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The State of Music Education Research

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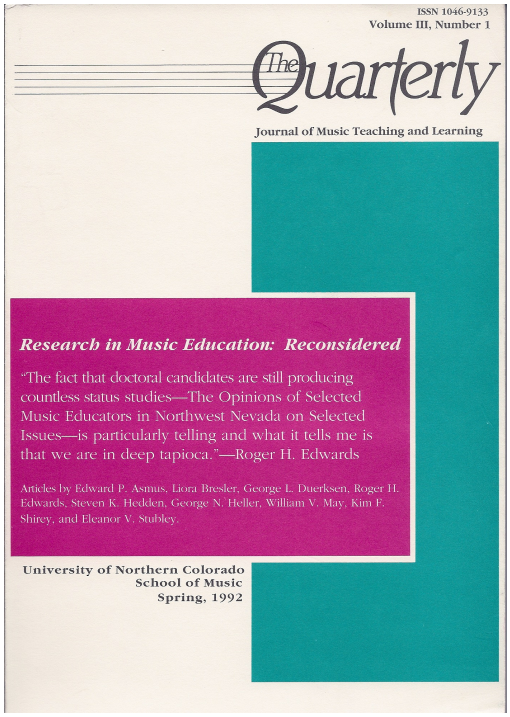

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It is with pleasure that we inaugurate the reprint of the entire seven volumes of The Quarterly Journal of Music Teaching and Learning. *The journal began in 1990 as* The Quarterly. *In 1992, with volume 3, the name changed to* The Quarterly Journal of Music Teaching and Learning *and continued until 1997. The journal contained articles on issues that were timely when they appeared and are now important for their historical relevance. For many authors, it was their first major publication.* Visions of Research in Music Education *will publish facsimiles of each issue as it originally appeared. Each article will be a separate pdf file. Jason D. Vodicka has accepted my invitation to serve as guest editor for the reprint project and will compose a new editorial to introduce each volume. Chad Keilman is the production manager. I express deepest thanks to Richard Colwell for granting VRME permission to re-publish* The Quarterly *in online format. He has graciously prepared an introduction to the reprint series.*

The State of Music Education Research

By Edward P. Asmus
University of Utah

The study of music teaching/learning processes has a lengthy history, though "research" in music education developed primarily during this century. Like those in other areas of inquiry, we are performing research and accumulating information about music education at a rate faster today than ever before in history. As the number of published and unpublished research studies increase, it behooves us to sit back and analyze the state of music education research. Knowing where we are today will help us determine where we need to go in the future. This presentation attempts to analyze the current state of music education research and from this analysis to target future directions that research efforts might take.

A macro view of music education research will be taken here. While several writers have identified topical areas in need of more research, that will not be the focus of this article. Rather, an analysis of how research is conducted, its dissemination, and its integration with the totality of music education will be emphasized.

The Past as a Basis for Discussion

The history of music education research can be viewed as quite long or quite short, depending on one's perception of the term "research," the perceived function of research, and the methodologies that comprise research. To ascertain the current state of music education research, it would be well to look at varying conceptualizations of the definition, purpose, focus, means of determining quality, past problems, and the role of research in music education.

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Defining Research

The term research has received various definitions. Cady (1967) characterized research as a search for facts about the teaching-learning process. Radocy (1983) and Rainbow and Froehlich (1987) pointed out that it is a process of systematic inquiry while Petzold (1963) claimed that it is a creative process that focuses on meaningful problems in an intelligent manner. Phelps (1980) viewed research as an organized procedure that can have two outcomes: (1) the production of new knowledge; and (2) the evaluation of concepts applied currently or previously in music education practice. The outcomes of research described by Colwell (1990, p. 30), "better teaching and more successful learning," are supported by several authors (Cady, 1967; Sidnell, 1987). The definitions that have been cited consist of two components: the process of acquiring information and the type of information that results from the process. While many variations of these definitions can be derived, here is one form of a definition of research in music education: *Research in music education is a systematic process that produces substantive information about music teaching and learning.*

Types of Research

There has been some disagreement among authors concerning the various types of music education research. Choate (1965) characterized three types of research: philosophical or speculative inquiry, descriptive, and experimental. Cady (1967) maintained that there were four types of research in music education: descriptive, experimental, historical, and philosophical. Reimer (1985) indicated that there are three forms of music education research: philosophical, historical,

and experimental. Rainbow and Froehlich (1987) argued that three types of research fully account for the various classifications used by other writers: philosophical, historical, and empirical. The latter tripartite conceptualization will be used throughout this presentation.

Purpose of Research in Music Education

The purpose of research in music education has tended to focus on either the production of "practical" knowledge or the production of "basic" knowledge. Britton (1969) has stated that "scientific articles" deal primarily with practical problems. He calls for "scientific researchers" to focus on basic problems that produce basic theories. Petzold (1963) has characterized basic research as having a carefully delineated problem, objective procedures for data collection, systematic methods for analyzing the data, and conclusions that have been based on the data.

Several writers have thought of basic research as that which leads to a theory of music education (Carlsen, 1987; Leonhard & Colwell, 1976; Petzold, 1963; Rainbow & Froehlich, 1987). Carlsen (1987) presented a framework for such research that is comprised of three basic components: input, process, and output. In this framework input is perceived as student, family, societal, and teacher factors that impinge on music teaching and learning; process is made up of teacher activity and student activity; and output consists of the demonstration of acquired knowledge and skills. Carlsen contends that research in music education has tended to be primarily directed at process and not at the input and output components.

The call for an emphasis on more basic research is juxtaposed to the call by others for more practical research that affects the daily activities of teachers. For instance, Colwell (1967, p. 74) has stated, "Research fails, or has failed, to make contact with the day-by-day work of the teacher." Such concerns are frequently heard from teachers and leaders of the major professional organizations. Indeed, a frequent criterion that is applied to determining research sessions at MENC conferences is the attractiveness of the sessions to the teachers in attendance.

The search for practical solutions to classroom problems is not new to music educators. Choate (1965) points out that a constant search for improvement has long been a characteristic of music teachers. He further indicates that long before most colleges were founded a large amount of printed matter and a large number of professional meetings were available to disseminate information about music teaching. Music teachers want to be introduced to new methods, but the formal research process either focuses on issues that are perceived to be impractical or too esoteric for the teachers to extrapolate the information to their unique situations.

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Duerksen (1987) has identified several reasons why teachers fail to apply research findings in their classrooms: (1) teachers have negative attitudes toward research; (2) teachers lack skills in analyzing and applying research findings; and (3) some teachers fear that knowledge will reduce aesthetic response. Yet, Radocy (1983) maintains that there are at least three ways that music teachers can benefit from research: (1) specific pedagogical suggestions can be developed; (2) present practices can be questioned; and (3) local problems can be solved with research information.

The importance of research to the development of the music education profession has been recognized by many. Cady (1969) cites several calls for research into the needs of music education. He indicates that Dykema called for more research into music teaching and factors that effect music teaching as early

as 1928. More calls for the application of the scientific method and research to solve fundamental problems followed from Kittle in 1932, Kwalwasser and Wilson in 1935, and Earhart in 1936. Such calls continue today (Brand, 1984; Colwell, 1990), but emanate primarily from the researchers themselves. Teachers who ask for research also emphasize practical issues. For instance, Boline (1981) called for research in identifying music's uniqueness to the school curriculum, evaluation of music's effect on the total learning environment, and the study of aesthetic effects on listeners.

Characterizing Quality Research

An evaluation of research must start with an understanding of what constitutes quality research. Cady (1967) provides specific criteria for identifying quality research. Quality research must: (1) have a clearly defined problem; (2) have methodology based upon the problem; (3) have methodology appropriate to one of the basic types of research; (4) apply the rules of logic throughout the research process; (5) use careful controls; (6) report only the truth as found in the investigation; and (7) report the knowledge gained to the public. Cady (1967) also points out that research quality is determined by establishing the relevance of the research to the need for the information. Thus, Cady's view for establishing the quality of research in music education is two-fold: (1) to weigh the need for the information produced by the research; and (2) to determine the excellence of the research process.

Within the research process, writers have emphasized the need for a clear conceptualization of the problem (Colwell, 1967; Phelps, 1980; Reimer, 1985). The clarity and solidity of the problem statement provide the basis for determining how appropriate are the methodology, analysis, and conclusions drawn from the research.

Past Critiques of Research

Music Education as a Discipline

In 1964 Cady called for music education to become a discipline. In this case, discipline is intended as a recognized branch of knowledge about music teaching. To attain such a status, Cady suggested that music education must evaluate and synthesize its research, disseminate its research, and increase research on important issues.

Efforts to synthesize a large body of research have been relatively few. The most notable exceptions are the work of Cady and Schneider at The Ohio State University during the 1960s and early 1970s, the recent efforts of the Instructional Strategies Special Research Interest Group that resulted in the production of *What Works: Instructional Strategies for the Music Teacher*, Madsen and Prickett's (1987) *Applications of Research in Music Behavior*, and a few summative articles that have appeared in the *Bulletin of the Council for Research in Music Education.* Teacher training and basal music series textbooks are using more research in their composition but still tend to emphasize personal preferences and common practice as their foundation.

Large-scale literature reviews that focus on specific issues of importance to music education are needed. These reviews should provide in-depth analyses of available literature and draw holistic conclusions in a meaningful way. Such work must be encouraged and a place for such efforts must be found in our research publications. In addition, appropriately written articles that transmit this information to music education practitioners should be expected from our researchers and such articles need to be accepted in the popular music education journals and magazines.

The dissemination of research to the music education research community has improved dramatically since 1964 when Cady wrote his original article. The number of research journals has expanded greatly and research sessions have become commonplace at the major meetings of music education. Further, recent years have seen a growth in the number of specialized or regional research meetings sponsored by universities. All of these factors combine to provide the potential for widespread dissemination of research findings.

The Role of Colleges and Universities

Cady (1969) identified four problems with research from a comprehensive review of the literature: (1) college and university faculty have not understood the meaning of re-

search; (2) college and university faculty have been vague in what problems are relevant to music education; (3) college and university faculty have not understood research techniques; and (4) graduate programs have not provided the philosophical and technical foundation necessary to do the research undertaken by graduate students. These problems will now be analyzed in light of today's research environment.

College and university faculty today are probably well aware of the meaning of research. When Cady made his statement decrying the conceptualization of the term research, he was referring to the predominance of writings in music education that were called research, but in actuality were unverified opinion (Cady, 1969). It is interesting to note that in the preparation of this manuscript, a comprehensive search of the literature revealed very few definitions of research and in the more recent works little effort was expended in discussing the issue. This indicates that there is a consensus as to what research now means and that Cady's hope for the concept now permeates the profession. Indeed, graduate programs in music education have made concerted efforts since the late 1960s to assure that graduate students are aware of the variety of forms of research useful to music education. Graduates of advanced degree programs have become the college and university faculty of today. These individuals often find that the "publish or perish" syndrome is quite active on their campuses and have responded by producing quite impressive research records. So Cady's first concern is no longer applicable.

Cady's second concern, that college and university faculty have been vague in identifying relevant problems to music education, appears to be an on-going problem. Britton (1969), Leonhard and Colwell (1976), Reimer (1985), and Carlsen (1987) are a few of the writers who have expressed similar concerns. The difficulty lies in determining exactly what the relevant problems are. It could be expected that relevant problems would be in constant flux following changes within the profession. That is, what is relevant today may not be relevant tomorrow. The danger in following a constantly changing definition of relevance would lead to the amassing of a body of literature that is constantly out of date. Yet, it is important that forums for the discussion of such issues be developed. At this time, there are no such forums. While the expanding number of research-oriented journals provide some possibilities via print media, it would be much more effective to have face-to-face meetings where the relevance issue can be discussed and debated.

The applicability of Cady's third concern, that college and university faculty do not understand research techniques, cannot be as clearly decided as the previous two concerns. While college and university faculty are more enlightened about research techniques than in 1969 when Cady's concerns were published, research techniques have expanded rapidly for all forms of research in music education.

The microcomputer has brought about a myriad of techniques available to not only empirical researchers but to historical and philosophical researchers as well. For the empirical researcher, there has been a wealth of new orientations to the research process, data-gathering techniques, and statistical procedures; however, these techniques are very slow to be applied in music education research. This is most likely due to the training provided in doctoral programs. The time devoted to music education study, which often includes research courses, must be balanced with work in advanced music study. The limited time available leads to covering basic concepts and little time, if any, for covering advanced and new concepts. For instance, in the statistical area most doctoral programs assure that students with empirical emphases understand basic statistical concepts through univariate analysis of variance. Yet, research into music processes is extremely complex with many impinging variables. Few doctoral programs require that students become familiar with multivariate techniques. This leads to what many historical researchers have been very quick to point out to this writer: that empirical studies tend to be simplistic and do not provide a broad perspective on the topic. Methods for expanding the capabilities of researchers in employing more sophisticated and contemporary research techniques need to be developed.

Cady's fourth and final concern, that gradu-

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ate programs do not provide the philosophical and technical foundation necessary to do the research that graduate students do conduct, is ameliorated by progress that has been made in meeting the first three concerns. The faculty who now guide the research of graduate students are the best trained in the history of the field. The guidance that is provided should compensate for the budding researcher's initial weaknesses in these areas. However, the philosophical and technical foundations of research must always be a concern to the research community. For example, Reimer (1985) notes that the philosophical base determines a researcher's orientation to research. Earlier, Colwell (1967) had indicated that philosophy is integral to the performance of adequate research. Unfortunately, until recently very little work has been done in philosophy as a music education research enterprise. Articles of a technical nature do find their way into the research journals of the profession, but few philosophical articles have appeared. This void must be filled by well conceived and articulated philosophical work that helps move music education research forward.

The Art of Music versus the Nature of Science

Leonhard and Colwell (1976) have identified two global problems of music education research: (1) there is a conflict between the art of music and the nature of science; and (2) there are few researchers expert in both the art of music and the scientific method who do research over significant time periods. The conflict between the art of music and the nature of science is not an issue to this writer. While some would like to create a clear boundary between musical art and its scientific study, well applied scientific methods do not impinge negatively on the artistic process nor produce results that are inconsistent with an enlightened view of the art of music. Enlightened artists and enlightened researchers share mutual interests and can assist each other in attaining higher levels of accomplishment in their respective areas.

Leonhard and Colwell's second concern is shared by Reimer (1985, p. 20), who indicates that individuals who maintain a focused research effort over long periods "are our research monuments." While these individuals are relatively few, an increasing number are maintaining on-going research programs. From such efforts, music education can expect to gain important knowledge about the music teaching/learning process.

Significant Research

Reimer (1985) has suggested directions in which music education research must move: (1) research efforts should be clustered around significant issues; (2) the borders surrounding significant issues need to be defined; (3) studies must include philosophical, historical, and experimental modalities; (4) large-scale, long-term research projects need to be undertaken; and (5) research linkages among universities should be formed. As was indicated in the discussion of Cady's concerns, the music education research community must define the significant issues. Once these have been established, their borders can be defined. Forums for discussion of significant issues must be established. These forums must be continuing because what is relevant and significant at any point in time will vary with the needs of the music education profession.

Reimer's third point, that research studies must include philosophical, historical, and experimental research modalities, is being accomplished to some extent today—though probably not at a level Reimer would desire. That is, a well documented empirical study includes a philosophical base in determining the research questions and includes a historical base within the review of literature. More thought about the philosophical base of a study should be expended and incorporated into the empirical research process. Greater efforts should be made to assure that the re-

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search has incorporated the work of the past in the planning, implementation, methodology, analysis, and the conclusions that are drawn by the study. It is also incumbent on historical and philosophical researchers to be cognizant of the developments and findings of empirical research.

Reimer's call for more large-scale, long-term research projects is one that is most desirable, but difficult to accomplish. The realities of most positions in higher education make it difficult to maintain a continuing research program. Large teaching loads, lack of funding and research assistance, and typically large administrative requirements work against most music education faculty in developing on-going programs of research. Such programs, however, are goals toward which all researchers should strive.

Reimer's final call for research linkages among universities is more feasible today than at any previous time. There are free electronic communications available among most universities and colleges not only within the United States, but throughout the world. Such electronic communications allow researchers to correspond quickly and easily, to share research data, and to share resources such as literature bases and computational capabilities. It is evident that contemporary research requires high levels of skill in a variety of areas. Because researchers tend to develop expertise in a particular area, this expertise should be shared in cooperative ventures. This would bring together individuals with different specialties that could address problems at levels never before possible. The potential benefits to the individuals and institutions involved and to the field of music education are limitless.

Music Education Research—*The Good*

Quantity of Research

Today, there is an unprecedented amount of research being conducted and published in music education. When the *Journal of Research in Music Education* was founded in 1953, there was relatively little research being conducted. The reasons for the expansion of research are numerous. First, leaders in the field during the 1950s and 1960s such as Cady, Schneider, Leonhard, Sidnell, Petzold, Britton, and others, emphasized the need for more research. Second, promotion and tenure decisions at colleges and universities began to require strong research records. Third, reward systems within higher education institutions emphasized research productivity by providing funding to conferences for presentation of research and other similar reinforcements. Fourth, the researchers found the research process to be rewarding in and of itself. These factors combined to produce the level of research we have today. This body of research tends to be diverse not only in the subject matter studied, but in the methodologies applied and the analyses used to base conclusions.

Journals

Paralleling the growth in the quantity of research is the number of journals devoted to research. The number of national broad based refereed journals that target researchers has expanded from just the *Journal of Research in Music Education*, to include *The Quarterly Journal of Music Teaching and Learning*, the *Council for Research in Music Education Bulletin*, and the *Southeastern Journal of Music Education*. The founding of *Update* brought a new dimension to research publications with an emphasis on placing research findings into the hands of practicing music teachers. That is, *Update* has attempted to provide a bridge between the music research community and the music teaching community at a national level. The number of state journals that focus on research has also expanded. Florida, Missouri, Ohio, and Pennsylvania all make their research journals available to the music education community. There has also been an in-

crease of research journals that have important relationships to music education, such as *Music Perception* and *Psychomusicology*. Another regularly published national research organ is the *Music Researchers Exchange*. While it does not publish research articles, it does keep researchers informed on a variety of news important to the music education research community.

Number of Professional Meetings

The number of professional meetings that incorporate or emphasize research has also increased. The national and regional meetings of the Music Educators National Conference (MENC) have long been the focal point for most researchers. Professional meetings that focus on specific topics or research areas and meetings put on by institutions of higher learning have added to the opportunities for researchers to share their work. In addition, more and more state meetings of MENC are incorporating or featuring research. Professional meetings are extremely important not only because they provide a means for college and university faculty to acquire necessary credits toward promotion and tenure, but they encourage researchers to produce more research and allow researchers to come together and reinforce each other's efforts in the pursuit of research.

Interfacing With Music Teachers

The research community has made tremendous strides in interfacing with music teachers. This is evident with MENC adding *Update* to its list of journals and by the research poster sessions that are the dominant research activities at most MENC conferences. As pointed out earlier, the call for basic research from the research community is counterbalanced by the call for research with practical implications by the teaching community. At MENC conferences, the call by the teaching community appears to have won out. The research community has an obvious role in providing teachers with the information they need in a form they can absorb and use to improve the music teaching/learning process.

Leadership Emphasis on Research-Based Findings

The leadership of MENC appears to look more and more toward research for information. This information is useful in making decisions that affect all music educators and in helping sway national, state, and local policy makers to support music in the schools. It is no longer unusual to see MENC presidents roaming the aisles at poster sessions. The MENC national office conducts numerous surveys and research studies of its own to obtain necessary information. These factors reflect the level of importance that the leadership of music education now attaches to research information.

Special Research Interest Groups

At the 1978 Chicago Biennial meeting of MENC, Henry Cady made a proposal that was subsequently adopted: to create Special Research Interest Groups (SRIGs). These groups were to be devoted to specialized areas of research within music education. The SRIGs have presented sessions at MENC conferences and, in some cases, produced publications, created journals, and promoted meetings outside the MENC framework. Most SRIGs publish a newsletter that is distributed to its membership. In general, the SRIGs have fostered communication among researchers with common interests that could be expected to enhance research within the SRIG area.

Music Education Research— *The Not-So-Good*

Lack of Leadership

The music education research community today finds itself without the leadership to provide the impetus for achieving its potential. The research community has traditionally aligned itself with the Music Educators National Conference (MENC). The MENC Constitution has assigned the research leadership role to the Music Education Research Council (MERC). The constitution states that, "It shall be the purpose of the Society to encourage and improve the quality of scholarship and research within the profession" (MENC, 1989). Unfortunately, MERC has been ineffectual in dealing with the leadership of MENC. For instance, the *Journal of Research in Music Education* (JRME) found itself recently with a backlog of over one and a half year's of accepted journal articles and, at that time, the backlog was growing. Such

a backlog is disastrous for young researchers whose promotion and tenure will rest on their abilities to obtain refereed research publications. These people are the hope of our future; the brightest and the best. Everything must be done to support their efforts and ensure their continuation in the field. Unfortunately, MERC received only the smallest token of assistance from MENC for expanding the JRME to eliminate the backlog.

Identifying the relevant research problems and determining the significant issues to be addressed by research can only occur through face-to-face professional meetings. Such meetings provide the only forum where ideas and opinions can be discussed in an open and nurturing atmosphere. MERC, who controls the research presentations made at national MENC conferences, makes no provisions for such discussions. MERC is indeed limited by MENC as to the number of sessions that it controls. If there is insufficient time at the national MENC conferences, it appears that MERC needs to sponsor national meetings dedicated exclusively to providing the necessary time. While such meetings have been discussed by MERC, none have occurred.

MERC has appeared to become so preoccupied with making research relevant to the teaching community at national MENC conferences that it neglects its constitutional directive to improve the quality of scholarship and research. In the recent past, there have been no sessions at national MENC conferences that emphasize the professional development of researchers. Given the rapid expansion in the number of research techniques and knowledge about the effectiveness of these techniques, such sessions would be a welcome addition to national MENC conferences. Indeed, because music education researchers are almost exclusively former teachers of music, it could be expected that music researchers would be as interested in enhancing their craft as music teachers are in enhancing theirs.

MERC is placed in the awkward position of having to deal with the whims of the MENC leadership, the needs of the SRIGs, and the needs of individual researchers. However, MERC is the only body that presently exists that can provide the leadership the research community so desperately needs. It may well be that the growth of research in music education, the ever increasing number of journals, and the ever increasing number of researchers have simply outpaced MERC's abilities within MENC to cope with the leadership needs of research. Is it time for a new national music education research association to be formed?

Special Research Interest Groups

Brand (1984) has indicated that SRIGs have the potential to (1) encourage continuing research, (2) emphasize continuity in research by providing a more holistic perspective of an area, and (3) promote collective efforts in developing workable theories of music education. Reimer (1985) supports Brand's view that SRIGs can provide coherence in music education's research efforts. Yet, it is doubtful that any SRIG has attained the potential that Brand has described. While the SRIGs have fostered communication, their meeting once every other year precludes making many significant strides toward attaining the potential that Brand envisions. In most cases, SRIGs have become (a) a means that allow leaders to get national service credit important to college and university promotion and tenure decisions; (b) focused on getting or keeping a session at the biennial national MENC conferences; and (c) publishers of newsletters. These limitations are not necessarily the individual SRIGs' or their leaders' fault, but rather caused by the untenable situation of only being able to come together once every two years. The time that they do meet at a conference is usually dedicated to making presentations that appeal to not only researchers but the teaching community as well. There is no provision for SRIGs to take care of necessary business and develop an agenda for the future.

Research Methodology

The methodology of research in music education has largely remained entrenched in the methodology common in the late 1960s and early 1970s. There has been limited advancement in research strategies applied within the music teaching/learning situation. Sidnell (1987, p. 3) has maintained that "there is not, nor need there be a research method peculiar only to music education." If this were true, the logic could be

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extended to eliminate trained music educators in favor of general classroom teachers in the teaching of music. While there would be no one research method peculiar to music education, there are probably many research methods peculiarly appropriate to studying the music teaching/learning process.

Research design in music education tends to follow the lines of Campbell and Stanley (1963) and does not take advantage of alternatives to such designs. The music classroom can never be turned into a laboratory with total control over the subjects. Rather, music classrooms are dynamic entities that require creative approaches to gather valid and reliable data of the meaningful music teaching/learning interactions that take place.

Music education research also lags in the application of technology to the study of music teaching/learning processes. Computer-controlled CD ROM, video disks, graphics imagery, audio imagery, and so on have tremendous potential for use in music research settings. A few such systems are being developed and have been used, but the potential of these systems has been inadequately explored.

Lack of Professional Development

The research profession provides too few opportunities for its constituency to develop and enhance their research skills. This problem has been discussed above in its association with MERC, but it is such a pervasive problem that it bears repeating. There are no means for researchers to expand capabilities in their particular research area and there are no opportunities to learn about developments in other research areas. For instance, the empirical researcher might obtain a great deal by learning about methodological developments in history and vice versa. Providing professional development opportunities does not appear to be too difficult a task. This should be a goal of the research community.

Statistical Analyses

The complexity of music demands complex analysis; yet, we continue to do empirical research that uses the most rudimentary of statistics. Such statistical procedures lack rigor and do not provide the complete picture that more complex procedures allow. The most appropriate method for defining a statistical analysis is to base it on the research questions or hypotheses, but researchers continue to develop studies to fit particular statistical techniques. Given the lack of professional development opportunities, however, this may be the only way that researchers can enhance their skills.

Space limitations within many journals have required researchers to scale down their statistical presentations. This is most unfortunate, because the statistical presentations clearly articulate the results on which the conclusions are based. In addition, they can provide researchers in the future with necessary data to answer new questions or to validate new findings. For instance, a multiple-regression without the correlation matrix is only a partial presentation of the results; the correlation matrix is an important component that can provide the fodder for numerous statistical procedures in the future.

Researchers who are using state-of-the-art statistical techniques face an additional problem when seeking to publish their work. The editorial board reviewing the research submitted may not be familiar with the statistical techniques used and may reject the work from a lack of personal knowledge about the techniques. It is imperative that the researchers provide sufficient discussion and references to assure that new statistical techniques are not misinterpreted, and it is imperative that reviewers be open to new methodologies.

Large-Scale Literature Reviews

Music education is in desperate need of large-scale literature reviews that focus on a particular issue, bring together all relevant sources, analyze the literature, and then draw conclusions about that issue. Such analyses are invaluable for moving the profession

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ahead both from a research and a teaching perspective. There has been a tremendous body of research accumulated in music education that needs to be synthesized and made available to the music education field.

Summative essays are also needed that develop strategies for music teaching and learning based upon a body of research literature. Such essays would find an immediate audience with music teachers and would do much to improve music teaching/learning practice.

Research Presentations

The primary research presentation format today is the poster session, which is popular with both the research community and the teaching community. This format is designed to allow a large number of researchers to present their findings to a large gathering of people; unfortunately, the researcher in fact usually conveys the results of the research to only a small handful of people. Furthermore, the poster sessions may not foster research that seeks answers to complex questions, but rather research that answers small questions that fit nicely and attractively on a poster board. Poster sessions do much to promote research quantity, but do little to promote research quality.

Alternatives to the research poster sessions should be available at a national level. Today, the most enlightening and elevating research presentations are made at smaller regional or specialized research meetings sponsored by universities. This does not seem appropriate; instead, the most rigorous of presentations should be available at national meetings. As indicated earlier, if time is not available for such presentations at national MENC conferences, then an additional meeting for the research community should be held.

The presentation format followed at the International Society for Music Education research seminars fosters high-level research by the researcher and high-level interaction by those attending. This format allows the researcher to make a formal presentation of the material for a specified time period, usually 15 minutes. This is followed by 15 minutes of questions and interaction with the audience. After three or four such presentations are made, one-hour discussion sessions are held in separate meeting rooms for each research presentation, and members of the audience attend the discussion session of their choosing. Such in-depth interaction brings new insight to both the researcher and the audience and encourages research growth and the solution of more complex problems while promoting continuing research. While MERC has been urged to adopt such a format, this has yet to be done.

Writing Research Reports

The writing of research reports—the material usually submitted for publication and presentation consideration—requires attention by all researchers, but especially by beginning researchers. First, the entire presentation must be based upon the questions addressed by the research. The title must reflect the questions and not promise more than can possibly be delivered. The abstract should focus on the questions and include information that enlightens the reader about how the questions were answered and what the answers were. The research questions should be developed from the best research and theory available as indicated in the review of literature. The methodology should be selected exclusively on the basis of the questions. The results should be presented in a manner that allows the questions to be answered in a logical and understandable manner. Finally, the conclusions should focus first on answering the questions and then derive potential questions for the future.

Second, the writing should make a clear presentation of the research that is understandable by reasonably enlightened individuals. While the researcher can expect that most if not all reviewers hold a doctoral degree, straightforward writing is that which best conveys information. Many young researchers select terminology to be "heavy" rather than informative, devise new terms for

old methods so that the research appears to be new, or apply new terminology to make something appear more complex than it really is. This is not necessary; good research stands on its own. The adage "keep it simple, stupid" is most appropriate. An individual who has developed some of the more complex multivariate statistical procedures once told this writer that the better he understood something, the more simply he could write about it.

Third, the references should be inclusive but should focus on the issues associated with the research. That is, the references should truly be relevant to the research being undertaken.

Fourth, the presentation should be organized to provide the greatest clarity possible. From the outset of the presentation, new material should be included on a need-to-know basis and should be presented in a clear, logical manner. The order in which ideas are presented can affect the ideas that follow. Researchers should carefully consider the order and manner in which the ideas are presented.

Fifth, all music education research will have aspects that might be questioned by others. This is the nature of working with people. It is simply impossible to account for all sources of error within a study which uses people as subjects. The research report should identify potential problems and state why the procedures compensated for these problems to the greatest extent possible. This makes it clear that the potential pitfalls of the research have been considered by the researcher, and it may result in sparking another researcher's imagination in creating a solution to the problem. In either case, the researcher wins. The research is presented in an honest and open manner that instills confidence in the reviewers about the competence of the research, and it may inspire advancement in the research process.

Sixth, well-done research requires well-done documentation. It is worthless to spend inordinate efforts and resources to do the perfect study and then to present the material in a slipshod manner. The written research report must reflect the quality of time, thought, and effort devoted to the research itself.

Research Productivity

The level of productivity for empirical research is the highest of any of the three research areas. Some researchers in history and philosophy have bemoaned the lack of published research in their areas, with the suggestion that this results from the control of editorial boards being in the hands of empirical researchers. It is this writer's experience that this is simply not true. The reason there are so few historical and philosophical articles in the refereed research journals is that research in these areas is simply not being submitted. This is a shame, for the complexity of both music and the music teaching/learning process require examination from all possible approaches. Further, it is imperative that all researchers support the efforts of other researchers, identify problems in a helpful manner, and use the knowledge of other areas to advance their own work.

Toward The Future

The attitude that we as researchers have toward research will dictate future progress. If we, the individuals who study change in music education, are capable of withstanding change, our future is bright. Progress toward ever increasing levels of excellence in our methodological procedures and the problems we address should be our collective goal. Every meeting should be better than the last, every research study should show advancements over those carried out previously, every issue of a journal should show growth in the level of scholarship presented. Attaining these goals requires an openness to change and a willingness to try new approaches. From the firm foundation established by earlier researchers, we can build an ever more substantive base of information about music teaching and learning.

Research in music education has never been in a stronger position. A diversity of research activities on numerous topics pervade the profession. What problems we have are solvable. It is up to all of us to work toward the improvement of research and the solution of its problems. As Allen Britton (1969), the first editor of the *Journal of Research in Music Education,* said after discussing problems in music education research:

> Despite all of these problems, I know that none of us is daunted and I look toward the future with great anticipation to see what wonders it will produce (p. 111).

References

Boline, M. J. (1981) Point of view: What should our research priorities be? *Music Educators Journal, 67*(5), 54.

Brand, M. (1984) Music teachers versus researchers: A truce. *Council for Research in Music Education Bulletin, 80*, 1-12.

Britton, A. P. (1969) Research in the United States. *Journal of Research in Music Education, 17*, 108-111.

Cady, H. (1964) The synthesis of music education research. *Council for Research in Music Education Bulletin, 3*, 12-15.

Cady, H. L. (1967) The identification of excellence in music education research. *Council for Research in Music Education Bulletin, 10*, 31-38.

Cady, H. L. (1969) A conference on research in music education. *Council for Research in Music Education Bulletin, 18*, 10-21.

Campbell, D. T., & Stanley, J. C. (1963) *Experimental and quasi-experimental designs for research.* Chicago: Rand McNally.

Carlsen, J. C. (1987) Framework for research: An international perspective. *Council for Research in Music Education Bulletin, 90*, 15-24.

Choate, R. A. (1965) Research in music education. *Journal of Research in Music Education, 13*, 67-86.

Colwell, R. (1967) Music education and experimental research. *Journal of Research in Music Education, 15*, 73-84.

Colwell, R. (1990) Research findings: shake well before using. *Music Educators Journal, 77*(3), 29-34.

Duerksen, G. (1987) Research and music education: Needs for the next decade. *Council for Research in Music Education Bulletin, 90*, 60-64.

Leonhard, C., & Colwell, R. (1976) Research in music education. *Council for Research in Music Education Bulletin, 49*, 1-30.

Madsen, C. K., & Prickett, C. A. (1987) *Applications of research in music behavior.* Tuscaloosa, AL: University of Alabama Press.

Music Educators National Conference. (1989) *Constitution of the Music Educators National Conference.* Reston, VA: By-Law 7-Society for Research in Music Education, Section 1. Personnel, purpose, meetings.

Petzold, R. G. (1963) Directions for research in music education. *Council for Research in Music Education Bulletin, 1*, 18-23.

Phelps, R. P. (1980) *A guide to research in music education* (2nd ed.). Metuchen, NJ: Scarecrow Press.

Radocy, R. E. (1983) The research effort—why we care. *Music Educators Journal, 69*(6), 29-31.

Rainbow, E. L., & Froehlich, H. C. (1987) *Research in music education: An introduction to systematic inquiry.* New York: Schirmer Books.

Reimer, B. (1985) Toward a more scientific approach to music education research. *Council for Research in Music Education Bulletin, 83*, 1-21.

Sidnell, R. (1987) The dimensions of research in music education. *Council for Research in Music Education Bulletin, 90*, 3-14.