A Philosophical View of Research in Music Education

By

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In this paper, four interrelated questions are addressed: What counts as research? What are some present challenges to music education research? What should be the relationship between theory and empirical data? What ought to be the distinctive features of music education research? The purpose is to elucidate how philosophical inquiry can be useful in music education scholarship in conceptualizing and clarifying the nature of the field and challenging preconceived assumptions about the nature of music education research.
In addressing four interrelated questions: What counts as research? What are some present challenges in music education research? What should be the relationship between theory and empirical data? What ought to be the distinctive features of music education research? I demonstrate how philosophical inquiry can be useful to scholarship in music education.1 Philosophy conceptualizes and clarifies the nature of the field and challenges preconceived assumptions about the nature of music education research. Specific topical questions that need to be addressed in music education are examined in a companion piece, “Questions for Music Education Research.” And this work extends a line of published scholarship.3

What counts as research?

Etymologically, the English word research derives from the Old French, recerche, in which the prefix re- expresses “intensive force” and cerchier means “to search.” It connotes notions of the “act of searching (closely or carefully) for or after a specified thing or person,” a “search or investigation directed to the discovery of some fact by careful consideration or study of a subject,” a “course of critical or scientific inquiry “inquiry,” “systematic investigation” in order to ascertain and “establish facts,” and a concerted “search for knowledge.”4 It might be regarded as synonymous with scholarship in which inquiry is disciplined within a school of thought and practice.5 Following the rise of science in the modern era, the idea of research was coopted by the scientific community along with the attendant assumptions underlying scientific inquiry. Still, other sorts of investigations in disciplines such as history, anthropology, philosophy, and theology also constitute species of research notwithstanding that they employ lenses different from the sciences. Nor is science monolithic, but various sorts of investigations are considered appropriate to inquiries about a wide range of phenomena in such disparate fields
as psychology, biology, sociology, chemistry, physics, anthropology, and astronomy. All of this activity can be regarded as research broadly construed. Irrespective of the particular disciplines or schools of thought in which scholars search to establish facts, ideas, principles, beliefs, or practices, their quest is one of discovering anew what may have been known in the past but forgotten or overlooked, or adding to knowledge that has not previously been discovered. In either case, whether of discovery or re-discovery, uncovering information, understanding, and wisdom help shape the ways in which people think and act in the phenomenal world.

Determining what counts as research in such a complex and multifaceted endeavor as music education requires a breadth of understanding and reasoned discourse across the various disciplines in which inquiry is conducted. Notions of the systematic nature of the investigation, its intensiveness, and the expectation of definitive results suggest that notwithstanding the importance of serendipity in stumbling upon new knowledge, research is reasoned and intentional. Israel Scheffler dispatches an unrealistic notion of reason as undertaken by disembodied and unfeeling brains to underscore the importance of emotion and physicality as elements of reason; for him, surprise and the joy of verification are two examples of “cognitive emotions” that accompany reason. In counterpoint with Scheffler’s notion of the “cognitive emotions,” Iris Yob replies that the arts, religions, myths, and rituals are examples of the reasoned expression of emotion that she calls “emotional cognitions.” Her argument, that Scheffler does not succeed in refuting, puts the shoe on the other foot, broadens the appropriate reach of reason and emotion, and multiplies the ways in which emotion and reason intersect. Underscoring the bodily and social nature of mind, postmodern thought and recent scientific investigations further complicate notions of rationality and intentionality by revealing how thought and consciousness are shaped by chemical, physiological, psychological, social and
historical factors of which people may be unaware. Notwithstanding these complications and caveats, scholarly communities still expect to follow predetermined courses of action that enable them to arrive at certain conclusions, be they speculative, hypothetical, or empirical. The findings of these investigative processes are then held up to public scrutiny, it is expected that they can be understood by other exponents in the field of study, and scholars are held accountable for the transparency and fidelity of their investigations.

Sometimes, new questions and methods of investigation challenge the received wisdom of a scholarly community. Such is the case with Michael Baigent, Richard Leigh, and Henry Lincoln’s *Holy Blood, Holy Grail*, that challenges the Christian story of Jesus and forms a basis for Dan Brown’s novel, *The Da Vinci Code*. Beigent, Leigh, and Lincoln attempt to “synthesize” rather than “analyze” historical phenomena and draw connections between disparate evidence rather than break it down into its constituent parts, an approach, they note, that flies in the face of established tenets of historical scholarship. Such challenges to received wisdom may be the stuff of scholarly breakthroughs just as they may result in spurious findings. Ultimately, findings are put to the test. Beigent, Leigh and Lincoln’s hypothesis is open to dispute and criticism and their claims eventually stand or fall on the weight of subsequent research findings that either confirm or rebut their case. This example also illustrates how the politically powerful establishment resists research findings that challenge cherished and institutionalized beliefs and practices and Beigent, Leigh, and Lincoln cite instances of the Church’s efforts throughout the greater part of the Christian Era to suppress evidence and ideas that support their thesis. Similarly, Galileo Galilei is among other scientists to incur the Church’s opposition when his astronomical theories came into conflict with Christian dogma. These examples illustrate how new research approaches and findings that counter well-established
ideas and practices are resisted by those with vested interests in the status quo just as they generate enthusiasm by those who stand to gain by a different order of things. This initially polarizing tendency then settles into a considered and systematic examination of the new or competing approaches, paradigms, and perspectives. Sometimes, they are found to constitute important breakthroughs; other times, they are shown to lack merit. And the proof is ultimately in the pudding.

Present challenges in music education research

In preparing The Art of Music Teaching, I sought to relate some of my own reflections about music teaching to the empirical research literature in music education. On many key points, notwithstanding notable exceptions, much of the evidence I uncovered was neither definitive nor unequivocal. I encountered a variety of logical, conceptual, and methodological issues that left me hesitant to interpret such findings as were reported with any confidence. I was also struck by the time and effort devoted to what sometimes seemed to be superficial or self-evident problems that are relatively obvious to experienced music teachers. Less attention seemed to be paid to matters that go to the heart of the complexities of music education, maybe because these are less amenable to scientific and other related methods of investigation. I worried that too many studies seemed highly specialized and remote from the exigencies of teaching and learning music. In seeking to understand the present state of music education in the United States, for example, I searched for recent status studies of music education across the United States, and uncovered two relating to Indiana at this time of writing. Many studies of various kinds seemed to test psychological and sociological aspects of music teaching and learning having to do with what sometimes appeared to be uncertain and ambiguous variables.
My survey of historical research likewise yielded often very specific, narrowly bounded, and biographical studies. Even philosophical studies were not immune from a narrow focus on particular aspects of musical and educational endeavor, sometimes concerning problems remote from the practice of music teaching and learning. All this research seemed not only fragmented but loosely connected to overarching and broad themes. And I was at a loss to grasp how all of this research related to music education as a whole and which of this work I could safely rely upon in speaking definitively to music teachers about what this research shows about how we should do our work.

I suspect that some of these difficulties arise partly because of the lack of persistence in research over a working lifetime and the fact that much of this work has been conducted with the relatively short-term objectives of reporting dissertation research and gaining tenure and promotion in the academy. Relatively few scholars of music education persist in research over a lifetime. Among them, I think, for example, of Nancy Vogan and Michael Mark in the history of music education, Patricia Shehan Campbell and Lucy Green in the ethnography and sociology of music education, respectively, Clifford Madsen and Anthony Kemp in the psychology of music and music education, and Bennett Reimer and Frede Nielsen in the philosophy of music education. Too often, music education researchers upon reaching middle age become administrators, editors, or reviewers of others’ work to the detriment of sufficient time for their own continuing scholarship. Charles Schmidt shows that graduates of reputable music education doctoral programs in the field typically publish few refereed scholarly articles in their careers—a finding that corroborates Cornelia Yarbrough’s observations. Beyond the publication of dissertation research, regarded in most academic fields as the work of a journeyman researcher, and that necessary for tenure and promotion, a prolific line of research
over decades is more often the exception than the rule.

So how to unpack these and other related problems? I begin with the need for serious theoretical research that should underpin as it also follows from empirical research. Rather than importing theories uncritically from other fields such as psychology, sociology, medicine, anthropology, and musicology, music education researchers need to attend to the claims of an interdisciplinary field with its own particular constraints, problems, challenges, and features. This reality ought to suggest that while models and approaches drawn from other fields may be helpful, it is also important to critically assess their relevance and worth in terms of validity and reliability to the field of music education. For example, notions of “thick description” designed for the purposes of anthropological research by Clifford Geertz are fraught with difficulties. Applying this notion to narrative inquiry in music education without also acknowledging the pitfalls and difficulties inherent in Geertz’s ideas, or asking whether there might be better and more rigorous ways of developing naturalistic analyses of classroom, studio, rehearsal, performance, or other group settings, seems to put the cart before the horse. Likewise, expecting empirical research alone to generate theory in music education is too narrow an approach. The classroom, studio, rehearsal hall, performance, or garage band jam session is a social, practical, musical, and political endeavor with enormous consequences. As a social system, its assumptions require the perspectives of science and philosophy, among other fields of study. Also, treating philosophical problems as if they are logical games to be played irrespective of their implications for the empirical world is arguably unethical in its wastage of intellectual effort and its failure to account for the important ramifications of these ideas for practice and for people’s lived lives. In whatever area of research, it is important to critically examine what scholars are doing, why they are doing it, how they are doing it, and what its
effects are, potentially and actually on the situations in which music education takes place. And no area of scholarship in the field is exempt from the need for this theoretical reflection over the whole cloth of music education as well as its particular aspects.

Theories are properly devised deductively, inductively, and analogically. Deductive thinking requires philosophical reasoning from cause to effect, from one proposition to another. In the European tradition, such reasoning is conducted according to the rules of symbolic logic that have mathematical roots.\textsuperscript{18} From at least the middle ages, one sees a close association between music, philosophy, and mathematics, witnessed, for example, in Boethius’s \textit{De institutione musica}, and for much of the Christian era, it was common for a professor of one to profess the other.\textsuperscript{19} Inductive thinking involves reasoning back from effect to cause, and from specific instance to general principle. This mode of reasoning became particularly important to modern science where the empirical study of specific data might point to more general theoretical and abstract principles. Analogical thinking necessitates reasoning comparatively between one thing to another figuratively in the manner of a simile or metaphor. As such, it makes special use of imagination through intuitive leaps between apparently unrelated phenomena.\textsuperscript{20} Each of these forms of reasoning helps elucidate theories in different ways. Deductive reasoning can formulate and defend initial hypotheses that can be tested empirically; inductive reasoning can help clarify and test theories that are refined through subsequent investigations; analogical reasoning can enable theoretical leaps to be made in formulating theories and testing them empirically. Music education research needs to include all of these forms of theorizing. For example, relying exclusively on factor analyses of specified variables to develop heuristic or conceptual models may rely too heavily on inductive reasoning without sufficient attention to deductive and analogical thinking. Forwarding theoretical models of music education without also testing them
empirically may rely too greatly on deductive reasoning without sufficient attention to inductive and analogical thinking. Writing metaphorically or figuratively without also testing these ideas deductively and inductively may also err in failing to place sufficient weight on inductive and deductive reasoning. Following all these forms of thinking would more rigorously elucidate theoretical assumptions, presumed relationships, and research methods argued deductively, inductively, and analogically than the too-often limited and theoretically-bereft literature reviews, research methods, and uncertain significance of some music education research.\(^{21}\) And this sharpening of our scholarly thinking would benefit theories and practices of music education.

Ensuring robust and logically sound theoretical formulations as a basis for empirical research also requires attending closely to definitional issues. I cite four examples. First, tautologies or circular thinking in which one of the elements of the entity or phenomenon to be defined is itself utilized in the definition are too common in the research I read.\(^ {22}\) For example, creativity is a messy construct that is often defined ambiguously and circularly, that is, creative people are those who construct products that are considered to be creative; creative products are judged to have been constructed by creative people. Since creativity in music education is defined this way, one is unsure what is meant by creativity or what the empirical research based on, or consonant with, this definition means.\(^ {23}\) And in the face of this conceptual circularity, I have preferred to sidestep these definitional problems and deal directly with the ways in which imagination functions in music and education, and how one can teach for it.\(^ {24}\)

Second, tautological thinking is also evident in the use of the continuous response digital interface to measure particular aspects of aesthetic experience.\(^ {25}\) Ambiguous notions of aesthetic experience that are nebulous at best play out in assorted determinations of the measurement of this quality that are predicated on circular thinking. The argument runs as follows: expert
witnesses say that they know what an aesthetic experience is; since they are able to respond to it in degree, it must exist; since expert witnesses are able to record their responses to music physically, their responses must indicate aesthetic responses. Predicating empirical research upon this fallacy reinforces and underscores rather than ameliorates and remedies the questionable value of the enterprise. We are indebted to John Geringer, Clifford Madsen, and Dianne Gregory for clarifying these underlying assumptions in their rebuttal of some of the criticisms of the continuous response digital interface raised by such researchers as Richard Colwell, Emery Schubert, and Charles Schmidt relating especially to reliability and validity concerns. This particular exchange is conducted professionally, concerns disagreements about a research methodology and literature, and exemplifies the sorts of critical and civil discussions needed among music education researchers. Moreover, since John Geringer, Clifford Madsen and Dianne Gregory have now clarified their theoretical assumptions concerning the nature of the continuous response digital interface and aesthetic education and its measurement, there are philosophical grounds to identify the offending tautology that undergirds this particular application. No amount of statistical and empirical investigation can justify, compensate for, or cover it.

Third, musical identity also turns out to be an ambiguous, murky, and complex construct, and I am not entirely sure what this term means. In seeking a definition of this word, I think of identity as who I think I am individually and as a member of a social group, viewed developmentally in terms of who I am becoming and summatively in terms of who I have become, descriptively in terms of who I think I am and normatively in terms of who I would like to be. Not only am I more-or-less identified with various social groups, but the means by which I distinguish myself from, and discriminate between, others are arbitrary, sometimes fuzzy, and
often emotionally-laden so that my knowing is both subjective and objective, fallible, and incomplete. This conceptual ambiguity creates questions about the meaning of empirical research purporting to measure or describe musical identity since clarity of evidence presupposes clarity of the theoretical construct on which it is parasitic.

Fourth, musical practice is referred to variously in the empirical literature, including guided mental rehearsal, mental practice, and deliberate practice, and a reader may be unsure whether these are more-or-less the same or different constructs. Unpacking the term “deliberate practice,” for example, Peter Miksza maps the conceptual terrain of intentionality and practice, shows reasons for its ambiguity and complexity, and suggests a theoretical construct for future empirical investigation. Although it is difficult to ascertain from the body of research on musical practice what is being referred to precisely and how particular findings about different things may be adjudicated, Miksza begins to unravel and classify this work based on the theoretical concepts and research tasks employed.

In these four areas of creativity, the measurement of aesthetic response, musical identity, and musical practice, theoretically clarifying the issues at the heart of the research and arriving at more robust formulations upon which there is some measure of agreement would greatly benefit empirical research in music education. It would permit more valid comparisons of findings, criticisms of the theoretical formulations and empirical examinations of them, and contribute to more definitive research findings.

A common form of argument in music education research is argument by authority, that is, the assumption that because such-and-such an authority or study confirms this proposition, it must be defensible. Rather than go further to investigate the nature of the claims themselves and apply the self-same tests of refutation (albeit logical refutation) that would be applied in a
scientific study, the researcher appeals uncritically to the authority, often accompanied by relevant quotations of what he or she has said or written.\textsuperscript{31} It is easy to slip into the further logical pitfalls of \textit{ad hominem} attacks in which criticisms are personalized and directed at the individuals who propound the ideas rather than at the ideas themselves or “poisoning the well” by casting ideas with which one disagrees in a deprecating light. In music education, this fallacy manifests in sometimes vitriolic and personalized attacks and counter-attacks.\textsuperscript{32} Rather, the point of criticism needs to be directed towards ideas and practices rather than those who are affiliated with them.

A related logical fallacy is that of argument \textit{ad absurdum} or caricaturing ideas as “straw men” against which criticism is pitted.\textsuperscript{33} This tendency to argue in extremes fails to fairly represent the ideas criticized and the rich nuances that are to be found in the studies in question. Every argument can be carried to an extreme and at that point, common sense fails. For example, detractors of Susanne Langer selectively quote from her writings to make her say things that were she alive to debate them, she would probably disagree.\textsuperscript{34} Likewise, Bennett Reimer is read by some of his detractors to support views with which he would disagree.\textsuperscript{35} Lifting quotations out of context and stringing them together can succeed in caricaturing writers and lead to extreme interpretations that fall into the category of “straw men” and commit, thereby, a philosophical sin. Attempting to fairly represent another’s ideas is fraught with difficulty because the text is inherently ambiguous and sometimes contradictory, notwithstanding the efforts of philosophers and theorists to clarify their ideas. Although I am critical of the use of the continuous response digital interface to measure aesthetic response, this is not to repudiate all of the studies that use the device or cut a swath across every study using the procedure without regard to the particular ways or circumstances in which it is used. Rather, it is especially important to read research writing contextually, fairmindedly, respectfully, and even generously.
These sorts of philosophical mistakes may come about partly because of an historical lack of a strong and critical scholarly tradition in music education and a pervasive insecurity felt by too many researchers engaged in their first or early studies. Fortunately, this reality is changing, as the Geringer, Madsen, and Gregory exchange with Colwell, Schubert, and Schmidt illustrates, and in ongoing and thriving philosophical conversations about music education, where criticisms are welcomed as marks of respect as well as aids to improved scholarship. The rise of a philosophical literature in music education in recent decades can also contribute to building better and more philosophically robust theories of music education and more critically examining what passes for research in the field. I have begun to explore systematically varieties of theories that emerge from analogical and figurative thinking in music education, and this approach complements extant theories-of-everything-in-the-world-of-music-education forwarded by such writers as Bennett Reimer, David Elliott, and Frede Nielsen. Recent philosophical work in music education has opened conceptual ground for further investigation and has also been helped by the development of an international community of philosophers and those interested in their work. This scholarship can benefit music education research generally by clarifying the conceptual terrain in the field and forwarding interesting ideas that can enhance other research in music education as it also draws from it.

Concerning empirical research, formulating more robust and comprehensive theories needs to be complemented by larger scale and longitudinal studies at various levels of generality. Harold Fiske notes that tensions, disagreements, and paradoxes can emerge from the fact that research is carried on at different levels of generality. As a political, familial, economic, religious, and professional undertaking, music education, like other social systems, is cast at various “integrative levels of analysis” or generality. For Alistair Taylor, where each
progressively higher level of generality includes more specific levels within it, analyses of sociocultural phenomena naturally integrate more specific physical, physiological, and psychological levels of analysis. As a social phenomenon, music education can be expected to integrate more specific levels of analysis. These different levels of analysis can give rise to tensions, apparent paradoxes, and disagreements between researchers. For example, conducting music education research exclusively at the psychological integrative level of analysis would obviously ignore important issues cast at higher levels of generality as well as those at even higher levels of specificity.

Longitudinal and large scale studies of music education would seem to be called for on several counts. Suppose that we agree that music education is, at least partly, a matter of enculturation, or affecting, whether through transmission and/or transformation, the musical culture of a particular time and place. To affect the culture of a time and place is a complex and daunting endeavor involving multiple actors in the social system including the state and national legislatures, governors’ offices, state and federal departments of education, parents, principals, teachers, religious institutions, private music teachers, accrediting agencies of various sorts, arts agencies and organizations, music instrument manufacturers, music education associations, schools, colleges, and universities, symphony orchestras, choirs, community theaters, mayor’s offices and local government agencies, mass media, among the many groups and institutions that help to shape musical culture. In the past, music education policy might be spearheaded by a few people, but now, it is more likely to be conducted on a large scale and forged collectively. Nor does focusing on music education construed as schooling or training suffice in a time when musical tastes are shaped by various institutions and in complex ways. Taking into account studies of music education construed as socialization and enculturation necessitates large scale
research projects, possibly outside the reach of a single individual but more easily rendered by research teams working collaboratively on significant projects.

Also, the well-known Hawthorne effect observed in industries, in which situations were found to improve simply by intervening in them can reasonably be expected to apply to music education. If short term research projects are also subject to a similar effect, it is essential to consider if and how such an effect can be controlled for, and whether the short term results that appear to obtain also hold up in longitudinal studies. Testing for this may involve conducting longitudinal studies. Christer Bouij’s study of music teacher identity in Sweden follows subjects over decades is one of the longest-running longitudinal studies in music education of which I am aware. Militating against such long-term studies in the United States and the United Kingdom, at least, are the constraints of tenure and promotion in the United States and approaches to faculty evaluation in the United Kingdom that reinforce the need for short-term studies that can be carried off relatively quickly. Bouij is also able to track his subjects due to a centralized system in Sweden that would not be permitted in the United States.

Moreover, the importance of quantifying research in academic reward systems means that bringing five short-term empirical studies to fruition over a five-year period may count more than completing a single five-year longitudinal study. Given this reality, it is not surprising that researchers opt for narrow, modest, and short-term studies that result in more-or-less immediate rewards. Changing this reality requires valuing research differently and altering the mind-set of researchers in music education and in the academy to reward fewer long-term and substantial studies that come to fruition less frequently.

It may also be important to investigate different sorts of phenomena than have been our interest in the past. Since music education is a social enterprise, it is important to engage
political and ethical issues that have not been of central concern in much of the research on music education in the United States. Matters of race, gender, age, ethnicity, and language are among the central issues of music education in our time. The profession’s obligations towards justice, freedom, goodness, civility, inclusiveness, beauty, among other values need to examined in the context of music educational traditions that are politicized, racialized, gendered, ethnocentric, homophobic, ageist, and otherwise discriminatory in a host of ways. Examining these issues involves bringing the lenses of other discourses including literatures in feminism, post-modernism, critical theory, philosophy, history, sociology, anthropology, ethnomusicology and new musicology to our analysis of music education phenomena. It no longer suffices, for example, to study musical perception without also grasping the plethora of social constructs that inform what is seen, heard, and grasped intellectually, emotionally, and physically. Regarding psychological phenomena within the context of these other insights not only broadens researchers’ views but potentially changes the nature of their observations. For example, were Adrian North, David Hargreaves and Jon Hargreaves to re-examine their findings concerning the use of music in everyday life within the frames of these other discourses, the significance of their results and the generalizability of their findings may be profoundly altered. In short, regarding psychological issues as interrelated with these other perspectives would seem to be logically defensible in light of the interconnectedness of these matters in lived life.

*What should be the relationship between theory and empirical data?*

Notions of a gulf between philosophy and science are unfortunate in caricaturing both enterprises and failing to see the many ways in which they are complementary activities. Philosophy may draw on scientific findings just as science can benefit from philosophical
insights. Both are imaginative, reasoned, abstract, empirical, emotional, and bodily activities.\textsuperscript{45} True, the questions addressed differ: science wants to know what or how such-and-such is the case; philosophy wants to know why it should or should not be the case. It is also important conceptually to avoid the \textit{is/ought} fallacy of confusing one with another.\textsuperscript{46} Still, both employ intellectual tasks of description, explanation, analysis, synthesis, refutation, demonstration, and generalization and each draws from, and contributes to, the other. So, rather than forging a gulf between science and philosophy, I prefer to build bridges between them in order to benefit from their intersections and the dialectics and what Reimer would prefer to think of as the synergies that come from relating one with the other.\textsuperscript{47}

Philosophy and theory-making are both empirical undertakings. Caricatures of the philosopher pre-occupied in armchair rumination about the abstract world of ideas and the scientist in the laboratory focused only on empirical facts arise from over-simplifications and misunderstandings of both philosophy and science. From Socrates, Western philosophers have constantly referred in their writings to things in the phenomenal world. Descartes went so far as to abandon his books and go out into the world to see what he could see and learn from his lived experience.\textsuperscript{48} Likewise, scientists are among our important philosophers and have contributed to the literature in the philosophy of science.\textsuperscript{49}

The pilgrim serves as a metaphor for philosopher and scientist alike.\textsuperscript{50} Scientists have been prone to create theories to cover the data they observe and wonder why such-and-such is the case. In this wondering, they, like their philosopher colleagues, pursue certain questions even though the specific questions they address may differ from the philosopher’s. The sense of wonder, awe, and even reverence are elicited in the midst of this process of quest. For example, in the past few decades, giant strides in astronomy have electrified earthlings and prompt
scientists and philosophers to ask existential questions in the face of the sheer scale and power of
the universe and the natural world: Who am I? How did I come to be here? What is my purpose
for living? Where am I going? Given important discoveries in our time at macro and micro
levels of the natural world, the sheer immensity of the possibilities and the challenges they
present raise deep and pressing philosophical and scientific questions. And it is a false choice to
have to choose between them.

Types can be thought of as the building blocks or means for conceptualizing ideas and
things in the phenomenal world and can, in turn, be classified as logical and empirical. Logical
types, known somewhat problematically in sociology as “ideal types,” are construed
comparatively as polar opposites. They are comprised of a set of identifying marks or
constituent dimensions by which they can be systematically compared and contrasted. In each
case, all of their dimensions constitute mutually exclusive entities in all respects. Complex social
systems such as music education are properly compared by reference to these logical types.
Examples of logical types in music education are found in my own distinction between four types
of musical instruction ranging from “reciprocal empathy” on the one hand to “reciprocal
antipathy” on the other, and five logical phases of development in musical ensembles, namely,
formation, expansion, maturation, regression, and cessation. These logical types are theoretical
entities formed deductively in relation to specific and theoretical profiles of constituent elements.

Apposed to the theoretical type is the empirical type, a classification that emerges with
reference to clusters of things in the phenomenal world. Such types may more-or-less
approximate theoretical types but they also reflect situations in the phenomenal world and they
are often situated in the “ground between” theoretical types. These are the types, for example,
that might emerge in an analysis of particular variables pertaining to a particular sample of the
sort common in music education research. Each instance might present some or most of the theorized symptoms although other peculiarities or anomalies may also be present. So, rather than presenting in generalized and universalized ways, such types are oriented more specifically and particularistically.

I am reluctant to let go of either theoretical or empirical types. Thinking generally as well as particularistically results in tensions that are not always or readily resolved. These dialectics illumine the relationships between theory and empirical data as sometimes complex, fuzzy, murky, and ambiguous interconnections. And these ambiguities require and underscore the importance of philosophical reflection and empirical inquiry as lenses on music education research.

What ought to be the distinctive features of music education research?

Among the features that are consistent with the foregoing analysis and need to characterize the research enterprise in music education, I begin with the proposition that the field is in need of robust conceptual theories of music education. Definitions of what counts as music education are important and need to be examined critically or redrawn. Rather than trusting solely to empirical research to derive theories inductively, it is also important to forward theories in advance of empirical investigations. Such theories need to differ from those borrowed from such fields as psychology, sociology, physiology in the particular light they shed upon music education as a field of study. Philosophers need to be about the task of assisting in formulating these theories, especially since philosophical purposes ought to include clarifying conceptual mistakes, omissions, ambiguities and the like, and systematically describing the field. Once built, such theories also require systematic and ongoing criticism in order to suggest better
frameworks. Given the similarities of philosophy and mathematics in clarifying the relationships of variables and their logical ends, these purposes are not unlike those evident in mathematics and in the “hard” and “social” sciences. And the publication of such theoretical work needs to be important in the leading music education research journals.56

Music education research also needs to matter to music teachers and other stakeholders in music education. Such research cannot just be an academic exercise carried forward without regard to the implications of research for those who do the work of music education. Rather, it needs to be perceived as relevant to the work of these teachers and stakeholders and close to their lived lives. To this end, research in the field of music education needs to focus on the theory and practice of music education.57 And unless it can be shown to do this directly rather than obliquely, it cannot be expected to matter to music teachers and other stakeholders in music education.58

To this end, since matters of research and practice intersect, there need to be changes in pre-service as well as in-service music education programs in order to prepare music teachers as intelligent readers if not always doers of research. All music teachers and other stakeholders need to be able to intelligently grasp the results of music education research. Technical reading related to acquiring practical skills needs to be complemented by scholarly reading so that pre-teachers come to understand their professional duty to continue to value scholarship throughout their working lifetimes. Doing this would also require that all music teachers read leading research journals as part of their pre-service and in-service preparation so that they possess the tools to keep abreast of scholarship in the field of music education. Bypassing research in the interest of attaining practical skills is anti-intellectual, and anti-intellectualism in music education needs to be deplored.59 Rather than focusing all or most of the resources of
music education research at the graduate level, research also needs to be taught at the undergraduate level, and dispositions to research need to be cultivated from the beginning of preparation as music teachers rather than towards its end. Presumably, such a re-orientation would also increase teachers’ willingness to participate as subjects in studies as well as undertake their own research.

Moreover, rigorous empirical investigations of all sorts are needed in music education. Here, it is important to deeply and broadly understand the phenomena under investigation and to avoid simplistic and superficial studies that peremptorily or cursorily examine these phenomena. Doing this means undertaking far more sweeping literature reviews than are common and that go beyond studies in music education to take in work in related disciplines. As an interdisciplinary field, music education researchers need to keep abreast of multiple fields at once. Interdisciplinary fields suffer the pitfalls of being too superficial and failing to take into account the complexities that lie beneath the surface and that are grasped by specialists in foundational fields. These being the dangers, it is important to guard against them by reading much more broadly than simply citing a narrow band of specifically music education studies in a literature review. Avoiding excessive reliance on argument by authority requires delving into the ideas and extant research, criticizing them, and defending the ideas being tested in the research. It matters not that a long string of articles, some by famous people, suggests such-and-such. They may all be wrong. Rather, it is important to critically examine extant research, and articulate clearly the specific assumptions, hunches, and hypotheses that drive this and other studies, and relate this work directly to other theories of, and evidence in, music education. Nor does it suffice to briefly list the research questions under considerations or sketch the implications for further research as if they are afterthoughts. Literature reviews are only important insofar as they inform
the questions under study and contribute genuinely to the subject under study; discussions of the results are significant only as they demonstrate that the conclusions drawn from the study are logically and empirically defensible and truly significant to the work of music education. These are very stringent theoretical tests indeed.

Also, research methods need to be seen as means to rather than ends of music education research. Thomas Regelski criticizes the “methodolatry” of music education, an idea that Susanne Langer articulates before him. By methodolatry, these writers refer to the tendency to regard means as if they were ends. Rather than organizing the study of music education research around research “methods,” a traditional approach that creates a silo mentality by perpetuating the fiction that methods are discrete and mutually exclusive, and focuses on the methods than their ends, it may be helpful to organize it around important questions in music education research. What are these questions? This is an important matter that must be bypassed now because it opens too much ground and I examine it more systematically in a companion piece. It is important to notice, here, that focusing on important questions in music education would better prepare music education researchers to grasp the various ways in which such questions could be approached, and think more about the significance of the questions than is possible when they attempt to put particular research approaches to work in specific ways. Were discussions concerning research questions to be paramount, music education researchers would see immediately the limitations of particular methods, the need to place various methods in particular contexts or discover new methods that fit the exigencies of the questions or situations under investigation. Problem-centered research approaches are also very interesting to neophyte researchers since the need to be able to address particular questions that are viewed as significant by teachers and students motivates them to learn ways to investigate them. If one is interested in the views of
music teachers about the nature of their work, and realizing that surveys and interviews are two of
the approaches that might be taken to excavating these views, one is impelled to discover how
best to employ these approaches and what pitfalls to watch out for. And with these ends-in-view,
students and teachers are likely to be intrigued by problem-centered approaches to research
especially when they are involved in research enterprises themselves.

Further, research is best learned by doing it. This need to know, when one confronts a
real and significant problem and wants to find answers to it, suggests that rather than talking
about methods and systematically going through them one by one, music education researchers
might design courses that take a different tack. John Dewey argues, and I think persuasively, that
when one first approaches subject matter of any sort, it is useful to engage it intuitively, and only
then, move on to systematically analyzing and synthesizing it such that one’s knowledge
eventually approaches that of an exponent. Designing introductory courses in research at the
undergraduate and early graduate levels might focus on significant questions and acquaint
students with the methods available to investigate them. It is then possible, later, and maybe
selectively, to develop a more systematic knowledge of research methods that an expert would
possess. In order to accomplish these ends, music education programs need to be shot through
with research ongoing at every level so that students can hone their research skills over an
extended time. Narrative, qualitative, or descriptive research procedures, historical research, and
philosophical research involving content analyses of mission statements, curricular objectives,
and the like, are of particular use to music teachers. For the statistically minded, quantitative
procedures may be utilized as part of scientific investigations. For example, in the United States,
the technical training in instrumental techniques courses that are a staple of many undergraduate
music education programs could be complemented by investigating, describing, or examining
important research questions relating to that training. Such an approach could transform undergraduate courses that are presently taught by mainly technical means. Likewise, at the doctoral level, music education programs might be rethought so that student research interests become a requirement for program admission and the basis of course work. In this way, students could develop and follow their research interests throughout their entire doctoral programs rather than come their dissertation research after the bulk of their course work is complete. In these and other ways, the doing of research of one sort or another might be an integral part of every music education course, undergraduate and graduate.

Finally, research can be undertaken collaboratively and individually. If music education researchers are to eschew amateurism and dabbling in music education research, it is necessary to specialize to some degree. Admitting one’s limitations and building on one’s strengths may require developing dispositions to undertake collaborative research that allows scholars to do the pieces of the research that lie within their particular competencies. Some research is doubtless solitary and some questions lend themselves to study by individuals. Investigating the large, complex, and long-term problems that abound in music education might also prompt researchers in the field to emulate those in other fields who engage in long-term collaborative research projects where one person’s project is just a slice of a much larger endeavor. Such studies are also more likely to gain substantial research funding at a time when it is necessary to compete for funding with scholars engaged in significant and large-scale projects in other fields. To this end, cooperative strategies and research teams that transcend individual institutionally-based centers of music education research may be warranted.

In sum, four questions concerning matters of what counts as research, present challenges in music education research, relationships between theory and empirical data, and some of the
features that need to characterize music education research have been addressed. I have shown that philosophy has important roles to play in clarifying and criticizing ideas and practices under investigation, formulating theories and hypotheses, examining extant scholarship upon which studies are predicated, developing procedures consonant with the questions that form the basis of research, examining the nature and significance of the results, and relating this work to the wider body of scholarship and practice in the field. And I have pointed to ways in which music education research might be done, taught, and learned differently than in the past and sketched principles that might be helpful in re-thinking music education scholarship.

How can these ends be achieved? I know of no better, more practical, or inspiring way to improve music education research than in the midst of a scholarly community. Producing excellent research involves a struggle. Also, it may be difficult to criticize others’ efforts as it is to receive criticism of one’s own since one is invested in one’s work. Regular scholarly opportunities are needed to report research, get into the habit of genuinely hearing the work of others, explore collaborations and interesting questions for future research, and critically and civilly examine the research produced. And as music education researchers collectively engage in such ongoing and long term conversations, it is possible to improve the research produced and contribute importantly to music education thought and practice.
Notes

1. A version of this paper was presented at the Society for Research in Music Education Research Symposium I, University of Kansas, Lawrence KS, July 5-7, 2007.


5. Jorgensen, “What are the Roles of Philosophy in Music Education?”


12. An example of this equivocality and lack of definitiveness is found in Aaron Williamon’s *Musical Excellence: Strategies and Techniques to Enhance Performance* (Oxford: Oxford University Press, 2004), 14. Williamon cautions the reader concerning evidence (p. 210) that suggests “[a]t first glance” that “alpha/theta” neurofeedback is more effective than an array of other interventions for performance improvement and explains that the study treatment over 16 weeks is optimum for neurofeedback intervention. He suggests possible reasons why the other treatments (all of which left subjects somewhat worse off in terms of their comparative performances after as compared to before the interventions) may have been more effective had the treatment time been extended. In so doing, Williamon casts doubt on the study’s validity and a reader is puzzled as to what the study means and what it contributes to an understanding of how performance can be enhanced. I am inclined to agree with Williamon that the treatment time in this study is short especially compared with the length of time it commonly takes to improve performance.

13. For example, the relationship between the amount and quality of music practice and musical achievement has been understood by music teachers from antiquity. In the North Indian classical tradition, for example, the practice of *riaaz*, or the spiritual devotion to the means whereby one attains an exemplary technique as much as to the ends of that practice is akin to the longstanding apprenticeship in the Euroclassical tradition whereby the student practices in order to achieve virtuosity. See Daniel M. Neuman, *The Life of Music in North India: The Organization of an Artistic Tradition* (Detroit MI: Wayne State University Press, 1980), 31-34.


researchers contributed five or more articles to this journal. And if this publication record represented a substantive part of their scholarly output, it would hardly constitute a sustained line of research by scientific standards.


21. Consider, for example, Adrian C. North, David J. Hargreaves, and Jon J. Hargreaves, “Uses of Music in Everyday Life,” Music Perception 22 (1) (Fall 2004): 41-77. In their literature review, the authors describe seven studies covering the fields of sociology and psychology of music. They rely upon journalistic questions relating to ways people use music in daily life—Who, What, When, Where, and Why? The literature reviewed takes little account of the complexity of historical, social, technological, economic, religious, racial, ethnic, familial and other issues, the political and economic aspects of musical life, the philosophical elements of meaning-making, among a plethora of related literature concerning music’s everyday involvement in people’s lived lives. To describe the situation without the benefit of engaging
these other theoretical complexities overlooks the richness and depth that such a descriptive study might otherwise provide and constrains the conclusions arrived at by the writers.

22. Circular arguments may arise from “affirming the consequent,” that is, “If \( p \) then \( q \). \( q \). Therefore \( p \).” In “begging the question,” a conclusion is used implicitly as a premise. See Anthony Weston, *A Rulebook for Arguments* 3rd ed. (Indianapolis; Cambridge: Hackett, 2000), 14, 15.

23. Maud Hickey, “Creativity Research in Music, Visual Art, Theater, and Dance,” in The New *Handbook of Research on Music Teaching and Learning*, eds., Richard Colwell and Carol Richardson (Oxford; New York: Oxford University Press, 2002), 398, writes that “A creative product is one that is both novel (to its creator) and is ‘appropriate’ or ‘valuable’ in the context of a domain, and a creative person is one who produces creative products.” Hickey cites Richard E. Mayer, “Fifty Years of Creativity Research,” in *Handbook of Creativity*, ed., Robert J. Sternberg (Cambridge UK: Cambridge University Press, 1999), 449-460, as the source of this operational definition.


27. See n. 25. On argument by authority, see Weston, *Rulebook for Arguments*, chap. 4.


29. For a summary of some of this literature, see Jorgensen, *Art of Teaching Music*, chaps. 11, n16.

31. Argument by authority is often used in literature reviews in music education research; the more the authorities and the more eminent they are, the more solid the research is supposed to be. This argument runs: “X (a source that ought to know) says Y. Therefore, Y is true” (Weston, Rulebook for Arguments, 24).

32. On *ad hominem* attacks and “poisoning the well,” see Weston, Rulebook for Arguments, 30-31, and 77-78, respectively. For example, David Elliott, *Music Matters: A New Philosophy of Music Education*, 36, suggests that the theoretical notion of aesthetic experience “rests on a logical contradiction that Leonard, Reimer, and others have decided to overlook.” This proposition implies that these writers willingly and intentionally erred; it constitutes a slight on their academic integrity rather than an argument refuting their claims. Were the statement to read “...that Leonard, Reimer, and others overlook,” a reader could focus on the nature of the contradiction Elliott claims, and if the claim is substantiated, grant the possibility that Leonard and Reimer are unaware of the difficulty. Likewise, in his essay, “Music and Affect: The Praxial View,” Philosophy of Music Education Review 8 (2) (Fall 2000): 79-88, Elliott writes: “Swanwick culls once again from Langer, as Reimer culled Langer’s themes from Charles Leonard, who culled Langer’s ideas from James Mursell, who culled from Langer herself” (79). Here, Elliott uses a pejorative verb “cull” and suggests that Reimer got his ideas third-hand from Langer, via Leonard and Mursell, rather than read Langer himself. A less provocative statement could read that Susanne Langer influenced music education thinkers since the mid-twentieth-century, namely, Mursell, Leonard, Reimer, and Swanwick. A reader is then left to ponder the reasons for Langer’s long-standing influence on modern music education.

33. On the “straw man fallacy” see Weston, Rulebook for Arguments, 78.


38. Harold E. Fiske response to Estelle R. Jorgensen, “Reflections on a Dialectical Approach to


41. For an historical example of the way in which a few people directed a change in social policy in music education, see Estelle R. Jorgensen, “Engineering Change in Music Education: A Model of the Political Process Underlying the Boston School Music Movement (1829-1838),” Journal of Research in Music Education 31 (1983): 67-75. Even here, it was necessary to mobilize public support for introducing vocal music into the fledgling common schools.


55. See Jorgensen, “What are the Roles of Philosophy in Music Education?”


57. North, Hargreaves and Hargreaves, “Uses of Music in Everyday Life,” focus on the role of music in life and the role of families in music education. Although these psychological, sociological and identity questions are important in their own right, what is crucial to music education is how this identity construction matters to music teaching and learning and what the impact of this learning can be on families.

58. In undertaking research that might be considered “basic” in the sense that the necessary foundational work has yet to be done, it is imperative to also spell out how such work potentially illuminates the ideas and practices of music education.


