Policy Brief

CREATION, PERFORMANCE, RESEARCH: MULTIPLE RELATIONSHIPS AND POSSIBILITIES

November 2008

Council of Arts Accrediting Associations

National Association of Schools of Art and Design
National Association of Schools of Dance
National Association of Schools of Music
National Association of Schools of Theatre

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**Purpose**

This policy brief addresses an issue of increasing importance to arts programs in higher education. It is an overview produced to assist administrators and faculty in and beyond the arts. It provides a contextual framework and lists of issues for consideration as institutions and programs make local decisions.

Taken as a whole, the brief shows that it is important to think comprehensively, specifically, and incisively about connections among the functions of creation and performance in the arts, and the functions of research. In argument and policy-making, conflating artistic production and research superficially can create as many problems as denying any relationship at all.

The brief also indicates the vast range of possible connections and encourages exploration and experimentation. It addresses artistic, research, and scholarly territories in ways that promote further consideration of ways they can be connected productively. Such considerations are important when many are asking, “To what extent are creation and performance considered research,” “How do the processes of art and science/technology relate to each other,” “What is the nature of multidisciplinary work,” and “How do institutions promote innovation?”

The presence of myriad possibilities creates the necessity of choice. Each institution, program, and individual will make choices by design or default. The primary purpose of the brief is to indicate the range and nature of these choices, and to point out the kinds of ramifications that need to be considered as any choice is made. It is intended to be useful to those seeking to connect and evaluate specific possibilities while considering the bigger picture, and particularly to those working with the futures of undergraduate and graduate education in their institutions.

**Terminology**

In this text, the term "arts" means all of the art forms and their various component specializations, whatever names they carry or however professionals in various art forms refer to themselves. For example, the visual arts includes design, theatre includes its particular technologies, and so forth. In their full manifestations, some of the arts combine specific art forms—dance, opera, theatre, and film, for example. All art forms show interesting relationships, such as the similarities and differences among sculpture and architecture. Such considerations may be the subject of research and scholarship, but they are not fundamental to this paper. Readers should interpret "arts" as they wish; for example, as their own field, or the arts as a whole, or some combination thereof.

"Research" is also used broadly. The text points to many approaches, and at times uses other research-associated terms to make informal distinctions among types of inquiry. However, the brief does show that research does not have a broad definition in many academic contexts, and that this fact needs to be noted as plans and decisions are considered.

"Compose" and "design" are used at times to refer generically to creating by putting things together, including various artistic/intellectual techniques for so doing. These functions are central to and observable in all the arts, although they may carry different names such as playwriting or choreography. This use does not obviate the importance of these same words to designate specific professional fields such as music composition or graphic design.

**Note:**

This paper refers extensively to the natures and characteristics of the arts. A Web resource on these topics may be found at [www.aqresources.arts-accredit.org](http://www.aqresources.arts-accredit.org).
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Council of Arts Accrediting Associations

Policy Brief

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MULTIPLE RELATIONSHIPS AND POSSIBILITIES

November 2008

This paper is intended to facilitate discussion both within and outside member organizations of CAAA—National Association of Schools of Art and Design, National Association of Schools of Dance, National Association of Schools of Music, National Association of Schools of Theatre.

It is not a statement of accreditation standards or procedures, nor does it have any function in the accreditation process of any of the Associations. Its purpose is to provide an analytical policy review of a number of issues associated with the creation and performance of and research.

I. Introduction

A. Intellectual Work

Creation and performance—the production of works in the fine and performing arts and in design—are intellectual work. Among other things, this work involves the gathering and ordering of ideas and communicative means. Work to create and perform, therefore, join other kinds of intellectual work to constitute the universe of intellectual endeavor. Creative and performing artists continue to exhibit many connections with other intellectual efforts. Other areas of intellectual endeavor continue to be applied to the work of artists, both to provide them with tools and to explain and otherwise consider the works they have produced. All of these facts are centuries old.

The term research is used as a descriptor for a vast range of intellectual work. Highly educated, reasonable people disagree about precise definitions of research. But when the term is used, there are general connotations of organized inquiry and investigation. Research reveals things; it is a way to find information that can be used creatively. The intellectual work of research is carried on in different ways by different disciplines and professions. The artistic world and its professional pursuits in various fields of art are full of research and research connections.

As arts fields, specializations, institutions, and individuals chart their future courses, there will be many continuing and new relationships among different types of intellectual work. There are tremendous possibilities for stunning advances in relationships between human understanding and creativity. The arts have major roles to play in developing this potential. Therefore, the relationships among integrations and syntheses of creation, performance, and research efforts are a major future issue for institutions that educate professional artists.
B. This Paper

This policy analysis paper is written from a positive perspective. The level of opportunity is astounding. Artists are creative people who revel in successful applications of human creativity. They enjoy the new. They glory in making new things and in making old things new. Given the vast expansions of knowledge and product over the past century alone, there are so many possibilities for new connections and new applications of creative vision and capability.

This paper attempts to cover a massive territory in relatively few words. By necessity, it is not a research paper itself, at least in the traditional academic sense. It is, rather, an attempt to create a broad overview of issues, possibilities, and questions.

Since the scope of this paper precludes a great deal of depth, the text points constantly to the existence of depth. Almost every topic considered in this paper has deep roots in various kinds of intellectual work. The range of topics considered indicates the necessity of in-depth analysis and projection when creating new academic programs or otherwise making large investments of time and resources.

Relationships involving artistic work and research become degree-specific only when a particular program is developed by an individual, an institution, or an organization. In other words, one or more concepts concerning possible relationships transcend specific degree considerations, even though, in the vast majority of academic and teaching circumstances, the most advanced connections will be pursued at the graduate level.

As is always the case with CAAA, the purpose of this paper is to assist individuals and groups in their own efforts to reach the best conclusions and make the best decisions in their own cases. This paper is intended to play a catalytic role, and provide a foundation for local and national discussion. It is an offering, not a mandate.

Policy analysis papers must discuss real and potential positives and negatives. There are dangers to be faced in making any decision. These dangers are not the same for all decision makers. However, policy analysis papers usually address many decision makers, and so, the dangers need to be cited. If we are preparing to go on a journey, warnings about possible dangers or challenges are not equivalent to advice against taking the trip. Facing four-squarely the possibility of problems is prudent as the basis for determining individual conditions and capacities. This paper is intended to be both an example and a proponent of prudence.

C. CAAA’s Position

CAAA has deep respect for all types of intellectual work. The standards and approaches to accreditation used by CAAA member Associations document this respect within and beyond the various arts disciplines, including the specializations.

CAAA and its member Associations have traditionally supported the expansion of intellectual work. They have tried to show the nature of intellectual work in various aspects of each arts discipline and the sensory world that it inhabits and creates, especially to those who are unfamiliar with the nature of this work.

CAAA has always recognized innovation and quality, and that quality in innovation comes primarily from work done by individuals and institutions.
CAAA seeks to preserve and enhance conditions that support different pathways, approaches, and agendas within all fields of the arts. Variety is an evidence of creativity. Variety is also critical as an overall operational norm because no single person or institution can do everything.

CAAA continues to believe that content is first. Once goals regarding content become clear, other issues usually begin to resolve themselves. Simply put, the duration, level, and process of a particular effort depend on the nature of its content. Degrees and other credentials are structured and labeled according to their content. New programs are developed to create or address content. New content or new combinations of content, or the need to address accumulating content, all raise questions about time and other resource necessities.

Status, while not the first thing, is an important thing. Since almost all work is with other people, respect among persons is a vital commodity. The same is true of fields of study and practice. CAAA recognizes that status and image challenges exist for and in the arts. These challenges must be met with care lest short-term solutions contribute to long-term problems. CAAA and its member Associations have demonstrated their belief that real status is based on work and that public relations techniques, though essential, alone are not enough.

CAAA member Associations are forums for exchanges of ideas and debate. In presenting this analysis, CAAA is not attempting to formulate a doctrine, a curriculum, or a set of curricula. The Council wishes to foster a climate of exploration where explorers of various territories share findings and understandings with each other.

The accreditation standards of CAAA member Associations accommodate and encourage innovation. Institutions should pursue their inquiries and developments regarding new types of programs with the understanding that NASAD, NASD, NASM, and NAST and their respective Commissions on Accreditation wish to support such creativity. Each Commission has a long history of approving experimental approaches to content, schedule, degree level, and method.

D. Institutional Conditions and Decisions

In considering matters of creation, performance, and research, it is critically important to remember that higher education encompasses institutions exhibiting a broad range of missions, goals, and objectives. Specific purposes and priorities affect each institution’s approach to all disciplines, including the arts. Each discipline has many specializations and types of work; no institution can do everything. Institutions make choices. The resulting diversity is reasonable, healthy, and a condition of overall effectiveness. Many different pursuits are necessary. Altogether this means that specific institutional approaches to questions of creation, performance, and research in the arts and in other subjects vary widely, and that this is an appropriate and positive result.

Local decisions about what to do and how to evaluate are influenced by many ideas and forces. How various individuals value and understand things and how they believe advancement can be made all make a significant difference. Clearly different institutions have different views about such questions; these views can change as personnel change. However, it is hard to make productive decisions about something being pursued at advanced levels without some understanding of its nature, or significant willingness to trust those who do have such understanding.

This obvious point is related to the criticality of each institution’s decisions in such areas as curriculum, faculty hiring, advancement, and reward systems, and expectations for various
kinds of achievement at individual and institutional levels. These decisions are made in a
climate pervaded by necessities to cultivate positive public perceptions. Moment-to-moment
image management is critical and can often take precedence over everything else. The
cclimate is also heavily influenced by funding considerations. For example, external source
funding streams for science and technology projects are far larger than those for any other
fields pursued in higher education. The effect of this reality on values, public perception,
methodology, and decision making is large.

Another reality is the need to bring order and consistency to evaluations of individual work.
This means that decisions must be made locally that define what counts. In the arts, these
local decisions are influenced by values and understandings about creation, performance, and
research, and the role they play in the fundamental mission of the institution, and in the way
the institution positions itself to its constituencies. Given the myriad ways that creation,
performance, and research can be considered and valued and the different approaches and
procedures used in different disciplines, in each institution, arts faculties and administrators
have the responsibility to work with all these conditions and perennial challenges in ways that
nurture the arts programs for which they are responsible. Much work has been done by
faculties and administrations throughout the nation to demonstrate and document the specific
natures of their tasks, how they are similar and different to tasks associated with other
disciplines, how their success depends on creating and maintaining conditions consistent with
the nature of their task, and the way their disciplines and specializations work. Such efforts
need to continue to meet evolving conditions and new potentials.

This paper is intended to assist these efforts.

II. General Considerations

A. Similarities, Differences, and Connections

Looking around the world, it seems clear that there are similarities, differences, and
connections among things. For example, red and blue are similar because they are both
colors. They are different because they are different colors. They can be connected or blended
together in a virtually infinite number of proportions to create a virtually infinite range of
colors. However, neither the fact that red and blue share certain similarities, nor the fact that
they can be blended and connected together in an infinite number of ways, obviates the fact
that red and blue are different. In fact, their differences enable the existence of their
similarities and connections or blends.

This obvious analogy has application to questions of disciplines and work in them. The
existence of differences is central to intellectual work of all kinds. Relationships among
similarities, differences, and connections are central to creation and performance as well as to
research that is based on or conveyed in words or numbers.

The preservation of differences happens somewhat naturally. Arguments can be made that
similarities erase differences or that differences do not matter because everything is
connected. Such arguments may wish to reduce the presence of differences as a consideration
in decision-making of all kinds. However, such arguments rarely dominate for long. The
essential natures of things tend to reassert themselves, at least during any timeframe that
matters to any individual now living. Fundamentally, red is not blue.
Among the various professions and disciplines, the various arts and design fields, in their fundamental forms, have similarities with other fields, differences with other fields, and connections with other fields. Each of the arts has its own identity as a large field of practice and approach. Among the various arts fields, there are also similarities, differences, and connections.

B. Three Terms

Behind questions, discussions, and actions that deal with issues of similarity, difference, and connection, lie three useful terms. The first is ontology, usually described as the nature of being, reality, or ultimate substance. The second is epistemology, usually described as the study or theory of the origin, nature, methods, or limits of knowledge. The third is typology, usually described as the study of types, symbols, or symbolism.

It is clear that perspective, however derived, can produce widely different ontological, epistemological, and typological views among highly educated and gifted people.

For example, knowledge is produced by many things, including experience, insight, learning, research, heritage, and so forth. Since persons, fields of endeavor, institutions, nations, and many other groups exhibit great differences in all these sources of knowledge and understanding, differences can be very great.

Ontology lays the foundation for epistemology, which in turn lays foundations for methodologies, typologies, and other forms of organization and description.

C. Content and Differences

Work with different sorts of content produces different sorts of perspectives. Likewise, different sorts of perspectives produce different sorts of content. Individuals trained professionally in the arts literally see, hear, and understand things differently than people who are not. The knowledge and perspective gained from intensive study produce a tremendous depth of analytical comprehension that is not available to just anyone. A group of individuals from twenty different professions may all view a magnificent sunset. Though it is only one of many factors, their knowledge or profession will have the sunset speak to them a specific way that is not natural to the others.

D. Status and Differences

Real differences, and the differences of approach and perspective they produce, have an impact on status. At different times, places, and levels of social organization, it is clear that not all fields, professions, activities, or areas of endeavor have the same status. In our own time, science has more status than almost anything else. In fact, science has so much status that other areas of endeavor that are not strictly sciences often attempt to imitate science or use scientific terms in the belief that it will improve their status.

Since status is preserved by differences, those who perceive themselves to have status work hard to ensure that differences between them and others are clearly understood and maintained. To bring this discussion to the point of our inquiry, such preservation extends to the definition, meaning, and valuing of the term “research.”
E. Battles of Terminology

In situations where there are feelings of disadvantage, remediation is often sought through efforts to change the meanings of terms. In these efforts, terms are used as symbols, perhaps more than standard indicators of particular meanings. And so, we come to the term “research.” When the word is said, how much does it create an automatic positive resonance? In most circumstances, “research” is a very positive word. However, the term does not mean the same thing for all users or hearers. For research, like everything else, has similarities, differences, and connections with other kinds of endeavors. Individuals and groups who feel their status is based on a particular definition of and approach to research will naturally try to protect that definition and approach against all attempts to conflate or connect other definitions and approaches with their own. In other words, many who derive high status from their position in a particular world of research do not want the definition of research expanded to the point that it erases the differences that give them their status.

The prospects of such battles raise a caution: If we appear to be what we are not in order to get resources to be what we are, what risks do we run in becoming what we are not?

F. Parity and Equivalency

Parity offers the most positive way to keep differences and address status. An independent artist and a research chemist employed in industry are both engaged in high levels of intellectual work. For purposes of this discussion, let us say that they have parity. They make the same amount of money, they have the same status in their own respective professions, and as far as one can tell they have equal respect in their community. They share many similarities and they may be connected to each other in a project of an intellectual nature or in other ways. But parity means parallel positioning of two separate things. Parity works as a descriptor in this case because one individual is an artist and the other is a scientist. The status each is accorded is reasonably connected to the nature and purpose of what the individual does. This example may not reflect specific economic and status realities, but it does present an ideal.

If status were sought in equivalency, however, choices would have to be made about which field or profession is more valuable. And, if some force had the power to demand a choice of terms so that all intellectual workers had to be called either scientists or artists, the status problems would become a generator of massive conflict as each different field would feel compelled to make its approach to intellectual work predominate.

Of course, it is possible that a single individual could develop capacities and capabilities in one of the art forms and in chemistry. Even if such a person were able to integrate or synthesize the two in a revolutionary new way, this would be a new example of a connection and not a destruction of the differences between the two fields.

Distinctions between parity and equivalency are extremely important when looking at connections between the arts and research of any and all kinds. For example, failure to establish reasonable parity can foster questionable assertions of equivalency that in turn can reduce prospects for parity.

G. Knowledge as a Term

However the term knowledge is used, it is useful to keep in mind the distinctions and connections between “knowing how” and “knowing what.” “Knowing how” refers to the
ability to do something, to engage using intellectual, technical, physical, and other means. “Knowing what” refers to identifying and understanding something in one or multiple domains, and at various levels of depth and intensity.

H. Research as a Term

Most dictionaries associate research with scholarly or scientific investigation or inquiry. There is an implication of thoroughness so that critical facts and issues are not left out, thus falsifying the results or nullifying their replicability. There is an expectation of systematic methodology.

Terms inquiry, investigation, research, and scholarship have obvious similarities. They have different meanings to different individuals and groups, and there are connections among them, including the use of one to accomplish another. For example, research is normally central to scholarship.

The term research literally means “to search again.” This confirms the usual connotation that research involves looking into something that already exists even if it is not known.

It may help us to sort things out if we consider research and its associated terms—inquiry, investigation, scholarship—in terms of intent, content, process, and product. This is important because the word research implies an individual’s search for information or knowledge known to others but not to oneself. It also implies searching for information or knowledge that is not known.

Inquiry, investigation, research, and scholarship can be critical ingredients in the creation of a work of art in any medium and art form. The artist may address the same content as a scientist, even engage in the same process in terms of technique and method, but the product of one will be labeled by the world as a work of art, design, music, dance, theatre, etc. while the other will be labeled a work of scientific research.

At the moment, it is clear that the product of all intellectual activity is not labeled research. It is also fairly clear that all intellectual activity is not research, inquiry, investigation, or scholarship. For example, some intellectual activity is compositional, some is theoretical, and much is creative. The fact that similarities and connections exist among various types of intellectual activity does not erase the differences among them. It also does not erase the differences in intent, content, process, and product that are engaged when anyone working intellectually is trying to find things out.

It helps to remember that research is a conceptual term, an operational term, and a political term.

III. Research Purposes and Typologies

A. An Embarrassment of Riches

It would take many volumes to explore questions of research purposes and typologies and their antecedent ontologies and epistemologies. What follows is an attempt to provide enough examples to indicate the vastness of this territory. In making this attempt, we are both enabled and hampered by terminology. Clearly, the same term does not mean the same thing to all. We also live in a time where specific terms are assigned various public relations values. These values are debated in ways that often reduce the prospects for clarity. However, no
matter what is said or how it is said, there are so many approaches to, and combinations of, intellectual work that no one need feel isolated or restricted by the practice of others. Our attempt here is to show ways of thinking about research purposes and typologies as opposed to the way to think about them.

B. Modes of Thought, Action, and Disciplines

Brown University Professor George W. Morgan produced a simple but profound formulation of modes of thought.¹ His effort was associated with development of an undergraduate course that attempted to develop an overall understanding of fundamental modes of thought. Morgan identified three.

The historical mode of thought is concerned with what happened. The scientific mode of thought is concerned with how things work. The artistic mode of thought is concerned with creating new things, including making old things new.

It is critical to remember that these three descriptors as used in this typology are modes of thought, not disciplines. This is important because comprehensive work in any and all disciplines includes all three modes of thought. The three modes are present in different proportions in various disciplines. For example, the scientific and artistic modes of thought, when combined, produce the intellectual energy that fuels technology-based disciplines such as engineering. However, in a work focused on the history of boiler design, for example, the historical mode of thought would predominate.

All significant intellectual and operational enterprises, including those in the arts disciplines, use the artistic, historical, and scientific modes. One does not have to be a professional in a discipline to use a mode of thought that is most usually associated with that discipline.

Most disciplines or works of intellect are focused on one mode of thought more than the others. At base, artistic creation and performance is more centered in the artistic mode of thought, even though from project-to-project various uses of the historical and scientific modes may be necessary or desirable. Historians of the various arts are more centered in the historical mode of thought. A chemist in the field of ceramics would, naturally, be more centered in the scientific mode. But being centered in one mode does not obviate the use of the other modes. There are fields beyond the arts that use the artistic mode as their base. A few examples are teaching, diplomacy, investing, and politics.

The artistic mode of thought is concerned with unique solutions for specific times and places. It brings things together from the vast range of possibilities. It makes specific choices amongst everything. It composes. It designs.

The historical mode of thought works on what has happened in the past. Since the past is so complex, total agreement about it is virtually impossible. The historical mode of thought, therefore, seeks partial replicability. Some facts are incontestable, but interpretations may be contested. An individual writing a history of the American Revolution in 2008 will replicate basic facts considered by a historian in 1958. But it is unlikely that conclusions will be exactly the same.

The scientific mode of thought normally seeks total or near perfect replicability. Two parts hydrogen and one part oxygen will always produce water.
This spectrum from uniqueness to total replicability has a great deal of influence on the types of inquiry, investigation, research, and scholarship that are conducted using the various modes of thought as they are applied to the many disciplines.

Questions of research intent, content, process, and product are also informed by the particular mixtures of these modes of thought and disciplines in a particular project.

Among many other things, Morgan points out the obvious fact that each mode of thought has its limitations. This means that each reveals certain things that the other does not reveal.

Modes of thought and action and the disciplines in which they are applied provide a useful tool for exploring issues of similarity, difference, and connection in the relationships among creation, performance, and research.

C. Quantitative and Qualitative Research

Quantitative research is based primarily on the methodologies of the natural sciences. Its findings are expected to be replicable. Objectivity is the goal.

Qualitative research is more subjective and based in part on realization that everything does not have perfect replicability.

These two approaches to research indicate that different things work in different ways. For example, they can work individually and they can work universally. The two approaches can be blended, an approach gaining adherents in educational and other kinds of research.²

D. Knowledge and the Aesthetic

It is clear that knowledge is gained from experiences as well as from study. What kinds of knowledge are gained from the experience of a work of art? If the artist wished to convey knowledge, to what extent can anyone be sure that the experience of any or most people produces that knowledge? Deep and perplexing questions of knowledge gained through the senses are pursued by aestheticians and increasingly by scientists and artists themselves. To those who understand an art form in some depth, works of art radiate knowledge of how the work was conceived and created. Many works teach, first of all, that a thing such as the work itself can be created; that something interesting, beautiful, provocative, and so forth can be composed or designed using certain ideas, forms, materials, and media. But there is also the whole world of insight and understanding that opens up through aesthetic experience. This knowledge is being generated by applications of the artistic mode of thought. It has its place alongside the knowledge generated by the historical and scientific modes of thought, or combinations thereof in such fields as philosophy, psychology, ethnography, and so forth.

This field of inquiry has enormous potential for all the arts.³

E. Intellectual Processes

There are many ways to characterize intellectual processes. These processes are associated with goals for all parts of intellectual work. These terms are not mutually exclusive. Each concerns the other. This work can be combined in a particular project or work of art or design or research. Some of the major intellectual processes/goals are: creation, discovery, analysis, interpretation, integration, synthesis, application, evaluation, and so forth.⁴
F. Arts Perspectives

There are numerous perspectives for studying an arts discipline. Singly, or in combination, these perspectives can address how things work, what has happened, what things mean, and can be used to gain competence in making new things. Several of the most common perspectives are:

1. *Art as Process* – compilation, integration, and synthesis of:
   a. medium;
   b. technical, historical, and analytical knowledge and skills;
   c. inspiration and aspiration;
   d. ideas and investigations that result in a work of art.

2. *Art as Product* – involvement with completed works presented, performed, or available for study from various perspectives; and the multiple interrelationships and influences of completed work.

3. *Art as an Educative Force* – development of knowledge and skills, including mental and physical discipline gained from the study of art as process; and historical/cultural understanding gained from the study of completed work.

4. *Art as Communication* – use of arts media and techniques to convey ideas and information for various purposes.

5. *Art as a Psychological Phenomenon* – the impact of arts media on human behavior.

6. *Art as Physiological Phenomenon* – the impact of arts media on the human body.

7. *Art as Therapeutics* – applications ranging from entertainment to psychology and psychiatry.

8. *Art as Social Expression* – correlations of artistic modes, products, and perceptions within specific groups.

9. *Art as Heritage* – correlations of artistic activities with culture and times.

10. *Art as Subject Matter for Other Disciplines* – use of points of view, methodologies, and context of the humanities, sciences, and social sciences to consider the impacts of art processes and products on intellectual, social, political, economic, and other developments.

These and other perspectives can be used uniquely or mixed in various ways. Each is either centered in or connected to artistic creation and performance. Each can be looked at through the various modes of thought, addressed through quantitative and qualitative research, and viewed through various intellectual processes. Each is associated in some way with knowledge that comes through aesthetic action and experience.
G. Boyer’s Typology of Scholarship

In the 1990s, Ernest Boyer, former US Secretary of Education, proposed a typology of scholarship intended to broaden perspectives within American higher education. Boyer suggested four types of scholarship:

1. The scholarship of discovery – what is usually meant by research;
2. The scholarship of application – application of knowledge to solve consequential problems;
3. The scholarship of integration – both understanding the connectedness of things and making connections in a scholarly way;
4. The scholarship of teaching – the use of scholarly methods in pedagogical circumstances.

Boyer’s typology provides yet another means for encompassing all the various methods and approaches we have been discussing into a specific type of inquiry, investigation, research, or scholarship.

H. Experimental and Clinical Research

In the sciences, a distinction is made between experimental and clinical research. In some scientific fields, “theoretical” and “applied” are used to indicate this distinction. Theoretical, or experimental work, is seen to be at the frontiers of fundamental knowledge about how things work. Applied, or clinical research, seeks to find uses for discoveries made in theoretical or experimental modes.

I. The RAE Typology

RAE stands for Research Assessment Exercise. RAE is an assessment and ranking system for higher education institutions in the United Kingdom. The RAE definition of research includes the following typology:

1. Scholarship – the analysis, synthesis, and interpretation of ideas and information.
2. Basic Research – work undertaken to acquire new knowledge without a particular application and view.
3. Strategic Research – work carried out to discover new knowledge which might provide for future application.
4. Applied Research – work undertaken to discover new applications of existing or new knowledge.

The RAE also includes the following types of research-based efforts and purposes in its code of practice on research ethics:

1. Consultancy – the development and interpretation of existing knowledge for specific applications.
2. **Professional Practice** – the interpretation and application of knowledge within a professional setting.

To provide a bit more context, the RAE understands research as “original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce and industry, as well as to the public and voluntary sectors; scholarship; invention and generation of ideas, images, performances and artifacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and analysis of materials, components, and processes, e.g. for the maintenance of natural standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.” In the statement above, scholarship is defined “as the creation, development, and maintenance of the intellectual infrastructure of subjects and disciplines in forms such as dictionaries, scholarly editions, catalogues, and contributions to major research databases.”

**J. Buchanan’s Matrix**

Richard Buchanan of Carnegie Mellon University, and an editor of “Design Issues” magazine, has created a matrix that presents and structures relationships of elements for design research in terms that have applications well beyond design:
K. The Arts and All Other Disciplines

Most of the information and analysis provided above is applicable to the various arts disciplines as well as to all other disciplines. Similarities and connections among all disciplines are clear from these and many other perspectives. For example, modes of thought are shared among disciplines, yet there are significant distinctions among the disciplines. These differences can be described in many ways, but for our purposes now, we return to intent, content, process, and product.

Disciplines shape perspective and value. Individuals regularly exhibit more talent for one of the many disciplines. This talent or inclination is also observable with respect to modes of thought. These manifestations are everywhere observable, and codified in many ways.9

High-level intellectual practitioners in each discipline have a deep understanding of the intent, content, processes (techniques), and the products that are the foundational expectations for work in their field. For many reasons, however, it may be difficult for such practitioners to understand or accept the validity of a different intent, content, process, and product expectation in fields other than their own, especially with regard to a hierarchy of value.

The distinction between parity and equivalence becomes important in questions of value. A novelist creating a work with an artist as the main character may engage in years of research into all aspects of the designated art form, including its theoretical foundations and debates. The novelist may share intent, content, and processes of an arts historian to a great extent. However, the products of the inquiries, investigations, researches, or scholarship undertaken by the novelist and the historian will be different. For the novelist, the investigation and research is integral to the whole, but it is not the whole. To the historian, the presentation of what has been discovered, including interpretive aspects, is the whole.

Political and funding issues now arise, and will continue to arise, over what sets of intent, content, process, and product are labeled research. A significant question for art forms now presents itself: are there intellectually based efforts that include intent, content, process, and product that are not research?

Clearly, if one wishes to use the term research as an umbrella word for intellectual activity in all disciplines and covering all sets of intent, content, process, and product, there is the prospect of semantic change. Even though such a change may produce desirable public relations images, it does not erase typology. If everything becomes research, typologies will assert or reassert themselves and new words will be formed to delineate among the different types and products of research. It is difficult to change values simply by changing words or conflating meanings.

Another critical fact is the depth of knowledge and expansion of specific methodologies in each of the disciplines. Each discipline seems to exhibit its own infinity. Overspecialization may be a concern, but specialization is a reality. The depth of specialization and the degree to which methods are unique become an especially important consideration when disciplines are combined.

L. Disciplines in Combination

Disciplines can be combined in many ways. Thus, the range of inquiries that cross traditional boundaries has given rise to a fairly complicated terminology. Because goals and activities can be vastly different, agreement on terminology has assumed great importance. The
following definitions are based on those found in Interdisciplinarity: Problems of Teaching in Research and Universities, published by the Organization for Economic Cooperation and Development (OECD) in 1972, and quoted in Disciplines in Combination by the Council of Arts Accrediting Associations.  

1. **Discipline** – a specific body of teachable knowledge with its own background of education, training, procedures, methods, and content areas.

2. **Multi-disciplinary** – juxtaposition of various disciplines, sometimes with no apparent connection between them (for example, theatre + mathematics + history). The distribution of coursework in the humanities, social sciences, and sciences found in most undergraduate curricula can be described as multi-disciplinary.

3. **Pluri-disciplinary** – juxtaposition of disciplines assumed to be more or less related (for example, mathematics + physics, or French + Latin + Greek = “Classical Humanities” in France). A collection of courses, satisfying distribution requirements in the humanities, would most likely be pluri-disciplinary.

4. **Cross-disciplinary** – imposition of the approaches and axioms of one discipline on another. A literature course that has analyzed a novel by utilizing the musical structure of exposition, development, and recapitulation would be cross-disciplinary.

5. **Interdisciplinary** – an adjective describing the interaction among two or more different disciplines. This interaction may range from simple communication of ideas through the mutual integration of organizing concepts, methodology, procedures, epistemology, terminology, data, and organization of research and education in a fairly large field. Examination of how the ideals of the Enlightenment had influence on and were synthesized in eighteenth century painting and literature would be interdisciplinary. An interdisciplinary group consists of persons trained in different fields of knowledge (disciplines) with different concepts, methods, data, and terms organized into a common effort on a common problem with continuous communication among the participants.

6. **Trans-disciplinary** – establishing a common system of axioms for a set of disciplines. For example, anthropology is considered “the science of human beings and their accomplishments.”

**IV. Creation, Performance, and Research**

**A. Creation and Performance and Research**

When an artist or designer in any arts field sets to work, the unfolding process of creation involves and reveals decisions about intent, content, process, and product. There are significant numbers of artists whose knowledge and virtuosity are sufficient to produce viable, professional, or outstanding work without any documentable inquiry, investigation, research, or scholarship. The process of making often involves exploring, working with, and reconfiguring the nature of the material at hand, perhaps without reference to an external source. The work forms in the artist’s mind. In works that have internal integrative purposes, material in the work seems to inquire of itself, even to research itself in the perception of the viewer, reader, or hearer, and the creator.
There are also many instances of work in the arts where intent, content, and process involve documentable inquiry, investigation, research, or scholarship. The results of such research-based approach to subject matter inform the work or are integrated within it.

There are also instances where artistic works are the result of or part of a series of investigations or research into particular sensory phenomena and the psychological impressions they create.

In all of these cases, however, the product of creation and performance is a work of art.

B. Research and Creation and Performance

In the sections of this paper presented above, there is a broad and cursory description of research issues, classifications, and possibilities. All of these and many others not described represent possible connections between research and artistic creation and performance. Many such connections are already evident. The disciplines of art, dance, design, music, and theatre history are venerable examples. These particular combinations of the historical, scientific, and artistic modes of thought connect research methodologies and scholarly products with works of art and ideas that surround them. But the arts histories are just one example.

It seems clear that inquiry, investigation, research, and scholarship can be used as the starting point for addressing issues of artistic creation and performance. Conversely, artistic creation and performance can be the starting point for engaging issues of inquiry, investigation, research, and scholarship. Decisions about starting points are governed, to a large extent, by decisions about intent, content, process, and product.

C. A Few Basic Models

1. Work in an arts field conceived of as art without reference to a particular research methodology or to research that can be documented beyond the natural inquiry that occurs in compositional thought and process.

2. Work in an arts field that uses methods of inquiry, investigation, research, or scholarship to inform or support the final product.

3. Work in an arts field conducted in an experimental mode, usually to find out “how things work” in the manner of the scientific mode of thought and action.

4. Research and/or scholarship associated with one or more aspects of artistic creation and performance. This research might be based in the scientific or historic modes of thought. It might be centered on one or more specific disciplines in the humanities, sciences, or social sciences, the psychology of visual or aural perception, for example.

5. Work in one arts field combined with another discipline in the same field. One manifestation is individual capacity to produce credible or professional products in both studio and research terms. An example might be a choreographer also prepared to produce scholarly work in the field of dance history.

6. Artistic creation and performance combined with another discipline related to the art form, for example, dual capability as an artist and as a researcher in a field such as computer science, engineering, anthropology, psychology, education, and so forth.
Creation and performance can also be combined with research that considers the aesthetic and other philosophical dimensions of creative work. Theoretical efforts, explanations, and connections with other phenomena are all examples of this connection. The individual is dually prepared to develop products in the arts media and verbal form that connect creative work and performance methodologies and research methodologies in various ways and with various ends in view. This type of connection is related to, but different than, the historical consideration of artifacts or projects.

7. Research and scholarship associated with the aesthetic, the theoretical, and multiple connections with other disciplines undertaken as a single project or the subject of particular degree study. Significant understanding of one or more of the various arts disciplines in their multiple forms and purposes would be an essential background for such work.

There are many other ways to consider these issues. 11

D. A Virtual Infinity of Possibilities

The basic approaches described in Section C. above, other approaches not described, or reformulations and extensions of those approaches all represent specific conceptual frameworks. These frameworks provide a means for considering, making, and studying all sorts of informal and formal connections among artistic creation and performance and inquiry, investigation, research, and scholarship. All the elements in these connections can be treated with various degrees of formality with respect to intent, content, process, and product. No product can show all the elements of its creation or development.

It seems important to repeat here that no intellectually-based discipline or activity owns any of the three modes of thought identified, or any other that someone may wish to identify. For example, theoretical physics makes continual use of the artistic mode of thought. Artists and designers in all arts fields use the historical and scientific modes of thought constantly. Professionals steeped in the historical enterprise often use the artistic mode of thought to communicate their findings. However, using a particular mode of thought does not make one a professional of a particular discipline or in the methodologies associated with that discipline. Issues of our original distinctions among similarity, difference, and connection are all ways of working and shaping results.

And so, individual artists, researchers, and scholars face a virtual infinity of possibilities. All modes of thought, subject matters, and methodologies in all their differences and variety are available for use and combination.

This condition produces a rich pool of traditional and innovative choices for institutions who wish to prepare individuals in the creative and performing arts, research, scholarship, or combinations thereof.

V. Time

The sum total product of intellectual work is expanding at a rapid rate. Possibilities for developing connections among this work are also expanding at a rapid rate. However, while product and connection produce a virtual infinity of possibilities, time imposes its own discipline. Choices must be made. For most people, proficiency development takes a great deal of time, even in areas of
natural ability. To a great extent, choices about intent, content, process, and product structure the use of time.

The time available in traditional or prospective degree program frameworks has an impact on decisions about what is possible with regard to various connections among creation, performance, and research.

VI. Questions for Arts Schools and Departments

A. Common Questions, Multiple Answers

Each arts school or department will, by design or default, determine its purposes as well as its curricular and programmatic relationships to the similarities, differences, and connections among artistic creation and performance, and inquiry, investigation, research, and scholarship. The questions implicit in this analytical briefing, and especially the questions posed in this section, will surely have widely varying answers among institutions and programs.

These questions will also have different answers in different curricula. All these differences are positive. They must be preserved, even if attention to more intellectual territory results in a greater range of differences within and across institutions.

Looking at possibilities in this way obviates creating a false conflict between what is traditional, what is new, and what is possible. In matters of art, unlike some aspects of science, the new does not necessarily drive out the old. Respect for differences must include respect for traditional ways of doing things, especially since traditional programs do not seem to hamper creative abilities to extend traditions or break out of them altogether.

B. Choices – Content

As this paper has both indicated and demonstrated, many choices can be made and tested for their ability to work together in an educational program. Institutions have opportunities to determine the extent to which they wish to work from new perspectives, explore opportunities for uniqueness in one or more educational programs, and enjoy the adventure of pioneering, inherent public relations risks not withstanding.

Institutions and programs make choices that determine and reflect their decision about the following questions:

1. What does a creative and/or performing artist look like to us?

2. What does an arts or arts-related researcher look like to us?

3. What does a creative and/or performing artist who is able to use or do research or scholarship look like to us?

Questions such as the following are useful starting points: What do we want to do? What do we want to know? What do we want to help our students do? What is our approach to inquiry, to investigation, to research in one of its many formal senses, and to scholarship?

In what ways do we recognize and work with various sources of content such as knowledge already gained, experience, study, or research?
C. Choices – Categories

Institutions evaluate in many ways. As previously noted, different values and understandings produce different criteria and methods. At base, disciplines and professions evaluate differently, in part due to the different modes of thought indigenous to their work. Efforts to achieve parity can also have an effect. The arts have challenges due to the inadequacy of words or numbers to describe conditions or achievement in terms of the art forms themselves. In faculty evaluations regarding creation and performance, for example, some institutions have made distinctions on grounds such as the location of a performance or exhibition, the extent to which work is considered innovative or path breaking or original, various valuations of technical virtuosity as an indicator of achievement, the extent to which the work is representative of what professionals in the same field do, and many others.

Such efforts to categorize are difficult, and whatever decisions are reached need to be applied with flexibility. For example, technical virtuosity is often an essential ingredient of new expression. It does no good to think of something new if an individual’s means to express it are nonexistent. Innovation seems to be in the eye of the beholder; some will argue that it is ubiquitous; others, that it is rare. Just because something is new, it does not mean that it is better or even successful. The highest levels of technical proficiency can produce sterility or transcendence. Old works of art can be treated in new and path breaking ways. The influences of a particularly successful work are not always immediately apparent.

Categorization tied to rewards distribution can lead to collisions on fundamentals. These can be considered in terms of ontology, epistemology, and typologies; values and understandings; and the natures of specific kinds of work, for example. The arts face difficulties here because the kinds of functions that are the basis for parity are often not fulfilled in the same way as in other disciplines. For example, path breaking work in the arts has parity with path breaking work in the sciences, but beyond the quality of being path breaking, divergence is usually readily apparent based on differences in the ways that scientists and artists normally work, differences that can be manifested in terms of intent, content, process, and product.

For these and many other reasons, choices about evaluation categories and their applications in the arts require the most careful attention to ensure that they support the nature of what is being done in conjunction with institutional mission, goals, and objectives.

D. Frameworks and Choices

In Section IV.C. above, a few basic models for organizing programs were presented. Juxtaposed with these conceptual models centered on issues of content, there are also traditional and experimental frameworks for organizing teaching and learning towards such goals. In institutions, frameworks are usually identified by degree and program titles.

The fundamental question, therefore, becomes the extent to which the intent, content, process, and product choices inherent in any curricular model can be adequately encompassed within a particular degree or programmatic framework. It is important to make a distinction here between what a particular framework will accommodate and how that particular framework has been used traditionally.

When the professional and, educational worlds of the various arts disciplines begin to explore many of the connections barely indicated by this document and by other papers, discussions, and decisions on the same topic, the field will see the potential for work with connections that are not indigenous to traditional degree patterns and structures. This does not mean that older
structures will not accommodate a particular purpose, but there is no guarantee that they will. Expansions of possibility can be in terms of subject matter, time on task, degree structures, or other factors of engaging with the institution.

E. Frameworks and Programmatic Details

Program building requires the usual considerations about content, courses, lessons, projects, tutorials, evaluations, and so forth.

Questions of content raise questions of what should be included and what can be included given the resources available. Content issues also raise questions of authority. Whose opinion is to be respected regarding generic and specific issues of content?

To accomplish the specific goals of a particular program, what do students need to know about content and methodology? How do the answers to this question change as students want to pursue a certain profession, approach to content, problem, or other parameter? For example, to what extent is the program we are developing trying to help students do things such as: become researchers or scholars in the traditional sense; become multi-disciplinary practitioners in an artistic creation and performance and some research-oriented discipline in this art form and beyond; learn how to do various kinds of research associated with their art form, or at least some aspect of it?

To what extent is our program associated with a certain body of knowledge and skill development that involves creation, performance, and research components? To what extent is our goal to produce capability with a variety of research tools with various applications in creation and performance and/or documentable research or scholarship? To what extent are our program goals reflecting our discussions about the above issues and questions?

To the extent research or scholarly capability is a goal in a creation or performance oriented program, what kind and level of competency or virtuosity are we seeking?

For any program we create at any level, what kind of preparation is necessary with regard to each element of the program? For example, if a program is interdisciplinary at an advanced level, what preparation is required if students are to be able to work using differing content, intellectual methods, vocabularies, and habits of mind with disciplines to be combined?

F. Practical Considerations

1. As speculation and development continues, it is good to ask what we are trying to change, protect, and advance at our institution or within our school or department or within a field of endeavor.

2. What definitions of research and scholarship are accepted on our campus? What forces and ideas control these definitions? If on a specific campus a definitional change were needed to accommodate creation and presentation of art as research, what would be the nature, scope, and length of the effort necessary to make the change? What are the prospects for success in such an effort in the short- or long-term? What about questions of parity and equivalency?13

3. What issues of degree titles, content, specialization, and requirements are raised by the nature of any particular program that we contemplate?
4. If a program involves disciplines in combination, to what extent will cooperation be expected of other programs and specializations? What about the availability of advanced courses for students who are not majors in those fields? What kinds of cooperation are needed to achieve the goals of the program?

5. What public relations issues need to be considered? What about reputation, and particularly, the connection between reputation and the currency of credentials for students seeking employment?

6. What is the level of programmatic structure necessary to serve the number of students expected or projected to be served? For example, many research-based universities provide opportunities for qualified individuals to engage in uniquely designed programs at the masters or doctoral level. Such programs accommodate situations where an individual brings a unique set of preparations and a particular agenda for individual work. Such programs provide maximum flexibility since they can be designed for unique circumstances rather than for more universal application. Working with this issue, institutions ask themselves: how many people can expect to be oriented and sufficiently prepared to pursue the program that we are constructing? This is an important consideration given the wide variety of approaches to combinations of creation, performance, and research and to the vast number of possibilities of making connections in terms of modes of thought and disciplinary combination.

VII. Questions for the Field

A. What Does Research Mean?

Individuals concerned comprehensively with the various arts fields, and specifically with particular aspects of those fields have a particular challenge. What definition or definitions of research would they like generally accepted in higher education and among others engaged in intellectual work? How consistent is the definition that they would like to see with the definition that they do see? To what extent do they agree among themselves?

These questions are vital because they go to the heart of issues ranging from content to status. For example, many artists spend a lifetime in personal research associated with developing their own personal technique in order to build the virtuosity and habits of mind that enable them to produce the emotional and intellectual impact evident in their creative work.

These questions are also important because of the necessity of preserving different perspectives and approaches to intellectual work. For example, there is a clear distinction between work that creates its own facts and work that is based on facts that already exist. There are fairly general definitions of what research means in various disciplines of the humanities, sciences, and social sciences, and with respect to disciplines in the arts associated with humanities, sciences, or social science disciplines that address one or more aspects of arts content—the methods of history applied to works of art, or the psychological and physiological study of visual perception and understanding, for example. But what does the term research mean, or what would we like it to mean, in regard to its presence in or connections with creation of works of art? Specifically, what would we like it to mean generically, as well as what would individual art and design disciplines like it to mean for their specializations?
B. What Response to Scientism?

Science and the arts have had many historic productive relationships. The two endeavors often inspire each other, and scientists are often participants in and supporters of the arts.

Scientism is another matter. It is usually defined as a view of the world that believes and acts on the understanding that everything can be explained by the methods of the natural sciences. The fact that this has not been done so far or that certain problems or issues have neither replicability nor a mathematical base, does not mean that it cannot ever be done. But if so, there is a long way to go. At the moment, scientism is unproven. Scientism is a narrow view. Thus when used as a paradigm, it narrows. Many scientists reject it.

Even if there is not a total embrace of scientism in our society, there is no question that methods, approaches, terminologies, and agendas of science have tremendous public status. This is easily observable in the tendency of fields that are not necessarily centered in the scientific mode of thought to embrace and present themselves using all sorts of science-associated imagery and method. At times this is done to such an extent that they discredit the essence of their own discipline. This perceived need to appear to be scientific is a real consideration. To be successful in creating such images, those aspects of intellectual work, which are not science-centered in the way that the natural sciences are, must claim validity in terms set by scientists, or that sound scientific. This practice further strengthens the hegemony of the science associated image.

There are several fundamental responses to scientism. One is to accept it as a fact of life and develop programs and messages accordingly. Another is to reject scientism and, in so far as possible, work independent of its influences. A third approach is to reject scientism, but to accept and support science as mode of thought and a set of disciplines that can be the primary focus of intellectual work, and also support work with other modes of thought and in other disciplines. In other words, science is primary sometimes, but not always. The latter approach seems most productive.

C. What Relationship to Science in Higher Education?

The presence and prestige of science in higher education has a long history. For example, the 19th century saw the beginnings of the science oriented research paradigm and the penchant for defining work in the arts and humanities in scientific or quasi-scientific terms. This approach, derived at first from German concepts, underlies or supports such realities as funding structures and patterns for projects and salaries.14

There are positive ways for the arts to work in light of this legacy. This report and local action can broaden concepts regarding modes of thought and thus of creative work and research and their relationships in ways that will reach potentials of the 21st century. Science, technology, and art are intersecting in new ways with many more connections to be made. The arts also need to build on the fact that most colleges and universities support the arts irrespective of their views about work in the sciences. Such support indicates that the arts are valued. The basis for further advancement seems solid in most institutions. In part the arts have challenges with broadening perspective.
D. What Relationships to Word-Based Scholarship?

In higher education, the content and methods of the humanities and social sciences can exert powerful influences similar to those that science, especially scientism, exert in the society as a whole. The same generic questions apply to the modes of thought, disciplinary content, and habits of mind of these fields. How do we best deal with the similarities, differences, and connections among what humanities and social science efforts produce and what is produced in the creation and performance aspects of art? How do we best find grounds to discuss and work with issues of intent, content, process, and product? How do we best deal with questions of intellectual content and effort when the product is not the same?

E. How Do We Protect Valuable Time?

Whenever a particular mode of thought or discipline in the entire firmament of intellectual work becomes devalued to the extent that it must claim validity in terms set by others, time must be spent in translating the intent, content, process, and product of that work into the terms and value systems of the other mode of thought or discipline. Here is an analogy: a novelist who completes a work in English who is then required to translate it into another language spends time making the translation that could be spent writing another novel. Certainly, there are instances of authors translating their own works. But irrespective of the value inherent in such a practice, it still constitutes a time allocation from one thing to another. When such translations are required across disciplines and intellectual efforts centered in different modes of thought, precious time is lost and quality can be affected, especially as the translation burden is increased.

As those responsible for the fields, it is critical to ask ourselves about the risks involved in losing control of the evaluation criteria that are applied to various kinds of work that we do, including products of creation and performance. In many circumstances, ill-considered claims about research and its presence in, or connections with, creation and performance can produce impositions of evaluation and funding expectations and conditions that are incompatible with the nature of creation and performance.

F. How Do We Win-Win?

To move forward most productively, the arts fields need to win in two respects. Each needs to find increasingly productive and fruitful approaches to issues of inquiry, investigation, research, and scholarship both on their own terms, and as they may be integrated with creation and/or performance.

Concurrently, there is a need to preserve, enhance, and build more common understanding about parity among different types of intellectual work (1) centered in different modes of thought but connected with each of the others, and (2) centered in a particular discipline or specialization, but connected to and reflective of other disciplines and specializations and what they reveal. With careful thought, planning, and creativity, both of these goals can be accomplished. Indeed, achieving each goal in deeper ways depends on success in the other.

Artistic creators and performers applying their intellectual and physical skills over the centuries have created a record of human achievement that is equal to those in any other discipline.

Parity is already present, it is just not always recognized.
To protect and advance our fields, similarities, differences, and connections need to be developed and applied in ways that create the best sorts of conceptual and operational parity and avoid false equivalencies. The issues discussed in the brief can occupy decades of productive effort. To create our way forward, it is critical to ask those strategic questions now and find reasonable answers to them, lest tactical decisions driven by expediency create unintended consequences.

Schools and departments of the arts have wonderful prospects ahead. There is so much content to address. This paper celebrates the concept of possibility and expresses deep faith in the searching intellectual nature, the individual and collective wisdom, and the artistic inspiration, capability and vision of arts professionals serving as faculty and administrators in higher education, and also, in budding form, the students they are nurturing.
Notes


3. For example, an international conference titled, “Sensuous Knowledge 2: Aesthetic Practice and Aesthetic Insight” was held in Solstrand, Norway November 9-11, 2005 hosted by the Bergen National Academy of the Arts.

   This conference and its predecessor considered questions of art and design in terms of concepts like *science, research and development*, and *knowledge* and their relevance for artistic research and development. (This information courtesy of Joe Deal, Rhode Island School of Design.)


5. See Note 4 above.


7. This summary of the RAE is derived from an unpublished introduction to a 2004 NASAD Annual Meeting session on Research and Practice in Art and Design by Joel Deal. Other speakers were Jacques Giard (Arizona State University) and Gary Sangster (Art Institute of Boston at Lesley University).


9. One of the most popular perspectives on multiple modes of thought has been Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences* (New York: Basic Books, 1985). Gardner expands the idea of talent and natural inclination to the idea of multiple intelligences. Gardner defines these as linguistic, musical, logical—mathematical, spatial, bodily—kinesthetic, inter-personal, and intra-personal intelligences. Daniel Goleman has further developed and expanded the ideas of multiple modes of thought to include *Emotional Intelligence* (New York: Bantam Books, 2006) and *Social Intelligence* (New York: Bantam Books, 2006).

11. For other approaches, see the types of dissertations discussed in: James Elkins, “The PhD in Studio Art: Possible Configurations of Practice-Based PhDs,” in Printed Project (Dublin: Sculptor’s Society of Ireland, 2005).

In the cited text, Elkins discusses:

(1) research that informs the art practice:
   a. art writing;
   b. philosophy or art theory;
   c. art criticism;
   d. natural history, economics, or any number of fields outside the humanities;
   e. technical report; and

(2) research that is not a support, but is part of the artwork itself:
   a. artwork and research [dissertation] comprise a new multidisciplinary configuration;
   b. scholarly work [dissertation] and creative artwork are wholly separate projects;
   c. dissertation is an artwork both text and images.


Institutions concerned with faculty issues in this are invited to view:


Both documents are available for purchase from the Publications section within any of the Web sites of the four arts accrediting associations (NASM, NASAD, NAST, NASD) linked at: www.arts-accredit.org.