I want to start my comments with some observations about the connection between the arts and the sciences and between the arts and research. Typically speaking, we do not tend to associate artistic activity with the more cool, calculating, and, for some, rational character of scientific investigation. The arts are guided by "feel," while scientific activities are thought to belong to the rational sphere; calculating, deliberate, logical and perhaps most of all, theoretical. Research is what scientists do. Painting or composing is what artists do. Thus, creating something called "arts-based research" is to some a kind of oxymoron. So we start our conversation with a terminology that some people find difficult to understand.

How do we argue the case that research is an activity that takes place in the arts just as it does in any of the sciences? By "just as it does," I don't mean that research done in the sciences and research done in the arts are identical. They are not identical. Even those fields that define themselves as sciences are not, from a methodological perspective, identical. Just what is the basis for believing that research is a proper descriptor for what people in the arts do and that arts-based research is neither an anomaly nor an oxymoron?

I think that initially one might conceptualize research as a broad "umbrella" process intended to enlarge human experience and promote understanding. It is a process that is concerned mainly with the creation of knowledge, or more modestly, with the process of knowing. Given this broad umbrella process, science can be regarded as a species of research; so too can the arts.

But even science separated from the arts itself is a problematic conception. If the arts are regarded as forms of experience, the kind that John Dewey described in his elegant book *Art as Experience*, then it could be argued (and I would) that the fine arts do not define the limits of art. Aesthetic experience, which is at the core of art, can be secured in the process of doing scientific research as well as in the satisfactions secured from its results.
The point of this brief résumé is to liberate the concept of research from domination by science alone and to recognize that science in practice and in outcome can have significant aesthetic features. Very often they are the very features that motivate scientists to pursue their work. It is in this sense that the well executed practice of science can be considered an art.

These considerations were not at all salient in the educational research community during the 1960s, ‘70s, or ‘80s in the United States, at least. Research was considered a scientific enterprise, and that pretty much was all there was to it. People who were looking for art had to find the time and the place somewhere outside of the educational research community.

The view that I have just described concerning the primacy of science is not particularly uncommon today. It is difficult to change canonical beliefs about how inquiry should proceed and how one comes to understand the universe in which we live, even if that universe is restricted to schools and classrooms, to teaching and to curriculum.

At the same time, it must also be acknowledged that minds are changing and that new possibilities are being explored. How did all of this get started? Let me say a few words about the genesis of arts-based research and later talk a little bit about some of its features.

It was in 1993 that the first Arts-Based Research Institute was offered at Stanford University to members of the American Educational Research Association. The Institute has been offered at Stanford and at Arizona State University virtually every other year since then. My aim in initiating the institute was driven by a tension that I felt personally as a scholar trained in the social sciences but immersed in the arts. That tension engendered the idea that the arts might be used in some productive way to help us understand more imaginatively and more emotionally problems and practices that warrant attention in our schools. At the same time, the idea that the arts could be at the core of research seemed more than a bit oxymoronic. Some encouraged me to talk about arts-based inquiry rather than arts-based research. I did not succumb to that temptation, knowing what matters most in U.S research universities.

The initial iteration of these conjectures about the relationship between the arts and educational research had been expressed earlier in the concepts of educational connoisseurship and educational criticism, two notions that I wrote about in my books The Educational Imagination in 1971, Cognition and Curriculum in 1982, and the Enlightened Eye in 1991. Could there be, I asked myself, an approach to educational research that relied upon the imaginative and expressive crafting of a form of representation in ways that enlarge our understanding of what
was going on, say, in teaching, or in the school's cafeteria, or in the high school mathematics classroom? To pursue this aim I conceptualized the practice of educational connoisseurship and educational criticism. Connoisseurship is concerned with the art of appreciation, criticism with the art of disclosure.

In many ways this hidden aim of mine, to develop an approach to the conduct of educational research that was rooted in the arts and that used aesthetically crafted forms to reveal aspects of practice that mattered educationally, was a central ambition. This ambition had ramifications. One unexpected ramification was that it led to considerations regarding the role of fiction in educational research. Could a work of fiction count as research? The 1998 AERA debate that Howard Gardner and I had about whether a novel could function as a dissertation is an example of the issues at stake. Gardner argued that doctoral training was essentially that—training designed to prepare skilled journeymen in the use of conventional research methods. My argument was that universities ought to be places in which doctoral students could explore imaginatively new methods and concepts for doing research, and if universities could not provide such settings, there were few places that could. You might say I was interested in providing safe-havens that made it possible for students and faculty to push the boundaries of method and explore alternative ways of knowing. I wanted to support methodological pluralism.

It is not necessary to get into the details of the debate except to say that it was spirited and that it represented two perspectives on how research might be undertaken. In neither case, I believe, was either of us looking for a single hegemonic orientation to research methods. I have always embraced pluralism in method, and I think Gardner does as well, even though he didn't argue that position when we shared a session at AERA in Chicago.

Just what's at stake with respect to views of the appropriateness of the arts as tools for doing arts-based research? Why make this an issue? One answer that seems persuasive to me is that the arts provide access to forms of experience that are either un-securable or much more difficult to secure through other representational forms. For example, the ability to experience emotionally the conditions of life in a school, a village, a classroom, is something that artistically rendered forms can make possible. The arts capitalize on the emotions and use them to make vivid what has been obscured by the habits of ordinary life. Becoming acculturated, we should not forget, is a way of learning not to see, as well as a way of learning to see. What I am saying is that paradoxically the hegemony of traditional scientific methods in the social sciences as the sole legitimate means through which the educational world can be revealed is a way of biasing our understanding by excluding other
perspectives. That is why new perspectives are needed. Among the most prominent of these is literary form; however, literary form is not the only form that arts-based research can employ. The world revealed through film and video are other resources that can display qualities that will not take the impress of linguistic form. Consider the following. Imagine a presentation by an art teacher and his class interacting in the teacher’s classroom. Here is one version of what might have occurred.

An Art Teacher at Work

What is going on when this high school teacher of art teaches aesthetics to a class of inner city youth? What did you see and what do you make of it?

The teacher’s first move is to help his students recognize the differences between two types of activities they routinely engage in, one practical and the other aesthetic. In effect, in helping them grasp this distinction he wishes to show them that there are different ways in which the world can be experienced. He proceeds to illustrate this distinction not by resorting to an exotic form of fine art or philosophical theory, but by calling their attention to a common activity, pouring cream into a cup of coffee. He first selects a Styrofoam cup and pours a little coffee into the cup, adds a little cream, tastes it, and then points out that the primary function of pouring the cream into the coffee is practical. He then uses a transparent plastic cup and carefully pours a little coffee into it and then a little cream while observing the way in which the white cream seems to explode in the cup for a brief few seconds after it is poured. He delights in the beautiful burst of cloud-like formations that the cream in the dark coffee creates. That kind of an activity, he tells the class, is an activity experienced for its own satisfaction; it is an aesthetic activity, not simply a practical one.

The example is something that students are familiar with, but not in the way the teacher addresses it. The larger point of the lesson is that perceptual attitude is a choice, that there is more than one way to see. This point is reinforced by giving the students terms—practical and aesthetic—with which to frame this distinction.

The teacher moves from the coffee example to the task his students are to engage in; this is no mere spectator activity. That task pertains to writing about what they see, but not just any old form of writing. He wants a form of writing that has literary qualities. He doesn’t use the term literary, but that is what he hopes they will create, and to increase the probability that they will, he tries to make sure that they have a sense of what literary language entails.

This is accomplished in two ways. First, he models the use of the language by giving them a picture of what it looks like. Second, he gives them examples of what their peers have written in the past, thus
making it clear that the task is doable and that it does not depend on special forms of adult expertise. In fact, he also gives them a negative example, that is, what their language should not look like.

He moves on by giving examples of experiences they had or could have had in their own lives in which practical experiences were transformed into aesthetic ones; watering the lawn, being lost in the experience of beauty; again, not in some exotic material outside their experience, but within their experience. The examples he uses make empathic forms of thinking possible.

The teacher then introduces the materials with which they are to work. These materials, water and red ink, are significant. Each student not only gets his or her own cup of water, the teacher comes around to drop the red dye in their cup individually; personal attention is being provided here. The red dye in the water invites projection. Its fluid quality, much like a cloud, makes it possible to see in the unfolding burst of form images that will receive without difficulty the meanings each student wants to confer upon them. The unfolding clouds of red open the door wide to individual interpretation. Unlike many tasks in school, this exercise has no single right answer. The key word is “single”; not any response will do. The response needs to have a literary or poetic feel, that’s what his talk about simile was about. Thus, what we have here is an open-ended task that invites an individual response and that yet is not simply an instance of anything goes. Not everything goes here. The heart of the problem resides for the students in the relationship between seeing and expressing. Seeing is necessary in order to have a content to express. Expression is necessary to make public the contents of consciousness, and so what we have here is an imaginative transformation of a perceptual event that is imbued with meaning whose features and significance the students try to transform into language capable of carrying that meaning forward.

This transformation is, of course, what writing is about. Somehow the writer must find a way within the affordances and constraints of a linguistic medium to try to create the structural equivalent of the experience. Often in the very process of representation new ideas will emerge that are then themselves the subject of expressive aims. This is exemplified in a student’s narrative about the destruction and contamination of the Native American population. When asked to write a brief reaction to the dye exploding in the water, this is what she wrote:

The clear crystal water looks to me like the landscape the native Indians love to live in. The land that was given to them from the Great Spirit. As the dye drops, Columbus lands. The Europeans not only destroy it, but pollute their beautiful land with diseases. The red dye spreads throughout the pure souls of innocent
Native Americans. The red dye destroys their people, their tribes, their culture, their beliefs. In good hearts, these beliefs will never die.

It seems likely to me that these ideas were close to the surface of her consciousness and were triggered by the color and form of the ink. But note that the narrative that she wrote had itself a powerful expressive quality, not only because of its imagery, but because of its form. Think about the coda she used to bring her narrative to closure. “In good hearts,” she says, “these beliefs will never die.” It is in the relationship of image to form, or more precisely, the forms her images take, that we are moved by her words.

This situation is one in which students use qualitative forms of thinking to do a number of things. First, perception, not mere recognition, is employed; the teacher is asking the students not merely to look in order to categorize, but to see. Second, the student’s imagination is engaged, in part because of the supportive relationship the teacher has with the students, but also because the exploding forms the ink creates invite such a response. In a sense, the free-floating cloud of red dye in water becomes a Rorschach-like experience. Third, the students must find a form, a form crafted in narrative that conveys their experience. They become writers. Their writing begins with vision and ends with words. We as readers or listeners, begin with their words and end with vision. The circle is complete. The artful crafting of language so that it expresses what sight has given birth to is what this short episode is about. Finally, they bring closure to the episode by sharing their work with each other.

Thus far I have tried to identify some of the issues, some of the history, and some examples of aspects of arts-based research.

What I also feel a need to comment about pertains to questions having to do with ideas such as objectivity, validity, and generalization. These three concepts almost always come up in discussions of the believability of arts-based research. I will not go into a textbook analysis of such notions; textbooks have never been particularly attractive to me. However, consider the process of generalization.

As you well know, in standard statistical studies, generalization is possible insofar as the sample selected from a population was random, which makes it possible to infer conditions or features to the population that are found in the sample, within, of course, some measure of probability. But what do you do with an $n$ of 1? Can generalizations be derived from a single case or from a narrative that has not been subject to quantification? My answer to those questions is “yes.” What needs to be done is to think about generalization in a way that is quite different from its statistical parent. In fact, we generalize all the time.
and have done so even before statistics became a refined inferential process. If you think about generalization in the way in which a great play—*Death of a Salesman*, for example—makes it possible for you to locate in the lives of others the travails that Willie Loman experienced as a traveling salesman, you get some sense of the ways in which an *n* of 1 can help you understand situations even though the initiating image was not statistically selected. A powerful example from the visual arts is found in most expressionistic works, including works that preceded them. Francisco Goya, Pablo Picasso, Velasquez—all create images whose meanings transcend the linguistic. Where would we be without Rembrandt or the great works of African tribal art?

Art provides canonical images that organize our world and that apply to more than we bargained for. Sometimes these images are so powerful that we find it difficult to see the world they address in any other way; art not only imitates life, life often imitates art. Characterizations that are artfully crafted of classrooms, teaching practices, and school environments, perform important cognitive functions. They give us a structure with which to organize our perceptions. With such a structure, we can check out the applicability of the canonical image to other situations. The conceptual parents of the kind of generalizability that I am talking about is perhaps most often located in literature and poetry, but are also provided in film, video, and multiple other genres. We can reach into the humanities to gain insights that can guide our perception and influence our courses of action.

When it comes to matters of validation (if that is the right word for a process so humanistic in character), we can test the utility of arts-based research by its referential adequacy. By referential adequacy I mean the extent to which we can locate in what the critic claims is there. Thus, when an art critic talks about a particular painting in a particular way, the critic's achievements are located in our ability to notice what the critic claims to be there and which we, in fact, discover by virtue of the observations that he or she provided. “The aim of criticism,” wrote John Dewey, “is the reeducation of the perception of the work of art” (1934). I couldn’t agree more.

In addition to referential adequacy as a means of assessing the validity of arts-based research, there is the process of structural corroboration. Structural corroboration is simply another way of talking about the circumstantial evidence that enables you to support a conclusion about a state of affairs. What are the markers that allow you to draw conclusions or to make observations about the situations you are studying? Put very simply, perhaps too simply, is there sufficient evidence to render your rendering of a situation believable?

In talking about believability, I am not suggesting that there are formulas, recipes, or rule-governed procedures for making such a determination:
That most exquisite of human capacities must be exercised in order to
draw a conclusion about the believability of a rendering. The capacity
to which I am referring is judgment. Differences among scholars that
relate to descriptions or interpretations of the meaning of a situation
are always subject to debate. Anthropologist Clifford Geertz once
commented that the aim of ethnography is to increase the precision
through which we vex each other (Geertz, 1973). Put another way,
through our work we enrich the conversation and refine our sensitivity
to the subtle but significant aspects of the situation we are examining.

Finally, consensual validation emerges as a potential means to secure
the believability of a description, interpretation, or appraisal of a state
of affairs. By consensual validation, I mean that there is more than one
person describing, interpreting, evaluating, and thematizing the situ-
ation at hand. One finds upon analysis that there is sufficient overlap to
breed confidence that what these respective critics say is there and what
it means is supported by the other’s rendering of the situation. In statis-
tical canons, it is often referred to as “inter judge agreement.”

As I have already indicated, altering deeply rooted conceptions of
reality has never been easy. It won’t be easy in the educational research
community. In our traditional epistemology we employ a language that
tends to objectify nature and which underestimates the extent to which
any form of knowing is a construction and not simply a discovery.

I titled this lecture, “Does Arts-Based Research Have a Future?”
Let me try to provide a tentative answer to that question.

What we see taking place in educational research is a gradual expan-
sion of the methods that are considered legitimate for understanding
schools, teaching, and learning. We are pushing towards pluralism. At
the same time, in the United States at least, there is a national push
towards a convergent approach to educational research, one that
emphasizes randomized experimental field trials as the gold standard.
There are on the one hand constraining conditions that are driven by a
national anxiety concerning the quality of our schools, and at the same
time, a growing recognition that there is more than one story to tell and
more than one set of methods to employ. Clearly, arts-based research is
an expression of the need for diversity and a tendency to push towards
a de-standardization of method. What is not clear is how much de-
standardization those in the research community will tolerate and, at
the same time, accept as being legitimate.

What is the future of arts-based research in education? There are
several features that need to be taken into account if arts-based educa-
tional research is to have a future. First, arts-based educational research
needs to have a cadre of scholars committed to its exploration. By scholars
committed to its exploration I mean individuals who regard arts-based
educational research as their primary research vehicle. These are people who define their research identity with respect to the conduct of arts-based research as it addresses critical educational questions. Luckily, the field has such people in its midst.

Second, another consideration deals with the attitudes of existing university faculty. University faculty need to be supportive of arts-based research and students in their midst need to find equal support in their use of such an approach. It is not uncommon for some university faculty to feel a sense of estrangement, or at least loneliness, with respect to arts-based research. Very often their colleagues know nothing of its features, but, nevertheless, may be suspicious of its scholarly merits. All that needs to be changed.

The most potent source of change pertains to the quality of arts-based research that is done. Good arts-based research ought to generate questions worth asking and ideas worth pursuing. The quality of our work is, by far, our most reliable vehicle for insuring the future of arts-based research. Good work may require establishing durable connections between faculties in schools of education and those who work in departments in the arts and sciences. What is needed are people who can provide the distributed expertise that good collective work typically requires. Arts-based research will need people who know how to create films, videos, narratives, literary texts, as well as texts of other sorts. We need to broaden the array of forms of representation that can be used in the conduct of educational research. Arts-based research should serve as an exemplar of how such uses are crafted and come to be employed.

Yet another consideration pertains to the availability of resources through which non-text work can be presented. How is film made available to a wider public? What do we do with video? And who should evaluate quality of the work in the first place? Arts-based research needs an outlet, a forum, something appropriate for handling the kind of messages it provides. This is no easy task, but it is an important one, necessitating inextricable ties to digital technology, the World Wide Web, and other contemporary electronic media.

Thus, my answer to my own question is that arts-based educational research will have a future depending upon our ability to reach for the heavens by crafting research that reveals to us what we have learned not to see and on the public’s willingness to accept what we have made visible as one useful way to understand and renew schools. In opening our eyes, arts-based educational research may become something of a revolution in awareness, epistemology, and in method. But it will not be without its battles. When this occurs, we would also do well to remember Alfred Lord Tennyson’s poem “Ulysses” (Tennyson, 1842).
So I close my comments with Ulysses' words to his old comrades as he leaves his ageing wife Penelope and his home in Ithaca to seek adventure on an uncharted sea. To encourage his old buddies to join him on what surely will be a perilous voyage, Ulysses tells them this:

And tho'
We are not now the strength which in old days
moved heaven and earth
That which we are we are
One equal temper of heroic hearts
Made weak by time and fate but strong in will
To strive, to seek to find and not to yield.

We, too, should not yield.

References