.

The researchers first examined data collected from the 100 elementary general music educators from the Northwestern United States who participated in a survey designed to identify the assessment practices of elementary general music teachers. The researchers next reviewed ten years (1999 – 2009) of the national publications *Teaching Music* and *Music Educators Journal* searching for articles that addressed the topic of classroom music assessment. Finally, the researchers ranked both the classroom and literature assessment techniques by frequency of use and frequency of inclusion in the literature and then examined the results in order to identify possible relationships.

The researchers found that there is a possible disconnect between the assessment strategies reported as used by the classroom music educators participating in this study and the major professional publications in the music education field.

Introduction

Assessment and teacher professional development are two areas currently receiving considerable attention from the many and varied stakeholders in the field of education. One area of professional development that is inexpensive, easily accessible, and considered relevant by practicing educators, is the publications of their professional organizations (Hughes & Johnston-Doyle, 1978; Littman & Stodolsky, 1998). The importance of these publications has long been understood by members of the educational community with master teachers often identified by characteristics that include continued participation in professional development, active membership in their area's professional organization, and current knowledge of research and ideas as

presented in the latest educational publications. From this, it could be expected that such publications would reflect the current practice, trends, issues, and concerns of the active classroom teacher.   However, little is known about the relationship between many of the pressing issues addressed in these periodicals and the actual practices of the readers they target. In fact, research addressing the relationships between teachers and their professional publications is primarily limited to professional reading habits and how to increase the small amount of time educators are able or willing to devote to it (Cogan & Anderson, 1977; George & Ray, 1979; Stopper, 1982; Womack and Chandler, 1992; VanLeirsburg & Johns, 1994; Eicher & Wood, 1977; Sanacore, 1995).

Given its prominence in the educational and political spotlight, assessment is one of the leading issues of concern to all educators. Classroom teachers and school administrators across all disciplines are currently engaged in the study, planning, and implementation of assessment practices of all types and scopes. Schools, districts, states, and regional bodies are all at different levels of training and experience in assessment with many in need of additional professional development resources. The result is opportunities in assessment that are wide and varied in both content and delivery with professional publications having the potential to serve as one of those valuable resources. Nevertheless, a better understanding of the various relationships between active educators and their professional publications could be of benefit to the profession.

Purpose

The purpose of this study was to investigate the relationships between the actual assessment practices of elementary music teachers and the assessment topics and techniques published in the literature aimed at those teachers. Specifically, this study sought to: 1) Identify the current assessment techniques utilized by elementary music teachers; 2) Identify the types of assessment techniques included in the current music teacher literature; 3) Identify any relationships between the assessment techniques that are most frequently utilized by teachers and those that are most frequently included in teacher-focused music education publications.

Method

The researchers first examined data collected from the 100 elementary general music educators from the Northwestern United States who participated in the Washington Music Assessment Participant Survey (WMAPS) (McQuarrie, 2008). The WMAPS includes items designed to identify background information, current assessment practices, changes in assessment practices, teacher perceptions of assessment practices, and teacher attitudes regarding statewide assessment in music. The survey consists of 25 closed response items, one open response item, and 17 closed response items with optional open response for additions and clarifications. The WMAPS is divided into five sections and includes questions in the forms of multiple choice, rating scales, and open-ended prompts.   Of specific interest to this study were the questions related to current assessment practices. Common forms of assessments were identified and participants were asked to classify them as: Frequently Used; Sometimes Used; Almost Never Used; or Not Used.

Analysis of the data from the WMAPs occurred through both qualitative and quantitative approaches. Descriptive statistics including frequencies and percentages were calculated for the closed-response items while emerging themes and sub-themes were identified and labeled for the open-ended responses. The included assessment strategies were ranked by participants' frequency of use ("Frequently Used" and "Almost Never Used" or "Do Not Use").

The researchers next reviewed the last ten years (1999 – 2009) of the national publications *Teaching Music* and *Music Educators Journal*. These publications were selected because of their wide distribution, easy accessibility to music educators prominence, and association with a large professional organization (MENC). The *Bulletin of the Council for Research in Music Education*, and the *Journal of Research in Music Education*, although significant to the field, were not selected because of their more limited circulation amongst classroom music educators and the research suggesting that teachers are less likely to read publications with technical language, articles or studies that are not easily and immediately transferable to the classroom, or articles without clear suggestions for classroom activities or approaches (George & Ray, 1979; VanLeirsburg & Johns, 1994; Hughes & Johnston-Doyle, 1978; Littman & Stodolsky, 1998).

The publications were first searched utilizing the search tool International Index to Music Periodicals and the keyword "assessment." The results were then narrowed by removing book reviews, lists, articles with extremely limited assessment content, and articles devoted to musical assessment in non-educational settings (i.e. music therapy etc.). This process was then repeated twice more utilizing two additional academic searches (SAGE and EBSCO). Following the identification of the appropriate articles for consideration, each article was assigned a number. The articles were then carefully read, assessment techniques identified, and the percentage of the article given to each assessment technique determined. Through this process a small number of additional articles were discarded when detailed reading revealed that their content did not address assessment practices or strategies as adequately as first supposed, or they did not address assessment specifically related to music education. The final result for articles identified by both researchers as appropriate for inclusion was then determined (*n* = 37).

Finally, the researchers ranked both the classroom and literature assessment techniques by frequency of use and frequency of inclusion in the literature. The highest and lowest ranked classroom assessment techniques were then compared to their corresponding rankings for inclusion in the literature and then the highest and lowest ranked literature assessment techniques were compared to their corresponding rankings for classroom utilization. The researchers then examined the results in order to identify possible relationships.

Results

Research Problem 1: Currently Utilized Assessment Practices

Participants completed a series of questions on frequency of use of certain assessment strategies (Table 1). The strategies participants most often identified as "frequently used" included: grading based upon participation (80.80%), grading based upon effort (79.59%), and assessing individual performances using informal observation (70.00%). Other assessment strategies that are "frequently used," but by fewer participants, included: assessing large group performances (61.00%) and grading based upon behavior (59.00%) (Figure 1). Assessment strategies participants most often identified as "do not use" included: standardized music achievement tests (73.00), music assessment software (72.73%), and formative assessment strategies (72.16%). Other assessment strategies that several participants identified as "do not use" included: portfolios (68.69%) and music aptitude tests (56.00%) (Figure 2).

Table 1. Assessment strategy frequency use

Strategy	Percentage			
	Frequently	Sometimes	Almost	Do Not

	Use	Use	Never Use	Use
Pencil and Paper Tests and Quizzes	10.00	58.00	27.00	5.00
Portfolios	3.03	8.08	20.20	68.69
Individual Performances (using rubric or rating scale)	40.00	43.00	13.00	4.00
Individual Performance (using informal observation)	70.00	21.00	5.00	4.00
Group Performances	61.00	29.00	7.00	3.00
Grading based upon Participation	80.80	10.10	6.06	3.03
Grading based upon Behavior	59.00	22.00	6.00	13.00
Grading based upon Effort	79.59	10.20	7.14	3.06
Music Aptitude Tests	3.00	17.00	24.00	56.00

Strategy	Percentage			
	Frequently Use	Sometimes Use	Almost Never Use	Do Not Use
Standardized Music Achievement Tests	1.00	8.00	18.00	73.00
Formative Assessments	6.19	10.31	11.34	72.16
Critical Thinking Prompts	23.96	41.66	23.96	10.42
Music Assessment Software	3.03	13.13	11.11	72.73

Figure 1. Percentage of participants indicating "Frequently Use" for the five most commonly used assessment strategies
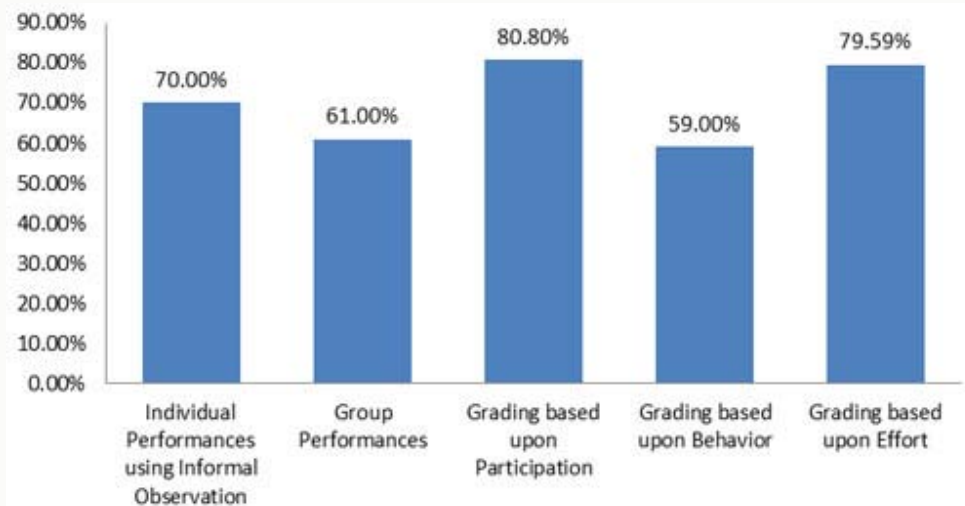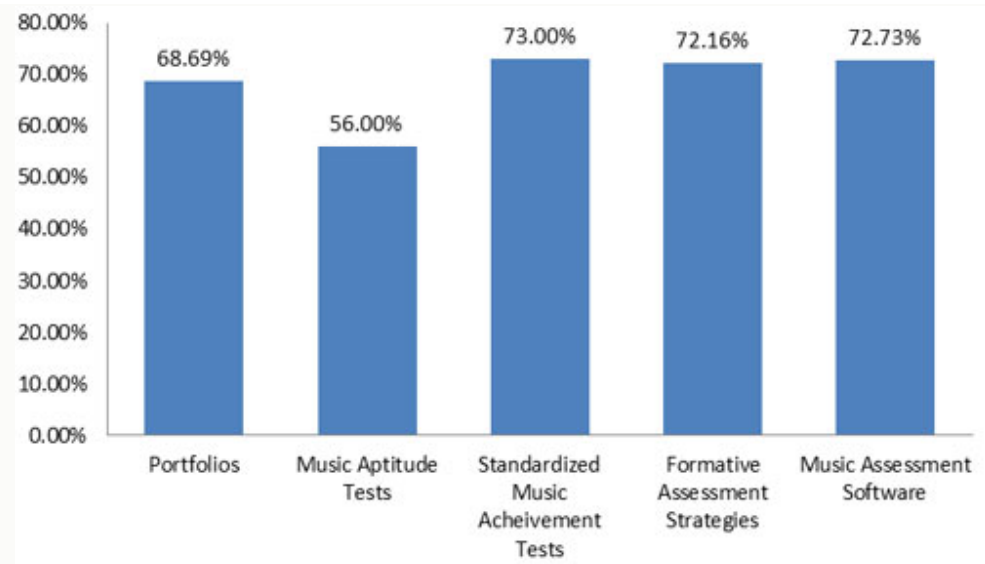

Figure 2. Percentage of participants indicating "Do Not Use" on five least used assessment strategies

Research Problem 2: Assessment Practices in Music Teacher Literature

The initial search of the two selected publications (*Teaching Music* and *Music Educators Journal*) using the keyword "assessment" resulted in 293 related entries that were divided into 22 categories. These results were further reduced to 148 publications when book reviews, lists, and other inappropriate entries were removed. These 148 articles, once reviewed for specific content and those not significantly addressing assessment (brief use of the term caused them to be included in the keyword search) were excluded, resulted in a list of 40 appropriate articles. This process was then repeated twice utilizing two additional academic searches (SAGE and EBSCO). In addition to the first 40 articles, these two additional searches produced three more appropriate articles bringing the total to 43 appropriate articles addressing assessment practices. Through the careful reading involved in the coding process, 6 additional articles were removed when it was determined that their content and/or focus were not as appropriate for the study as first believed. As a result, the final number of articles addressing music assessment in the last ten years and coded for this study was 37 (n = 37).

Of the 37 articles coded, 54.05% had a strong focus on at least one assessment technique and 45.95% were about general assessment practices and procedures and focused on multiple assessment techniques. The assessment techniques that were most often the main focus of an article were: standardized assessments (13.51%), assessing through use of music software (10.81%), assessing through group performances (8.25%), and using rubrics to assess individual performances (8.25%). Other techniques included, although less frequently, as the focus of assessment articles included: projects, such as compositions (5.41%), portfolios (2.70%), formative assessment strategies (2.70%), and self-reflection as a form of assessment (2.70%). Use of pen and pencil assessments, music aptitude tests, textbook series assessments, critical thinking prompts used as assessments, assessment based on informal observation, or grading based on effort, participation, or behavior never appeared as the main focus of any of the assessment articles.

The assessment technique most frequently mentioned, but not necessarily the sole focus of the article, was the use of rubrics to grade individual performances. 32.43% of all the articles coded at least mentioned this technique while an additional 8.25% focused on it. Other assessment techniques frequently mentioned in the articles included formative assessment strategies (18.92%), projects, such as compositions (18.92%), and critical thinking prompts used as assessments (18.92%). Self-reflection (16.22%), use of pen and pencil techniques (13.51%), assessing through group performances (8.12%), assessing through music software (8.25%), portfolios (2.70%), standardized music tests

(2.70%), and grading based on participation (2.70%) were also mentioned in the articles. Assessment based on informal observation, music aptitude testing, textbook series assessments, and grading based on behavior or effort were not addressed in any articles (Table 2).

Table 2. Assessment practices in music teacher literature

Strategy	Addressed in article	Focus of the article	Total Tally
Pencil and Paper Tests and Quizzes	13.51%	0.00%	13.51%
Portfolios	2.70%	2.70%	5.41%
Individual Performances (using a rubric or rating scale)	32.43%	8.12%	40.54%
Individual Performances (using informal observation)	0.00%	0.00%	0.00%
Group Performances	8.12%	8.12%	16.22%
Grading based upon Participation	2.70%	0.00%	2.70%
Grading based upon Behavior	0.00%	0.00%	0.00%
Grading based upon Effort	0.00%	0.00%	0.00%
Music Aptitude Tests	0.00%	0.00%	0.00%
Standardized Music Tests	2.70%	13.51%	16.22%
Formative Assessments	18.92%	2.70%	21.62%
Textbook Series Assessments	0.00%	0.00%	0.00%
Projects (such as composition activities)	18.92%	5.41%	24.32%
Critical Thinking Prompts	18.92%	0.00%	18.92%
Music Software	8.12%	10.81%	18.92%
Self Reflection/Assessment	16.22%	2.70%	18.92%

*self reflection is not a response option in the WMAPS but is included in this table given its prominence in the literature reviewed.

Research Problem 3: Relationships between Utilized Assessments and those in the Literature

In order to identify possible relationships between those assessment strategies utilized by classroom teachers and those addressed in the literature, the researchers ranked the strategies by both frequency of use and frequency of inclusion in the literature (Tables 2 and 3). The ranking of the top five "most frequently" used assessment techniques were compared to their corresponding rankings of inclusion in the literature (Figure 3). The researchers then compared the top five highest ranked article topics to their corresponding assessment strategy use (Figure 4). Of the top five highest ranked assessment strategies (grading based upon participation, grading based upon effort, individual performances based on informal observation, group performances, and grading based upon behavior), only two of these strategies were written about in the literature (grading based upon participation and group performances). Of interest was the fact that the other three top five assessment strategies were not included in any of the literature reviewed.

When comparing the top five highest ranked assessment strategies discussed in the current literature to those strategies utilized by classroom teachers, it was found that each assessment strategy found in the literature was being utilized by at least some classroom teachers; although the rankings differed notably (Figure 5). For example, the

use of music software to assess was ranked fourth in the list of assessment strategies written about in the current literature, but was ranked thirteenth in the list of assessment strategies utilized by classroom teachers. Further, it was noted that only the assessment strategy of paper and pencil tests received the same rankings (8th) in both classroom utilization and frequency of inclusion in the literature.

Table 3. Ranking of assessment strategies "frequently used"

Ranking	Assessment Strategies "Frequently Used"
1	Grading based upon Participation
2	Grading based upon Effort
3	Individual Performances (using informal observation)
4	Group Performances
5	Grading based upon Behavior
6	Individual Performances (using a rubric or rating scale)
7	Critical Thinking Prompts
8	Pencil and Paper Tests and Quizzes
9	Projects (such as compositions)
10	Formative Assessment Strategies
11	Textbook Series Assessments
*12	Portfoilios
*13	Music Software
14	Music Aptitude Tests
15	Standardized Music Achievement Tests

*Both Portfoilios and Music Software received 3.03% of the "frequently used" responses; however, portfoilios was placed above music software in this table because fewer participants indicated that they "never use" this strategy.

Table 4. Ranking of Assessment strategies found in current literature

Ranking	Assessment Strategies in Current Literature
1	Individual Performances (using a rubric or rating scale)
2	Projects (such as compositions)
3	Formative Assessment Strategies
*4	Music Software
*5	Critical Thinking Prompts
**6	Standardized Music Tests
**7	Group Performances
8	Pencil and Paper Tests and Quizzes
9	Portfoilios
10	Grading based upon Participation
***11-15	Individual Performances (based on informal observation), Grading based upon Behavior, Grading based upon Effort, Textbook Series Assessment

*Both Critical Thinking Prompts and Music Software were addressed in 18.92% of the articles; however, because more articles focused on Music Software, this strategy was placed above Critical Thinking Prompts in this table.

**Both Group Performances and Standardized Music Tests were addressed in 16.22% of the articles; however, because more articles focused on Standardized Music Tests, this strategy was placed above Group Performances in this table.

*** Strategies ranked 11 – 15 were not addressed in any of the articles.

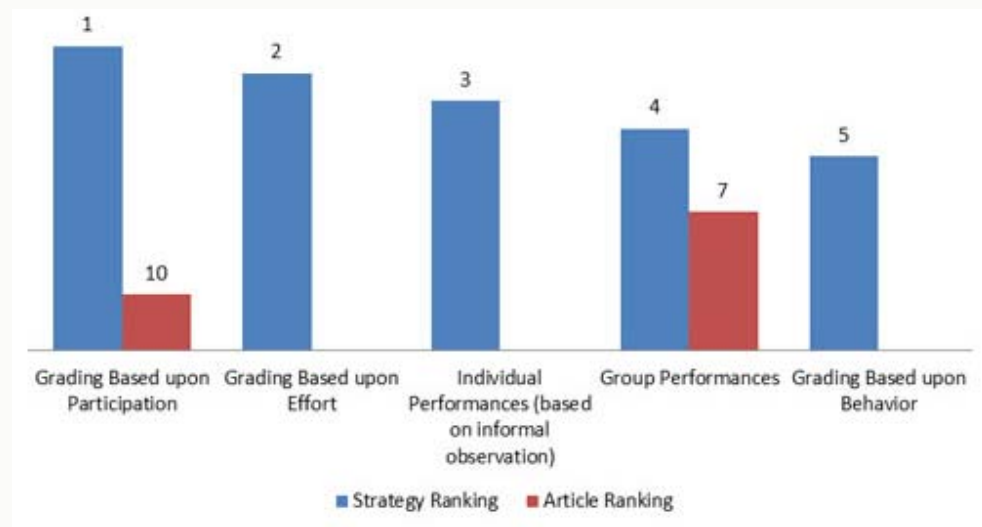*Figure 3*: Top Five Utilized Assessment Strategies with Corresponding Article Ranking

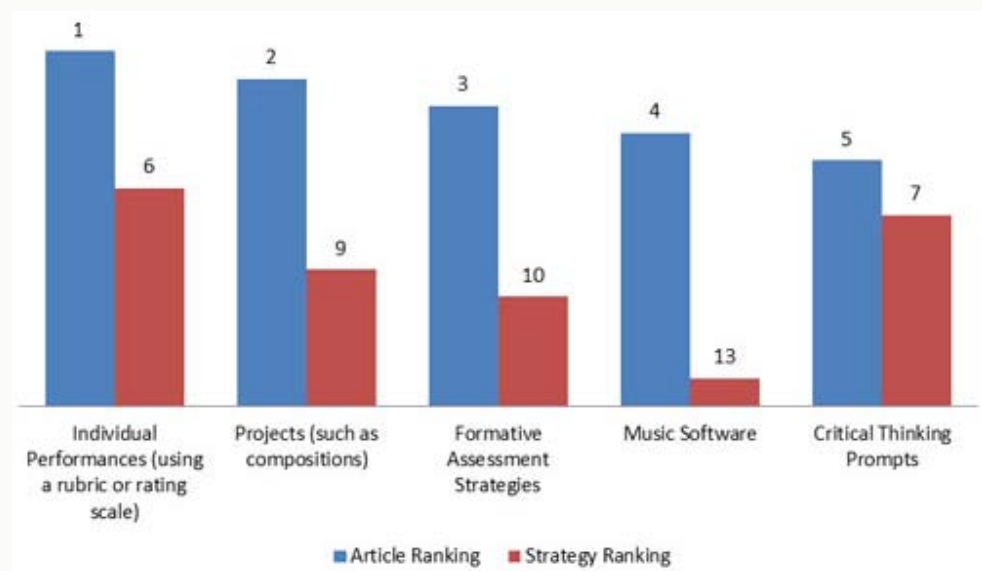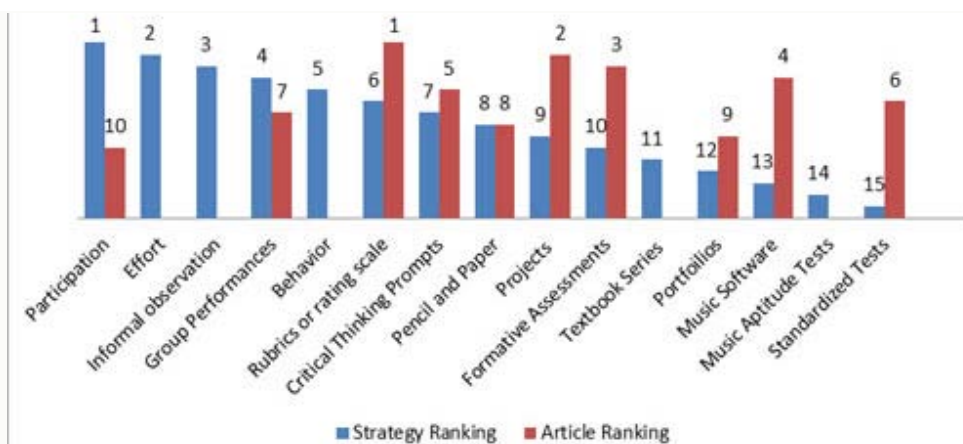*Figure 4.* Top Five Article Topics with Corresponding Assessment Strategy Ranking

Figure 5. Full comparison of ratings between utilized strategies and articles

Discussion

Research Problem 1: Currently Utilized Assessment Practices

In order to determine the assessment practices of the participants, the researchers calculated the percentages from Section B of the WMAPS which was designed to acquire the data necessary to identify which strategies elementary music teachers are utilizing (McQuarrie, 2008). The five strategies the participants most often reported as frequently used were either non-musical measures or strategies with no formal means of measurement. The most popular non-musical strategies were grading upon effort, participation, and behavior. The most popular strategies that assess musical concepts and skills but have no formal means of measuring individual student comprehension were assessing through group performances and assessing through informal observation of individual performances. The popularity and frequency of use of these assessment strategies is significant because it suggests that the majority of student data collected by these teachers is not relevant to their students' musical skills and levels of comprehension, nor is it documented with valid and reliable measuring devices. In effect, the assessment that is occurring in the music room is either not about music, not actually documentable, or both.

In terms of the assessment strategies reported as not used, the participants most often identified standardized music achievement tests, music assessment software, formative assessment strategies, portfolios, and music aptitude tests. Nevertheless, when considered in light of the responses from other sections of the WMAPS, as well as unsolicited comments written in the margins of the survey, the researchers observed that participants may be misusing some of common assessment terms. For example, the researchers identified possible confusion with the term "music aptitude." When asked about the use of music aptitude tests, one participant, crossed out the word "aptitude" and penciled in "attitude"; suggesting a typographical error in the survey. Further evidence of confusion manifested itself through written responses that appeared to come from an inaccurate understanding of music aptitude. As a result, it is impossible to determine how many other participants answered the question without understanding music aptitude.

Perhaps the most significant point of confusion surrounds the use of the term "formative assessment." The majority of the participants stated that they do not use formative assessment strategies; nevertheless, these same participants frequently suggested that they used assessment to improve and shape instruction. According to Black and William (1998), formative assessment occurs when data collected through assessment practices is used to change teaching in order to better meet the needs of the students. When asked why they assess, many participants offered reasons seemingly in alignment with Black and Wiliam's definition. Representative examples included:

• To guide my instruction, to assess my own delivery of content, to revise and review.
• To better gauge their learning and correlate my teaching and therefore adjust as needed.

Based on comments such as these, it is possible that participants do use formative assessment strategies more frequently than they reported. However, it is possible that the confusion could have come from the researchers' example of a formative assessment strategy rather than a misunderstanding of the term formative. Nevertheless, the fact that confusion over assessment terms, strategies, and theories exists to such a degree as to affect the responses of a significant number of survey participants suggests that assessment material is not reaching enough members of the music teaching profession.

Finally, with the exception of formative assessment, the least utilized strategies all require costly materials and resources. Many participants indicated that they do not use portfolios, music software, music aptitude tests, or standardized music achievement tests; all of which all require costly materials to implement.

Research Problem 2: Assessments Practices in Music Teacher Literature

Of possible significant is the fact that five of the assessment strategies currently reported as being used by the music teachers responding to the WMAPs were not mentioned in the literature reviewed from the last 10 years (individual performances based upon informal observation; grading based upon behavior; grading based upon effort; textbook series assessments; and music aptitude tests). It is not as surprising that the assessments such as grading on behavior and effort would not be included because they are based upon non-musical behaviors that are not grounded in solid research in music education research and best-practice. However, given that non-music classroom teachers and administrators often expect or require their music educators to report on behavior, and to some degree effort, it would not have been unexpected to find that this issue had been addressed if only to provide pre-service and new teachers with information useful for responding to such expectations.

Perhaps more interesting is the void of material addressing individual performances based upon informal observation. Given that a large portion of the time spent in music education involves observing students as they participate in musical activities like singing games, musical responding, or playing an instrument, it would seem appropriate to discover material devoted to this type assessment in the literature. Similarly, given the emerging prominence of Music Learning Theory and the writings of Edwin Gordon (1999, 2007) it was surprising to find that Music Aptitude Testing was not included in any of the literature reviewed (an additional search specifically targeting this subject both confirmed the existence of a limited number of entries on this subject and that they were not linked to the keyword "assessment").

Finally, the use of pre-designed assessments found in textbooks may not be included in the literature for two reasons. First, reliance upon the pre-designed curriculum found in textbooks is not considered best-practice by many and as a result is not discussed in the literature. Second, it is assumed that the assessments included in these texts have been carefully designed, tested, found to be valid and reliable, and thus do not require further research. Nevertheless, given the use of such assessments it would not have been unexpected to find some mention of its use, either for or against, in the literature.

Of further interest was the large number of articles focusing on the use of standardized tests. The interest in this topic may be the result of the current political climate and the prominence of both the National Assessment of Educational Progress (NAEP) and No Child Left Behind (NCLB). The report and subsequent responses to the 1997 NAEP began to appear at the start of the ten-year period of literature reviewed for this study and the

passage, and highly publicized and charged responses, to NCLB occurred during the heart of the same ten-year period. As a result, it follows that there would be such a focus on this assessment strategy even if it is not necessarily associated with best-practice, teacher-driven popularity, or interest to contributing writers

Finally, self-reflection was a relatively common assessment strategy found in the literature. However, because the WMAPS did not include this as an option in the closed-response section, and it was not mentioned in the open-responses from the participants, it is not possible to compare this strategy with actual practice. Nevertheless, this form of assessment strategy is important and future study, and perhaps future versions of the WMAPS should include this as it could provide valuable information.

Research Problem 3: Relationships between Utilized Assessments and those in the Literature

The relationship between the assessment strategies utilized in the actual music classrooms of the participants in this study and the strategies discussed in the music education literature is both the most critical question of this study and also the area where the analysis of the results suggests significant area for concern within the profession. Specifically, of concern is the fact that of the top five ranked assessment strategies, only two (grading based upon participation and assessing through group performances) receive any attention in the literature of the last ten years. This suggests that a serious disconnect may exist between classroom educators and those writing and editing for the professional publications serving those music educators.

If a gap between educator and publisher does exist, and at least in assessment literature it appears it may, the possible causes are many. The most obvious cause suggested by the literature is the poor professional reading habits of classroom educators (Cogan & Anderson, 1977; George & Ray, 1979; Stopper, 1982; Womack and Chandler, 1992; VanLeirsburg & Johns, 1994; Sanacore, 1995, etc.). However, precisely because there is only limited research in this area other possibilities must be considered. Perhaps publications' selections of topics for inclusion are more closely tied to research trends, political agendas, or other factors that are less connected to current classroom practice and teacher interest. Further, if publications are being used as professional development resources it would follow that publication topics occurred ahead of actual implementation of practice. However, given the ten-year period of publications studied, it would have been expected that the gap would have begun to close as the decade ended.

The apparent disconnect between practice and publication is not only observed in the limited inclusion of educators' most popular assessment techniques in their professional literature but is also evidenced by assessment strategies whose classroom use does not positively correspond to its mention in the literature. For example, the use of music software was ranked thirteenth out of fifteen by the participants; however, in the literature it is amongst the top five frequently mentioned strategies. The reasons for this disconnect are not clear, but is likely linked to issues of expense, visibility from intense marketing (including sessions at many national, regional, and local conferences and events), and the often passionate support of those who have adopted this approach.

Similarly, standardized testing ranked the lowest in classroom utilization (fifteenth out of fifteen) and sixth in frequency of inclusion in assessment literature. Again, one possible reason is the expense of large-scale standardized testing; however, in the case of district or state standardized tests finances are less likely to be a concern of classroom teachers. One more likely contributing factor may be an underlying effort by some to promote both the validity and usefulness of this frequently-maligned form of assessment. Nevertheless, documenting this possible reason is challenging if not impossible, given the scope of this or similar studies.

Although there does appear to be a disconnect that is significant enough for concern and to warrant further study, it would be incorrect to suggest that the divide is more severe than it actually is. When the examination begins with the literature and moves to a comparison with actual practice, it can be observed that the five top ranked assessment strategies found in the literature are all utilized to at least some degree by classroom educators. Further, the strategies of pencil and paper tests and critical thinking prompts were similarly ranked in both usage and literature (8th and 8th and 7th and 4th respectively). And while not as closely ranked as the previous two assessment strategies, group performance assessments were ranked 4th in usage and 7th in literature inclusion.

Conclusions

In conclusion, the researchers found that there is some degree of disconnect between the assessment strategies reported as used by the classroom music educators participating in this study and the major professional publications in the music education field. Many of the assessment strategies most frequently used by teachers are not included in the literature, while many of the strategies included in the literature are utilized but only to a limited degree and only by some of the participants. Of concern were the findings that the most popular assessment strategies utilized by the participating teachers were non-musical in nature, or with limited or no formal means of measuring individual student comprehension and that the most popular topics included in the literature may not be useful in many classrooms. Nevertheless, while it appears that on the topic of assessment the teacher-focused publications and the teachers are not aligned, there were areas where it appeared that topics and practice were connected. However, support for the existence of disconnect is strong and the reasons for it are unknown, likely highly complex, but certainly worthy of further study given the importance of assessment in today's music classroom and the need for publications to provide the relevant, meaningful, and practical information needed and expected by active classroom music educators.

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