Research Priorities
for Dance Education:

A Report to the Nation

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Foreword

The Research in Dance Education (RDE) project grew out of a long-term national need in dance education – a need to know what researchers in dance and allied fields have studied over 80 years, what they learned, and if, and how, existing research impacted teaching and learning in and through dance.

As dance educators, we knew that research had been done in dance and that it began to accumulate following the development of the world's first dance major program at the University of Wisconsin-Madison in 1926. Over the decades this research was deposited in libraries scattered all over the country, finding a home in the literature and research of our and other disciplines – faculty published their work when and where they could. What our field lacked was a comprehensive knowledge of what was written; by whom, where it was located, and what promise this hidden resource might have for teaching and learning in and through dance.

In 2001, the National Dance Education Organization received funding for a three year project from the United States Department of Education that allowed the discipline of dance, for the first time, to identify and analyze existing literature and research in dance/movement education from 1926 to the present.

The Research in Dance Education project set out to answer the following questions:
- What research exists in dance education? When was it done? Where is it?
- What patterns, trends, and gaps may be identified by analysis of these data?
- What are the implications for understanding the scope of this information for dance, arts education, and U.S. education?
- What recommendations for the future of dance arts education may grow out of this project?

The *Research Priorities for Dance Education: A Report to the Nation* (2004) provides a summary of the information gleaned over 76 years of literature and research in dance education. The Research in Dance Education database (RDEdb), available online at www.ndeo.org/research, contains vast amounts of information for more than 2,800 documents, 2,339 of which comprise the study.

Knowing what literature exists, putting it into historical context, and understanding its content, implications, and impact has made it possible to reveal important patterns, trends, and gaps that have emerged in dance/movement education research over time. The discovery and recovery of decades of field productivity has resulted in a reclaiming of our history, and a renewed appreciation for how learning in, through, and about dance enriches learning, working, and life itself.

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Project Director, Research in Dance Education

Introduction

Research in Dance Education Project

The Research in Dance Education (RDE) project was executed in three phases:

- Phase I: Data Collection;
- Phase II: Data Analysis, Conclusions and Recommendations; and
- Phase III: Development of the national web based Research in Dance Education database (RDEdb), publication of *Research Priorities in Dance Education: A Report to the Nation,* and the establishment of a Center for Research in Dance Education (Temple University, Philadelphia, PA).

Literature and research (1926-2002) was accessed by field researchers in one of three content areas: (1) Unpublished Literature (dissertations, theses, conference proceedings, technical manuals, monographs, etc.); (2) Published Literature in Dance Education (articles, editorials, and reviews in periodicals; and federal publications); and (3) Published Literature in Other Disciplines (e.g. anthropology, cognition, ethnography, educational psychology, kinesiology, medicine and science, physical education, psychology, sociology, somatics, body therapies, and so forth).

Thirty-seven field researchers and ten key personnel reviewed over 13,000 primary source materials in unpublished literature and research, and published literature in dance and other disciplines. Researchers scoured more than 110 collections in colleges and universities and reviewed 190 separate journal titles representing field research activity from 1926 to the present. Currently, the Research in Dance Education database (RDEdb) contains over 2,800 citations that document how the literature relates to 820 cells of information addressing U.S. Education Issues, Populations Served, and Areas of Service in dance.

Research Priorities for Dance Education: A Report to the Nation

This *Report to the Nation* contains an analysis and summation of the research uncovered during the 15 month collection phase (June 1, 2001 – August 31, 2002), "Phase 1: Data Collection," of the Research in Dance Education project. The report's purpose is to reveal the patterns, trends, and gaps of research produced between 1926 and the present. By illustrating research productivity in dance/movement education from its beginnings to the present, the report provides recommendations for dance education research in the twenty-first century.

The research collected has been organized into three basic content areas as described above (*Unpublished Documents, Published Literature in Dance Education*, and *Published Literature in Other Disciplines*). Chapter 1: Methodology, written by Research in Dance Education Project Director, Jane M. Bonbright, outlines the three phases and methodology of the RDE project. Chapters 2, 3 and 4 review each of the three content areas in four time periods and present composite analyses of the *patterns*, *trends,* and *gaps* uncovered over 76 years of literature and research; and each Content Area Chair and Coordinator notes research methodologies appropriate to their field of study, as needed. Chapter 2: *Unpublished Literature* is written by Thomas K. Hagood (Chair) and Carol M. Press (Coordinator), Chapter 3: *Published Literature in Dance Education* is written by Karen K. Bradley (Chair) and Loren Bucek (Coordinator), and Chapter 4: *Published Literature in Other Disciplines* is authored by Susan Koff (Chair) and Sara Lee Gibb (Coordinator). Chapter 5: *Synthesis and Comparison of Content Areas*, written by Rima Faber (Research Director) and Jane Bonbright (Project Director) provides a synthesis and comparison of the three content areas from 1926–2002. In the final chapter of this report, Chapter 6: *Recommendations*, key personnel provide recommendations for dance, arts, research, and education communities.

Intrinsic and Instrumental Learning; Quantitative and Qualitative Research

In *Research Priorities for Dance Education: A Report to the Nation*, dance education is looked at both for its intrinsic value as arts education and for its instrumental value as a tool for facilitating learning in other content areas and disciplines; indeed for life force skills, as well. Often viewed by educators and art specialists as exclusive of one another, we see them as complimentary – both important in the universe of learning. The developmental and academic benefits promoted in and through dance include heightened artistic experiences that are the right of all students to enjoy.

The report also addresses a national dilemma concerning the pursuit of scientific research that seeks to correlate student achievement with the learning of the arts, versus qualitative research that seeks to unpack complex phenomena associated with human beings in teaching and learning environments. To reduce everything to statistics does not give one much sense of complexity; yet, to not strive for data makes it difficult to articulate, and probably truly understand, outcomes in student achievement and program effectiveness. Again, through looking at 76 years of reviewing literature in dance and other disciplines, we see diverse research methods necessary in the universe of learning. The diagram below presents, we believe, a more holistic and realistic view.

Qualitative

Intrinsic ←→ **Instrumental**

Quantitative
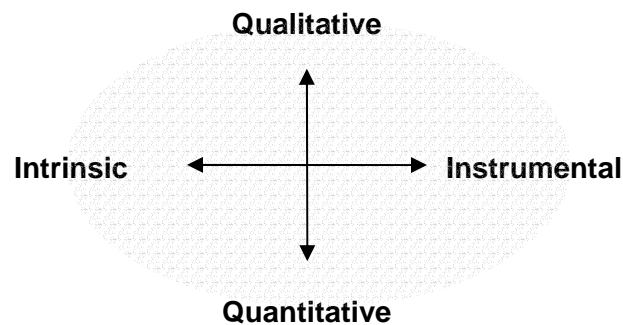
Research in Dance Education Database

An important outcome of the Research in Dance Education project was the online Research in Dance Education database (RDEdb). It is hoped the RDEdb will allow future researchers to build on what information exists, encourage replication of significant research, and facilitate the development and execution of future research informed by research in the past. Furthermore, it is hoped, field use of the information included in the RDEdb will drive data-based decisions, improve instruction in research, encourage study and use of more inclusive methodologies spanning qualitative to quantitative research, and explore intrinsic to instrumental values in arts education.

Research Priorities for Dance Education: A Call to Action

Research Priorities for Dance Education: A Report to the Nation is a call to action to dance, arts, research, and education communities. It is hoped that the nation heeds the call for the good of future generations involved in all aspects of teaching and learning and, further, that public and private funders support research in these domains for the good of the nation.

The National Dance Education Organization is indeed grateful to the U.S. Department of Education for making this work a reality for the discipline and nation.

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Historical Background

Dance was introduced into nineteenth-century American education primarily for its healthful and social benefits. Folk dancing was an important component of early K–12 physical education programs and was considered an acceptable physical activity for young women.

European folk dances—the "national dances"—were viewed as appropriate activity for children of both sexes because learning in and through folk dance taught rules of courteous behavior, reinforced accepted gender roles, and was thought to help assimilate a diverse and sometimes fractious immigrant population.

In the first decades of the twentieth century, practice of the "national dances" slowly gave way to educating through rhythmic or "natural" movement. Gertrude Kline Colby's program for dance education at Teacher's College, Columbia University, was an important early model for teachers who embarked on this more creative and educationally aesthetic dance education program for America's children.

In the 1930s and 1940s dance education took on many of the characteristics of concert dance, becoming more art-oriented and influenced by professional standards in dance composition and performance. However, even with these new developments in the field, where dance remained part of a school's physical education program, its recreational and social contexts continued to dominate its practice. In most American schools dance education remained a "square, folk and social" event.

Beginning in the 1960s, and lasting into the present time, a national struggle ensued for aligning dance with arts education and separating it from its long-term, and largely recreational association with physical education. Following similar developments in America's universities and in government funding for arts and education programs, dance education programming in K–12 education has become more arts-oriented, moving away from its former identification as an adjunct within a larger program of physical education. Today a growing number of states, districts, and individual schools accept and endorse the idea that dance education is arts education and that sequential instruction in and through dance should be provided by a dance specialist.

The Evolution of Dance as Art in Education

Dance found its first home in higher education in physical education programs for women. In 1926, the first dance major was approved at the University of Wisconsin-Madison and, between 1926 and the early 1970s, most university dance programs continued to be affiliated with women's physical education programs. However, as a result of developments in the field, Title IX (1972), and the Equal Educational Opportunity Act (1974), men's and women's physical education merged into coeducational programs and the profession turned more fully toward athletics and the science of sport. With a less nurturing environment in physical education for the study of dance as art, there came a corresponding realignment for dance with other arts disciplines.

Dance migrated to the fine and performing arts in newly created Colleges of Applied, Fine or Performing Arts. Arts based academic units provided a logical home for dance education programs. Over the next 25 years, dance continued to clarify its focus as arts-related. The shift in academic identification for dance is illustrated in the following statistics. In 1986, 250 colleges and universities offered dance major and minor programs in the United States; and, 63% (158) delivered dance through the fine and performing arts while 37% (92) delivered dance through health, physical education, recreation, and dance (HPERD).[1] By 2001, 717 colleges and universities offered dance major and minor programs in the United States; and, 81% (577) offered dance programs through colleges of fine and performing arts while only 19% (140) continued to align dance with HPER disciplines.[2] In essence, over 15 years (1986-2002), the number of colleges and universities offering dance programs tripled; and, dance under fine arts increased from 63% to 80% and dance under physical education decreased from 37% to 19%.

Throughout this period of transition, professional preparation and training in dance pedagogy increasingly turned toward meeting the standards and aesthetics of concert dance. Dance students were trained in creative and artistic processes that involved creating, performing, and analyzing dance; these processes were founded in problem-solving techniques, critical thinking skills (deconstruction and reconstruction, critical analysis, comparative and evaluative analyses); and in the cultural, historical, social, and artistic contexts of dance.

Today, dance major programs generally require 50 and 90 credits in the major concentration, while physical educators who take dance as part of a physical education certification program may be required to study as few as 2, rarely more than 15, credits in dance. Yet while teacher-training programs in physical education and dance no longer share a common career path, many state certification programs still continue to tie studies in physical education and dance under one subject title. Such certification standards do not recognize that contemporary teacher training programs in physical education and dance no longer share common educational goals or perspectives.

As we enter the twenty-first century, states are revising dance certification requirements to reflect the pedagogical shifts in training evidenced over the past three decades, and to meet the legislative requirements such as those found in "No Child Left Behind" (2001), a federal mandate requiring that states hire only "highly qualified" teachers by academic year 2005-2006.[3]

Federal and State Support of Arts Education

Since 1992, the arts have been a part of the nation's goals and standards in education. Legislative mandates enacted in the administrations of Presidents Clinton (*Goals 2000: Educate America Act*, 1992) and George W. Bush ("No Child Left Behind Act," 2001) affected arts education in three important ways. At the federal level: (1) dance was recognized as a separate discipline; (2) dance was aligned with the arts (dance, music, visual arts, and theatre); and (3) the arts were recognized as core subjects of equal value to other academics (math, science, language arts, history, and so forth). In addition, "No Child Left Behind" legislation required accountability from states emphasizing scientifically-based research and documentation.[4]

Other significant initiatives that occurred over the decade included: Goals 2000 funding to states building arts education programs; national standards for arts education (1992–1994); national assessments in the arts (1992–1998); the State Collaborative for Assessments in Student Standards (SCASS); three national research surveys on arts education (Fast Response Survey-I and II; and the National Assessments for Educational Progress [NAEP]); the Interstate New Teachers Assessment and Support Consortium (INTASC) guidelines for teacher certification; and the promise of national assessments in the arts by year 2008 from the National Assessment Governing Board.

Dance achieved national significance as it joined forces with other disciplines in both arts and education to address the national agenda. A national agenda for dance arts education developed in the early 1990s as a result of the intersection between federal support for arts education and the evolution of dance as an art form in education. The national agenda for dance arts education was aligned with public policy, public legislation, and public funding for the arts.[5]

National Dance Education Organization

The National Dance Education Organization was established in December 1997 by the dance arts education community in the United States to respond to the national agenda in arts education in PreK–12, higher education, private schools of dance, outreach programs of performing arts organizations, community centers, and cultural organizations.

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[1] Lundahl, V. (1986). *Dance Directory: Programs of Professional Preparation in American Colleges and Universities.* Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

[2] Bonbright, J. (2001). Database of Higher Education Institutions Offering Dance Minor and Major Programs. Bethesda, MD: National Dance Education Organization.

[3] The Bush administration's "No Child Left Behind" legislation (2001) requires that states hire only "highly qualified" teachers in classrooms by academic year 2005-2006. "Highly qualified" requires the teacher have an undergraduate degree, teach in their area of concentration, and be certified (or have alternative certification meeting their state house standards).

[4] The Bush administration's "No Child Left Behind" (2001) legislation significantly increases the testing requirements for states and sets demanding accountability standards for schools, districts, and states with measurably adequate yearly progress objectives for all students and subgroups of student defined by socioeconomic background, race-ethnicity, English language proficiency, and disability. School-wide and targeted assistance programs are required to use effective instructional methods and strategies based on scientifically based research.

[5] For a more detailed analysis of the evolution of dance as arts education and the evolution of the federal interest in and support of arts education, see: Bonbright, J. (2001). "National Support for Arts Education: Linking Dance to Arts Education Reform," *Journal of Dance Education,* 1(1), 7-13.

Chapter 1. Research in Dance Education: Methodology

By Jane M. Bonbright, Ed.D.

PHASE I: DATA COLLECTION

The Research in Dance Education (RDE) project involved 37 field researchers, ten key personnel, and other arts and education research specialists who scoured over 13,000 primary source materials in dance and related fields from 1926 to the present. Primary sources included unpublished documents (dissertations, theses, conferences proceedings, monographs and technical manuals) and published literature in periodicals representing both the field of dance and other disciplines.[1] A Content Area Chair and Content Area Coordinator led the research teams in each of the three content areas. Research specialists and a dance library science specialist were part of the key personnel that developed research and library science design and methodology.

Operational Definition of Dance Education: Constructing the *Grid Matrix*

In order to define "dance education" for the purposes of the RDE project, a *Grid Matrix* was developed. The *Grid Matrix* served as an important screening tool that allowed vast amounts of information to be organized, discreetly identified, included, or, equally as important, excluded from data collection. The *Grid Matrix* was constructed in the form of a table with 20 *U.S. Education Issues* (referred to as *Issues* throughout the report) listed along the horizontal axis, and 14 *Populations Served* and 27 *Areas of Service* in dance listed along the vertical axis. The resulting *Grid Matrix* produced 820 cells of information and, in essence, defined the scope of "dance education" under review. Descriptors identified the following domains of knowledge. [Appendix A: Grid Matrix and Descriptors.]

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U.S. Education Issues

Health, Creative Process, Learning Styles and Theories, Kinesthetic Learning, Student Achievement, Affective Domain, Student Performance, Policy, Funding, Certification, Uncertified Teachers, Teacher Standards, Equity, Multicultural Education, Children-at-Risk, Integrated Arts, Interdisciplinary Education, Arts Education, National Content Standards, and *Brain Research.* The *U.S. Education Issues* were derived from two sources: (1) a 1998 U.S. Department of Education study that identified national education issues of concern in the United States; and, (2) issues that the discipline of dance nationally addressed, or potentially could address, in U.S. education (e.g. kinesthetic learning, creative process, integrated arts, interdisciplinary education, arts education, and brain research). The *Issues* were arranged along the top of the *Gird Matrix* in order of their appearance in the historical record as a discreet issue of education focus, from oldest to most recent. [Appendix A: Grid Matrix and Descriptors.]

Dance *Populations Served*

Early Childhood and Pre-Kindergarten, K–4, 5–8, 9–12, Higher Education, Different Abilities, Seniors and *Elderly, After School Programs, Outreach Programs, Private Studios, Artists, Administrators* and *Policy Makers, Community and Family,* and *World Cultures.* Identification of *Populations Served* was derived from

the diverse environments that NDEO serves to advance teaching and learning in and through dance education centered in the arts. [Appendix A: Grid Matrix Descriptors]

Dance *Areas of Service*

Advocacy, Artists-in-Schools, Technique, Curriculum and *Sequential Learning, Creating* and *Choreographing Dance, Performing, Critical Analysis, Creative Process, Child Development, Cognitive Development, Somatics and Body Therapies, Dance Science and Medicine, Higher Order Thinking Skills* and *Problem Solving, Historic* and *Cultural Contexts, State* and *Local Education Agency Standards, Interdisciplinary Education, Assessments for Student* and *Teachers, Assessments for Program Effectiveness, Assessments for National, State* and *Local Education Agencies, Opportunities-to-Learn, Pedagogy, Teacher Preparation* and *Training, Certification, Licensure, Resources, Research,* and *Technology. Areas of Service* in dance were identified from technical and professional services supporting teaching and learning. [Appendix A: Grid Matrix and Descriptors.]

Content Areas

The Research in Dance Education project included published and unpublished literature written in the United States between 1926 and 2002. Documents considered for review included research based studies in the content areas of: (1) *Unpublished Documents* (dissertations, theses, monographs, conference proceedings and other technical reports; (2) *Published Literature in Dance Education* (journal articles in periodicals focusing on dance); and (3) *Published Literature in Other Disciplines* (anthropology, arts and aesthetics, child development, cognition and intelligence, educational psychology, kinesiology, medicine and science, music, physiology, physical education, psychology, science and medicine, somatics and body therapies, theatre arts, etc.).

In an effort to facilitate clear presentation of the Research in Dance Education report, some of the content areas titles have been abbreviated. *Unpublished Documents* remains unchanged; *Published Literature in Dance Education* is referred to as *Literature in Dance Education;* and *Published Literature in Other Disciplines* is referred to as *Other Disciplines.*

Database Searches

Extensive database searches were conducted for unpublished and published literature using search words drawn from the G*rid Matrix* (*Issues*, *Populations Served*, and *Areas of Service*). Extensive database searches included: Art Abstracts, Article First, multiple Arts and Humanities indexes, Digital Dissertations, Education Abstracts, Educational Research International Clearinghouse (ERIC), Humanities Abstracts, Library of Congress, MLA, New York Public Library, OPAC, Pro Quest Digital Dissertations, Papers First, RILM, Teaching-Learning Bibliographies, Wilson Select, World Catalog and known existing research compendia.

> Extensive database searches were conducted for unpublished and published literature using search words drawn from the *Grid Matrix* (*Issues, Populations Served,* and *Areas* of Service).

Searches produced 3,500 plausible titles in literature and research whereas physical searches produced over 13,000 plausible documents. Much of what was identified and reviewed in the RDE project was not available in electronic databases nor converted to electronic format.

Database searchers in the different content areas included the following three areas: *Unpublished Documents, Published Literature in Dance Education,* and *Published Literature in Other Disciplines.*

Unpublished Documents

Extensive database searches were conducted to identify and locate dissertations, theses, monographs, and other unpublished documents that were accessible in institutions throughout the United States. However,

database searches also uncovered rogue documents that were little known or not well documented, hidden in archives, or lost to the discipline. In addition to the above database searches, historically prominent graduate programs in dance and dance education were identified and arrangements were made to visit these collections for physical searches.

Previously compiled bibliographies on graduate research in dance were helpful in identifying documents in this content area. *Research in Dance Education Monographs I-IV* (published by the National Dance Association/American Alliance for Health, Physical Education, Recreation and Dance) were invaluable sources for identifying active masters and doctoral programs in dance, and for identifying thesis and dissertation titles generated between 1926 and 1990. A corresponding search and review effort focused on identifying and locating conference proceedings, private monographs, and other materials on dance education written over the same period that had not found broad dissemination or publication. Scholars in the field and other practicing and retired dance educators were interviewed to help locate remaining dance theses, dissertations, conference proceedings, and monographs**.** [Appendix B: Unpublished Document Collections.]

Published Literature in Dance Education and *Published Literature in Other Disciplines*

The RDE dance library specialist and key personnel conducted database researches on current and discontinued periodicals in dance and other disciplines published 1926–2002. Searches produced several hundred periodicals that became potential sources for research.

Citations and titles of journals gleaned from the above searches were separated into the two content areas, *Published Literature in Dance Education* and *Published Literature in Other Disciplines.* Content Area Chairs and Coordinators were assigned field researchers, citations and journals to be reviewed; and, when field researchers completed assignments, new journals were awarded. [Appendix B: Journals in Literature in Dance Education and Other Disciplines.]

Time Periods

The 76–year scope of the Research in Dance Education project (1926–2002) was divided into four time periods based on important evolutional changes in the field of dance education:

> The 76-year scope of the Research in Dance Education project (1926-2002) was divided into four time periods based on important evolutional changes in the field of dance education.

- 1926–1950: From the initiation of the first dance major program in higher education to the post World War II era;
- 1951–1964: From the post-World War II years to the period of educational and social reforms of the Johnson Administration's Great Society programs;
- 1965–1979: From the years of Great Society reforms, to the end of the decade of the "dance boom" in higher education and the initiation of federal interest in, and support of, the arts in the United States.
- 1980-2002: From the end of the "dance boom" to the development of dance as an art form in education with federal support expanding to arts education legislation, policy, and funding.

Procedures Manual

A comprehensive Procedures Manual outlined RDE methodologies, tools (*Grid Matrix*, forms, instructions and descriptors), procedures, content areas, timelines and flowcharts of key personnel. In addition, a comprehensive Database Manual detailed all aspects of collecting data specific to 150 fields. The RDE Procedures and Database Manuals were used by RDE personnel to answer policy and procedural questions.

Literature and Research Review Forms

Field researchers were chosen from a rich pool of applicants representing the scope and breadth of professionals in American dance education. Seasoned professionals, teachers, and recent graduates of masters and doctoral level programs combined to provide a diverse field researcher group that made it possible to access a large and diverse body of field literature.

Four levels of review were implemented to support a multi-layered system of checks-and-balances. Information gleaned from original research documents was entered onto a standardized review form (see Form "A" below). Forms then progressed: (1) from the first level of review and initial citation in the hands of the individual field researcher; (2) to a second level of review by the Content Area Coordinator; (3) to a third level of review by the Content Area Chair, and (4), to final review and approval by the RDE Research Director. Upon acceptance of the Research Director, citations were entered into the database. Questions and clarifications were resolved at each of the four levels of synthesis and editing. Primary source materials were re-researched, reviewed, and documented second and third times, as needed.

"A" Form

Standardized A Forms were developed to collect information related to five areas of interest: (1) each document's fit with the *Issues, Populations Served* and *Areas of Service* outlined in the *Grid Matrix*; (2) complete citation information (e.g., author, title, year, type of document and respective location or journal); (3) research methods and techniques used in the study; and (4) essential research characteristics that defined works as research-based. Descriptors for *Issues, Populations Served, Areas of Service*, research methods, research techniques, and essential research characteristics were provided in the Procedures Manual. [Appendix C: A Form and Descriptors.]

Only those documents determined to be within the purview of the *Grid Matrix* (fitting the descriptors for dance education as defined by the RDE project) and to address teaching and learning in and through dance, were included in the RDE database. It is important to note that whether or not a document reached A Form review had nothing to do with evaluating research efforts on a scale of "good" or "bad."

"B" Form

Standardized B Forms were developed to provide opportunity for more detailed, narrative commentary on a study's research hypotheses, question(s) or problem(s); methodologies used; variables and controls; and results and conclusions. In addition, the B Form cited potential contributions the study made, or could make, to the field (in advocacy, pedagogy, policy, or other); and, provided comments, recommendations, and suggestions about ways the research could impact future directions in dance education research. [Appendix C: B Form and Descriptors.]

> Standardizing A and B Forms was challenged by difficulties inherent in comparing research methods, research techniques and essential research characteristics for documents that spanned eight decades of history, involved multiple disciplines, and embraced diverse modes of inquiry.

In the first year of collection (June 1 – August 30, 2002), 603 of 2,339 studies accessed were determined to require additional analysis of research design.

Research Methods, Techniques and Essential Research Characteristics

Standardizing A and B forms was challenged by difficulties inherent in comparing research methods, research techniques, and essential research characteristics for documents that spanned eight decades of history, involved multiple disciplines, and embraced diverse modes of inquiry. The majority of research methods and techniques included on A and B forms favored post-positivist inquiry; however, forms included reference to the spectrum of quantitative and qualitative research designs. In undertaking this task, RDE

key personnel well realized the charge set before the field of dance – the need to clarify research terminology, and the need to do so through field dialogue and consensus.

NDEO intends to initiate field conversations about research methods, research techniques, essential research characteristics and, equally important, content in need of research. However, to move forward with the RDE project, extensive efforts were made to solicit field opinion and commentary on terms and definitions used with dance, arts, and education communities.

> In undertaking this task, RDE key personnel well realized the charge set before the field of dance – the need to clarify research terminology, and the need to do so through field dialogue and consensus.

Research Methods

For purposes of the RDE study, the following major research methods were referenced: *Descriptive, Correlation, Ethnographic and Anthropological, Evaluation, Curriculum, Historical and Biographical, Philosophical, Experimental,* and *Quasi-Experimental.* [Appendix C: A Form and Descriptors.]

Research Techniques

For purposes of the RDE study, the following major research techniques were referenced: *Anecdotal, Action Research, Case Study, Computer Simulation, Content Analysis, Focus Groups/Interview, Meta-analysis, Observation, Survey/Questionnaire,* and *Thinking Aloud.* It is acknowledged that the list of research techniques used in the RDE study reflect a predominance of descriptive research methods. [Appendix C: A Form and Descriptors.]

Essential Research Characteristics

Research designs are clarified when researchers sequence the component parts of a project from start to finish. For the purposes of RDE, six standard questions regarding essential research characteristics were considered in the assessment and review of all documents. The questions posed were:

1. Does the research design pose clear and unambiguous question(s), problem(s), or effect(s)?
2. Does the design include a clear and reasoned discussion of appropriate methodologies for addressing a question(s), problem(s), or effect(s)?
3. Does the design include an organized and comprehensive review of related literature?
4. Does the design present clear and reasoned discussion of techniques and methods for collecting, recording, and storing data?
5. Does the design include a clear and concise analysis of the data and present a clear and organized set of conclusions?
6. Does the design present an organized and relevant set of references and bibliographic citations?

Development of the Data Base

A Microsoft Access database was developed to house the information collected in A and B research forms. The Research in Dance Education Database (RDEdb) required more than 150 fields to track information, pertaining to citations, *Issues, Populations Served, Areas of Service*, research methods, research techniques, essential research characteristics, and deeper narrative commentary.

At the time of this study, 2,339 records were included in data analyses.[2] Two years later, at the time of publication of *Research Priorities for Dance Education: A Report to the Nation,* the RDEdb contains more than 2,800 records; and, it continues to grow. The RDEdb is available on the web at: www.ndeo.org/research.

PHASE II: DATA ANALYSIS

Descriptive Analyses

Data analyses were executed on the 2,339 studies accessed from June 1, 2001—August 30, 2002, the first 15 months of the RDE project.

Several types of data were gathered for this report:

1. Data focusing on the titles and content of the work in relation to its historic time frame as well as the *Issues, Populations Served, and Areas of Service* as outlined in the RDE *Grid Matrix;*

2. Statistics indicating the actual number of documents ("n" numbers) reviewed in the study that addressed one specific *Issue, Population Served*, *Area of Service,* research method, research technique, and essential research characteristic in a given time period;

3. Percentages indicating the relative amount the "n" number is to the whole in a given time period; and

4. Statistics indicating the composite reference number or the number of cross-references involved in two or more *Issues*, *Populations Served*, or *Areas of Service.*

Actual numbers and composite reference numbers provided important insight into the multiplicity of research methods, applications, and techniques used individually and collectively in one or more time periods.

For example, statistics representing composite reference numbers reflect the condition that the content of any given article could address up to five *Issues* (e.g., *Arts Education, Certification,* and *National Standards*); cite up to five *Populations Served* (e.g., *K-4, 5-8, 9-12, Artists,* and *Different Abilities)*; and identify up to five *Areas of Service* (e.g., *Curriculum and Sequential Learning, Pedagogy,* and *Artists in Schools* programs). Thus*,* in the example provided, the same article would be "counted" as being related to three *Issues*, five *Populations Served*, and three *Areas of Service.* Composite reference numbers provide important information about the multiple channels of delivery and services one study may cover relating to *Issues*, *Populations Served,* and *Areas of Service*.

Actual numbers (cited as "n") were derived from extensive database queries for individual and collective fields involving content areas, time frames, *Issues, Populations Served, Areas of Service*, research methods, research techniques, and essential research characteristics. Percentages were calculated based on the 'n' universe in the referenced era.

Actual numbers and composite reference numbers illustrated the multiplicity of research methods, applications, and techniques used individually and collectively in one or more time periods. Specific titles were important as they provided needed context to the discussion at hand.

Analysis Tables

A total of 21 *Grid Matrix* tables were developed to show the composite reference numbers that filled each of the 820 cells of information provided in the *Grid Matrix* (*Issues, Populations Served*, and *Areas of Service*).

- Four tables represented each one of four time periods (1926–1950, 1951–1964, 1965–1979, and 1980–2002) and a fifth summary table represented the entire period studied, 1926–2002. This was replicated for each of three content areas; thus, producing 15 *Grid Matrix* tables.

- Four additional tables represented "All" content areas in each one of four time periods (as above) and a fifth summary table ("All-All") represented all content areas in all periods (1926-2002); thus, producing 5 *Grid Matrix* tables for "All" content areas. [Appendix D1: "All-All" 1926-2002.]

- One summary table, broken out by content area, represented data for all research methods, research techniques, and essential research characteristics in each time period and collectively for all time periods. [Appendix D2: "Research Methods, Techniques, Characteristics 1926-2002."]

The complete set of color *Grid Matrix* charts is available on the NDEO web site: www.ndeo.org/ research.

Some tables in the text of the document cite composite totals. These numbers are sums of the composite reference numbers totaled across or down horizontal and vertical axes of the *Grid Matrix.*

Predominantly, tables in the text of the document cite actual numbers of documents ("n") and these were derived through extensive queries in the Research in Dance Education database (RDEdb). Queries were executed on each of 20 *Issues,* 14 *Populations Served*, 27 *Areas of Service*, and all research methods, techniques and research characteristics for each time period (1926-1950, 1951-1964, 1965-1979, 1980-2002), and for all time periods (1926-2002).

Finally, table cross comparisons of both composite reference numbers and actual number of documents were done to illustrate *patterns, tends,* and *gaps*. Respectively, tables were developed to rank order the *patterns, trends,* and *gaps* for each content area in relation to the specified time periods and in relation to the aggregate time period.

Definitions of *Patterns, Trends,* and *Gaps*

For each individual time period (1926-1950, 1951-1964, 1965-1979, and 1980-2002) and for all time periods (1926-2002), the "landscape" of data and tables is revealing, including full and empty categories. These data illustrate general *patterns, trends,* and *gaps* in discipline content addressing *U.S. Education Issues,* dance *Populations Served* and A*reas of Service* as well as in research methods, techniques, and essential research characteristics*.*

> For purposes of the RDE study, *gaps* were identified in *Issues, Populations Served,* and *Areas of Service* that received less than 10% of research focus in any given time period; or averaged 10% or less over the 76-year span of the RDE project from 1926-2002.

Below are the definitions for *patterns, trends,* and *gaps*.

Patterns

Patterns are an arrangement of order of like characteristics *within* each of the four time periods (1926–1950; 1951–1964; 1965–1979; 1980–2002). *Patterns* could be the same or different *within* or *among* individual time periods. *Patterns* were revealed as data were collected, analyzed, and referenced in relation to the content of the *Grid Matrix* (*Issues*, *Populations Served*, and *Areas of Service).*

Trends

Trends are an arrangement of *patterns* over two or more time periods (1926–1950, 1951–1964, 1965–1979, and 1980–2002). *Trends* were revealed by looking at the progression or regression of data in relation to the four time periods and overall placement within the *Grid Matrix*.

Gaps

Gaps are an absence of information, a void, an empty space or interval, or a suspension of continuity.

For purposes of the RDE Project, *gaps* were identified in *Issues, Populations Served,* and *Areas of Service* that received less than 10% of research focus in any given time period (1926-1950, 1951-1964, 1965-1979, and 1980-2002); or averaged 10% or less over the 76 year span of the RDE project from 1926-2002. *Gaps* identified those areas in dance education that are considered under-researched and underserved, and in need of more research. *Gaps* were also identified in research methods, research techniques, and essential research characteristics within eras and over the span of 76 years.

These analyses are illustrated in the tables presented throughout the report and *Grid Matrix* tables [Appendix D1, D2, and www.ndeo.org/research.]

PHASE III

The Research in Dance Education Database

The RDEdb is available to the general public at www.ndeo.org/research and supports four levels of access: Guest, Member, Institutional and Library License, and Center for Research in Dance Education.

The resultant Research in Dance Education database (RDEdb) provides citations and comprehensive information for more than 2,800 individual studies in dance education in relation to: *U.S. Education Issues*, *Populations Served, Areas of Service,* research methods, research techniques, essential research characteristics, and comments. The RDEdb is accessible to the general public at: www.ndeo.org/research. Four levels of access are available: Guest, Member, Institutional and Library License, and Center for Research in Dance Education.

Guest Level: is intended for public use. Anyone with internet capability may log on to the NDEO site to get free citation information (title, author, year, and publication) on over 2,800 studies relating to dance education.

Member Level: is intended as a membership benefit. Members in good standing can log on to the NDEO website and receive the above information plus search by over 820 fields that include *Issues*, *Populations Served, Areas of Service,* research methods, research techniques, and essential research characteristics.

Licenses: are available for using the RDEdb on public computers. Licenses provide greater database access for students, staff, and administrators interested in pursuing scholarly research. Two license options are available: (1) Institutional licenses are for use on a limited number of computers (1–3) in a public educational setting; and (2) Library licenses offer unlimited use on public computers located in libraries or computer labs in preK–12, colleges and universities, private schools of dance, and arts programs and schools.

The Center for Research in Dance Education

The NDEO/Temple University Center for Research in Dance Education (CRDE) is located in Philadelphia, Pennsylvania. The NDEO/TU CRDE works to:

- promote excellence in dance education research;
- conduct seminars and workshops in research methods, techniques, and definitions;
- advance new research based on national arts education agenda and other relevant research priorities; and
- continue the work of the RDE project.

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[1] Major disciplines included: anthropology, art and aesthetics, child development, communications and education, cognition, education, educational psychology, ethnography, ethnic studies, ethnomusicology, gender studies, linguistics, medicine, music, philosophy, physical education, psychology, sociology, somatics and body therapies, sports science, technology, theatre and others.

[2] Data collection began on June 1, 2001 and, for purposes of RDE project, analyses were performed on data collected through August 30, 2002, as specified in the US Department of Education grant. In the course of 15 months, 2,339 records were identified, reviewed, and analyzed, the results of which are published in *Research Priorities in Dance Education: A Report to the Nation* (published October 15, 2002). At time of publication, there are more than 2,800 records in the Research in Dance Education database (RDEdb) which is available online at: www.ndeo.org/research.

Chapter 2. Unpublished Documents: Theses, Dissertations, and Other Unpublished Materials

By Thomas K. Hagood, Ph.D. and Carol M. Press, Ed.D.

This section of the RDE Report highlights *patterns, trends* and *gaps* in dance education research that emerged as a result of reviewing theses, dissertations, and other unpublished works. These materials are collectively titled *Unpublished Documents* (N=843) and consisted of three subcategories: theses (n=484; 57.4%), dissertations (n=178; 21.1%), and "others" including conference proceedings, unpublished papers, monographs, and/or other unpublished documents (n=181; 21.5%). Documents ranged in time from 1929[1] to 2002. Data are presented in Table 1 (below).

 Patterns, trends, and *gaps* in dance education research are revealed by organizing data in relation to specific time frames and in relation to the overarching *Issues, Populations Served,* and *Areas of Service* included in the *Grid Matrix* [Appendix A: Grid Matrix and Descriptors]. After data were placed within the *Grid Matrix*, they were rank ordered to identify *patterns, trends,* and *gaps* over four time periods in dance `education research.

Historical Contexts

Before turning to analysis of rank ordered data, we first consider some important historical contexts for the scope and breadth of research in dance education in colleges and universities. Historic contextualization of data provides additional background for appreciating the evolution and product of 76 years of endeavor.

 In academia, dance found its first home in programs for women's physical education. Over time dance evolved toward identification as an arts-based discipline, and over the last 30 years independent programs in dance have come to dominate the field. Out of these dance programs—both undergraduate and graduate— have come the vast majority of the authors and researchers whose work is considered in the RDE Project. The unique and shared contexts for dance in higher education have shaped and impacted the products of its practitioners. Pursuing the depths of the organizational, philosophic, and pedagogical characteristics indicative of any particular university program is beyond the scope of this study. However, an overview of important landmarks in the evolution of dance in the academy, coupled with a consideration of *patterns*, *trends,* and *gaps* in this development, helps clarify and situate the conclusions presented here.

RDE Time Periods

The time periods chosen for inclusion in the RDE Report are based on time frames that reflect discreet periods of historical activity for dance. The period 1926 to 1950, for example, frames the beginnings and first substantial development for dance in the academy. The University of Wisconsin-Madison established the first major program for dance in 1926 and the first graduate (MA) program for dance in 1927. Wisconsin's programs acted as the template for subsequent development for many dance programs well into the 1950s: the programs were biomechanically oriented on the theoretical side, creatively focused in their arts contexts, and institutionalized as a major track within a larger program of Women's Physical Education. The educational and cultural characteristics of the field of Women's PE during that period influenced the scope and focus of early research endeavors. By looking at *Grid Matrix* data charts and noting the *Issues, Populations Served,* and *Areas of Service* for this period, we can see a developing body of research largely focused on defining historical contexts and clarifying the nature and scope of dance as arts education in higher education.

The second period for data collection is 1951–1964. In this time period dance began to emerge as an arts related discipline and the slow, but steady realignment of dance away from physical education and toward affiliation with other fine and performing arts began to take place. Independent departmental status for dance in the research university context began at the University of California at Los Angeles (UCLA) in 1955 when the Department of Dance was established. Throughout this period one can trace a growing trend in the field toward academic individuation for dance. Comparing data charts for *Unpublished Documents*, 1926–1950 and 1951–1964, significant increases in research in learning in dance as arts based education are evident. Descriptive studies analyzing the creative process in dance also show significant expansion.

The years included in the third time period, 1965–1979, represent the years of the "dance boom" in colleges and universities. Between 1965 and 1979 there was a significant increase in the numbers of dance programs (undergraduate and graduate) offered in American universities. Conferences, special meetings, and other field events empowered administrators and others interested in pursuing arts aligned identification for dance in K–12 and higher education. During these years, we see an increase in research projects focused on issues of dance and health, the creative process, dance and kinesthetic learning, and dance as arts education.

The final time frame, 1980–2002, represents two decades of internal and field focused development. In this period, we see that the evolution of dance in independent academic units expands significantly. Specialized foci for dance programs begin to emerge, as does a push toward field based standards in curricula and in scholarship and research. Table 1 (below), clearly illustrates a dramatic increase in the range and numbers of research endeavors related to dance in education, art, and learning contexts during this period.

Table 1. Unpublished Documents 1929-2002: Total Theses, Dissertations, and Unpublished Other Documents *

Decade	1929–1950	1951–1964	1965–1979	1980–2002	Total
Theses	48	66	115	255	484
Dissertations	9	13	48	108	178
Other	12	4	5	160	181
Total	**69**	**83**	**168**	**523**	**843**

* Data reflect actual numbers of documents

The majority of documents reviewed were at the master's program level. The degree to which these documents reflect sophisticated approaches to research design and implementation is limited. For these reasons, specific reference to documents as examples of "good, bad or interesting" research is not included. These data do reveal interesting and thought provoking results, and individual research efforts stand out for originality, construction or implementation. Nevertheless, considering the bulk of *Unpublished Documents* as reflective of the best in dance education research is not an appropriate frame of reference for these data. It should be noted, however, that requirements in higher education for much of the *Unpublished Documents* afforded the deepest and richest explorations and reporting of the three content areas.

Analysis of *Patterns, Trends, and Gaps*

For all time periods the "landscape" of data illustrated in tables is revealing, including full and empty categories. These data indicate general *patterns, trends*, and *gaps* in the field's attention to research in dance education. The data included in the following tables are available in the NDEO/RDE *Database.*

This report follows the format design of the RDE A Form [Appendix C: A Form and Descriptors]. Commentary is organized in 2 parts: Part 1 considers data as revealed through rank ordering references to

the *Grid Matrix* (composite reference numbers), and Part 2 considers data from the perspective of rank ordering research methodologies, research techniques, and essential research characteristics (actual numbers) included in the A Form.

PART 1

Patterns and *Gaps*: *Issues*

Reviewing *Issues* in comparison to both *Populations Served* and *Areas of Service* provides a numeric portrait of how energies have been focused for research in dance education over the past 73 years. Table 2 (below) illustrates totals for *Issues* in relation to *Populations Served* (left column), and *Issues* in relation to *Areas of Service* (right column): 1929–2002. Comprehensive reference numbers are aggregate totals for the issues inclusive of all *Areas of Service* or *Populations Served.* Issues have been listed in ranked order to illustrate the number of documents in each field.

Table 2. Unpublished Documents 1929-2002: Rank Ordered Sum Scores of Issues in Relation to Populations Served and Areas of Service, High (1) to Low (2) *

Rank Order	Issues Totals for Populations Served	Comp. ref #	Issues Totals for Areas of Service	Comp. ref #
1	Arts Education	930	Arts Education	1048
2	Creative Process	320	Creative Process	416
3	Kinesthetic Learning	225	Kinesthetic Learning	257
4	Learning Styles/Theories	196	Learning Styles/ Theories	248
5	Health	186	Health	232
6	Integrated Arts	166	Integrated Arts	189
7	Interdisciplinary Education	124	Interdisciplinary Education	153
8	Multicultural Education	121	Affective Domain	143
9	Policy	104	Multicultural Education	118
10	Affective Domain	99	Policy	105
11	Student Achievement	69	Student Achievement	81
12	Children-at-Risk	38	Equity	33
13	Equity	33	Children-at-Risk	28
			Teacher Standards	28
14	Teacher Standards	26	Brain Research	23
15	Funding	20	Funding	19
	National Content Standard	20	Teacher Certification	19
16	Teacher Certification	17	National Content Standards	17
17	Brain Research	15	Student Performance	9
18	Student Performance	6	Uncertified Teachers	7
19	Uncertified Teachers	5		

* Composite reference numbers

The five highest ranked *Issues* in relation to *Populations Served* and *Areas of Service* (1929–2002): *Arts Education, Creative Process, Kinesthetic Learning, Different Learning Styles and Theories,* and *Health.*

The five lowest ranked *Issues* in relation to *Populations Served* and *Areas of Service* (1929–2002)*: Funding, National Content Standards, Teacher Certification, Brain Research, Student Performance,* and *Uncertified Teachers.*

Overall, these data are (relatively) barren for *Issues* dealing with *Funding* dance education, *Certification* and *Uncertified Teachers* for dance, *Teacher Standards* and other policy based issues. In terms of *gaps*, the "negative landscapes" for *Issues* identified in the *Grid Matrix* table titled "All: 1926–2002" [Appendix D1],

center around research in policy issues. *Funding* and *National Content Standards* tied for the fifth lowest rank.

Documents were found for all *Issues* in relation to *Populations Served* and *Areas of Service* for the period 1929–2002.

Table 2. Discussion: *Issues*

Looking at these data as first related to an *Issue*, and then in correlation to *Populations Served* and/or *Areas of Service,* provides an overarching sense of *patterns* and *gaps*, delineating what *Issues* have been of importance to researchers conducting thesis, dissertation, and other unpublished research in dance education, 1929–2002. Sum scores at the high and low ends of Table 2 (above) illustrate the *patterns* of attention to *Issues* over time and demonstrate research questions regarding the nature of education in art-based dance. Inquiry into the creative process in the studio, understanding characteristics of individual learning styles used in dance education, and the health-based characteristics of learning in dance have dominated the attention and efforts of the field over time.

It is interesting to note the manner in which ranked sums decrease between *Issues.* The top five *Issues* are those that may be investigated "close to home"—conducting the research within the confines of the department or university. Inquiry into *Uncertified Teacher*s, *Student Performance,* and *Standards for Teachers* requires field-based techniques and, therefore, the number of studies drops significantly, representing *gaps* in the literature. In addition, some *Issues* (*Brain Research*) require greater sophistication in technical methodologies necessary for investigation and so are minimally addressed. *Brain Research*, while difficult to do and demanding well-organized and clearly delimited research designs, is certainly worth future field investment. If dance faculty and graduate students can expand inquiry in this area, the field would benefit from the discovery of possible links between dance education and brain structure and function that such inquiry might produce.

> Inquiry into *Uncertified Teachers, Student Performance,* and *Standards for Teachers* requires field-based techniques and, therefore, the number of studies drops significantly, representing *gaps* in the literature.

The numeric differences between high and low ranked *Issues* are also interesting to note. Over 1,000 separate entries are cited for *Arts Education-Areas of Service.* Compare that with the total of five studies that are cited for *Uncertified Teachers-Populations Served.* On practical and grassroots levels, research and inquiry focused on matters of *Content Standards*, *Teacher Certification, Uncertified Teachers*, and *Student Performance,* all of which are timely and topical considering the current educational climate. It is recommended that the field give attention to researching the *Issues* identified above, especially given the federal and state funding allocated to better understanding the nature and scope of skill-development in both teachers and students.

Patterns **and** *Gaps***: *Populations Served***

Reviewing *Populations Served* in relation to *Issues* provides a numeric portrait of what populations have been the foci of research in dance education over the past 73 years. Based on aggregate totals for *Populations Served* in relation to *Issues* from 1929–2002, Table 3 (below) rank orders the number of documents in each field, reflecting their frequency of attention or lack thereof.

The five highest ranked *Populations Served* illustrate where Research in Dance Education has been primarily focused: 1929–2002: *Higher Education, K–4* education, *9–12* education, *5–8* education*,* and *Artists.*

The five lowest ranked *Populations Served* illustrate where Research in Dance Education has not been focused*:* 1929–2002: *World Cultures, Community/Family, After School, Outreach,* and *Seniors and Elderly.*

Table 3. Unpublished Documents 1929-2002: Rank Ordered Scores for Populations Served Related to All Issues

Rank Order	Populations Served	Composite Totals for All Issues*
1	Higher Education	869
2	K-4	355
3	9-12	348
4	5-8	337
5	Artists	240
6	Private Studios	177
7	Administrators and Policy Makers	98
8	Different Abilities	76
9	Early Childhood	64
10	World Cultures	61
11	Community and Family	53
12	After School	30
13	Outreach	7
14	Seniors and Elderly	5

* Composite totals

Table 3. Discussion: *Populations Served*

Ranked mean scores for *Populations Served* in relation to *Issues* addressed provide indicators of *patterns* and *gaps* regarding which communities the field has attended to—and which communities have received less attention over time. These data indicate that by large measure the greatest attention has been paid to inquiry concerning dance education in the college and university setting; higher education has been both the source and the focus of much research. This makes sense from the historical perspective that research in dance education initially found its academic home in colleges and universities.

The fact that the ranked scoring for this category was the top scored *Populations Served* for each of the four time periods reviewed (see www.ndeo.org/research for *Unpublished Documents* all time frames), may be explained in a number of ways:

1. Most of the documents reviewed are Master's theses (57.5%), which often represent beginning efforts in research design and implementation; inquiry that is managed and organized "close to home" is often more accessible and easier.
2. Resources and skills for conducting off site or field research are limited.
3. The number of environments outside higher education where research in dance education is conducted are limited.
4. Students who are pursuing graduate degrees in higher education often expect to teach in institutions of higher education; they often focus their research on questions relevant to higher education and their own future careers.
5. Most masters level students collaborate with a faculty advisor in selecting a topic of study; students are similarly influenced by the work of their faculty member, many of whom are concerned with issues in higher education.

Perhaps the field also comes back to itself again and again because there has been little shared communication regarding the focus of graduate and doctoral research between dance departments over time; there has been no database of shared information on the "who, what and where" of dance education research prior to the RDE Project. Undoubtedly, this has made hunting for existing literature difficult, and, thus, has limited the information base.

Although inquiry into dance education within the confines of higher education dominates the scoring of *Issues* over time, traditional educational contexts at the elementary, junior, and senior high school levels also rank high in *Populations Served*. Again, the fact that research endeavors have focused on traditional educational settings (K–12) is not surprising. In the recent past, dance has surfaced as a component part of

Outreach and *After School* programs. Additionally, state and federal interests in funding inquiry into the benefits of educational programming for underserved populations are rising. There may be opportunities for significant research findings and subsequent publications if researchers strategically focused their efforts toward inquiry in educational settings.

The lack of inquiry for *Seniors and Elderly Populations* is also worth noting because all demographic forecasts suggest the needs and welfare of senior citizens and the elderly will only increase as a topic of interest (and potential area for research funding), with the maturing of the "Baby Boom" generation.

Patterns and *Gaps: Areas of Service*

Reviewing *Areas of Service* in relation to *Issues* provides a numeric portrait of what subject matter, program content, and services have been the foci of research in dance education over the past 73 years. In Table 4, (below) the numbers listed in the Composite Totals for All Issues column are aggregate totals for the *Issues* inclusive of all *Areas of Service* from 1929–2002. These issues have been listed in ranked order to illustrate the number of documents in each field, reflecting their frequency of attention, or lack thereof.

Table 4. Unpublished Documents 1929–2002: Rank Ordered Scores for Areas of Service Related to All Issues

Rank Order	Areas of Service	Composite Totals for all Issues *	Percentage (%) of Composite Total
1	Advocacy	290	12.4
2	Pedagogy	283	12.1
3	Curriculum/Sequential Learning	276	11.8
4	Creating/Choreographing Dance	250	10.7
5	Historical/Cultural Contexts	242	10.3
6	Creative Process	241	10.3
7	Dance Science/Medicine	172	7.4
8	Dance Technique	164	7.0
9	Performing Dance	160	6.8
10	Critical Analysis	147	6.3
11	Resources	123	5.2
12	Child Development	109	4.6
13	Somatic Body Therapies	105	4.5
14	Teacher Preparation/Training	104	4.4
15	Research	102	4.4
16	Interdisciplinary Education	98	4.2
17	Assessment/Students & Teachers	56	2.4
18	Artists in Schools	54	2.3
19	Technology	46	1.9
20	Opportunities to Learn	42	1.8
	Cognitive Development	42	1.8
21	Higher Order Thinking	22	0.9
22	Assessments Program	21	0.9
23	Certification	11	0.5
24	Assessments National/State LEA	9	0.4
25	State and LEA Standards	3	0.1
26	Licensure	1	0.0

* Composite Totals

The five highest ranked *Areas of Service* illustrate where Research in Dance Education has been focused (1929–2002): *Advocacy, Pedagogy, Curriculum/Sequential Learning, Creating and Choreographing Dance,* and *Historical/Cultural Contexts.*

The five lowest ranked *Areas of Service* illustrate where Research in Dance Education has not been focused (1929–2002): *Assessments Programs, Certification, Assessments National/State LEA, State and LEA Standards,* and *Licensure.*

Table 4. Discussion: *Areas of Service*

Ranked mean scores for *Areas of Service* in relation to *Issues* provide indicators of the *patterns* and *gaps* for what subject matter, program content, and services have been of interest over the past 73 years in theses, dissertations, and other unpublished research in dance education research. Research emphasis has been focused on advocacy, as well as on the educational value of dance education and the effectiveness of dance education as an educational tool. *Areas of Service* involving the teaching and "doing" of dance in education were the categories that received most attention: for example, pedagogy, curriculum design and sequential learning, making dances, and dance in historical and cultural contexts. These areas of understanding provided the field with definitions and models for action.

Contrasting high and low ranked *Areas of Service,* one notices that low ranked *Areas of Service* are those that focus on criteria and processes for evaluating the teaching of dance as well as policy at local and state levels – *Program Assessments; Certification; National, State and LEA Assessments; State and Local Standards;* and *Licensure.* The standards and assessment topics are of concern to agencies seeking to better understand the efficacy of state and federal promotion of standards, assessment protocols, and the component aspects of quality teaching. The historic lack of inquiry focused on these areas is not too surprising considering these concerns have been given only recent attention in the national arts agenda.

Trends: *Issues* in Relation to *Populations Served* for Four Time Periods

By looking at *Issues* ranked in relation to *Populations Served* over four time periods, *trends* in Research in Dance Education (Table 5, below) may be illustrated.

Table 5. Unpublished Documents 1929-2002: Issues Ranked in Relation to Populations Served

Issues	1929-1950	1951- 1964	1965-1979	1980-2002
Health	8*	7	4	6
Creative Process	2	2	2	2
Learning Styles and Theories	6	6*	5*	3
Kinesthetic Learning	4	3	3	4
Student Achievement	8*	9	9*	10
Affective Domain	7	6*	5*	11
Student Performance	-	-	13*	19
Policy	11*	5	8	9
Funding	-	-	-	14
Certification	11*	-	9*	18
Uncertified Teachers	10*	-	13*	-
Teacher Standards	10*	11	11	15
Equity	-	10*	14	13
Multicultural Education	9	10*	7*	7
Children-at-Risk	-	-	12	12
Integrated Arts	3	4	6	5
Interdisciplinary Education	5	8	7*	8
Arts Education	1	1	1	1
National Content Standards	-	12	10	16
Brain Research	-	-	13*	17

Rank order reflects composite reference numbers; * indicate tie scores (more than 1 issue with the same score).
 '-' Indicates no Issue entries for that time period.

The following *Issues* in relation to *Populations Served* received no ranking because zero documents were found:

- 1929–1950: *Student Performance, Funding, Equity, Children-at-Risk, National Content Standards,* and *Brain Research*
- 1951–1964: *Student Performance, Funding, Certification, Uncertified Teachers, Children-at-Risk,* and *Brain Research*
- 1965–1979: *Funding*
- 1980–2002: *Uncertified Teachers*

Table 5. Discussion

In *Unpublished Documents* reviewed to date, inquiry was primarily centered on topics concerned with making dances. *Arts Education* (ranked #1 in all four time periods*)* and *Creative Process* (ranked #2 in all four time periods) have remained foremost *Issues* throughout the four time frames. *Kinesthetic Learning* jockeyed for third and fourth place, balanced by studies focusing on *Integrated Arts* and *Learning Styles and Theory*.

In considering the evolution of the *Issue* of *Learning Styles and Theory,* its rank order increased between periods three and four (#5 up to #3). Movement in ranked order for *Learning Styles and Theory* may be a result of the clarification of definitions for learning styles and theory in the 1960s–1970s, and its movement upward in scale during period four might reflect increased interest and awareness after Howard Gardner's 1983 publication of *Frames of Mind*,[2] a paradigm for modes of knowing which has been widely referenced by dance educators.

Although all *Issues* received at least some attention during the 76 year span examined in the RDE study, there was no time period that included all *Issue* fields in *Unpublished Documents*.

Funding, an issue of great importance to artists and art educators, shows no presence in periods one to three, but then develops as an issue of low importance in period four. No recent research is identified in *Uncertified Teachers*, a current issue of great professional concern for dance educators, public educational institutions, and state departments of education. Research in *Certification* was void in period two, surged to ninth place in period three, but fell back again after 1980 to almost no inclusion in period four.

National Content Standards, which relates to educational reform measures to improve student performance, showed some evidence of attention from 1965-1979 but fell significantly to near bottom 1980-2002 in an era that celebrated the first set of "*National Standards for Dance Education*" (1994).

Student Performance showed no evidence until the third period and similarly fell to almost no inclusion in period four. *National Content Standards*, which relates to educational reform measures to improve student performance, showed some evidence of attention from 1965-1979 but fell significantly to near bottom 1980-2002 in an era that celebrated the first set of *National Standards for Dance Education* (1994).[3]

Affective Domain grew to its greatest involvement in the third period, but also decreased significantly after 1980. The juxtaposition of rankings with *Learning Styles and Theory* may indicate focus switched from examining the personal and emotional effects of dance education to examining the relationship of dance education to learning.

Trends: *Issues* in Relation to *Areas of Service* for Four Time Periods

By looking at *Issues* ranked in relation to *Areas of Service* over four time periods, *trends* in Research in Dance Education (Table 6, below) may be illustrated.

Table 6. Unpublished Documents 1929-2002: Issues Ranked in Relation to Areas of Service *

Issue	1926 -1950	1951- 1964	1965 - 1979	1980-2002
Health	7*	7*	4	4
Creative Process	2	2	2	2
Learning Style/Theory	6*	9	5	3
Kinesthetic Learning	3	3	3	6
Student Achievement	7*	8	10	11
Affective Domain	6*	5	6	10
Student Performance	-	-	15*	19
Policy	9*	7*	11	9
Funding	-	-	-	14
Certification	10	-	12	18
Uncertified Teachers	9*	-	15*	-
Teacher Standards	8	12*	13*	16
Equity	-	11	15*	12
Multicultural Education	7*	10	8	8
Children-at-Risk	-	-	15*	13
Integrated Arts	4	4	7	5
Interdisciplinary Ed	5	6	9	7
Arts Education	1	1	1	1
National Content Standards	-	12*	14	17
Brain Research	-	-	13*	15

* indicate tie scores (more than 1 issue with the same score).
'-' Indicates no Issue entries for that time period.
Rank order reflects composite reference numbers for that period highest (rank #1) to lowest (rank #20). Order of Issues
1-20 reflects placement on the horizontal bar of Grid Matrix and does not indicate ranked ordering.

The following *Issues* in relation to *Areas of Service* received no ranking with zero documents found:
- I926–1950: *Student Performance, Funding, Equity, Children-at-Risk, National Content Standards, and Brain Research*
- 1951–1964: *Student Performance, Funding, Certification, Uncertified Teachers, Children-at-Risk,* and *Brain Research*
- 1965–1979: *Funding*
- 1980–2001: *Uncertified Teachers*

Table 6. Discussion

In *Unpublished Documents*, *Issues* related to *Areas of Service* ranked fairly parallel with those for *Populations Served;* research inquiry similarly focused on examining the processes of dance making. The *Issue* of *Arts Education* remained paramount in rank followed by *Creative Process* and *Kinesthetic Learning*. *Integrated Arts* ranked #4 for the two early periods, but *Health* moved into #4 ranking after 1965. New awareness of the health benefits promoted by dance activities was prompted by a growing popularity of aerobic dance and physical fitness. In addition, more attention was focused on understanding dance in relation to the human body or on health problems of dancers such as eating disorders and injury prevention.

All *Issues* received some field attention in one or more time periods. The *Issue* of *Funding,* not addressed in the first three time frames, became an issue in the fourth time period, perhaps indicating the importance of changes in arts education and funding patterns during the same period. The problem of *Uncertified Teachers* received no documentation in the period from 1951–1964 and since 1980. These are the same time frames for which it received no attention in relation to *Populations Served*. Added to this problem is the significant drop in rank for *Certification* between the third and fourth time periods (6 points), which highlight the degree to which the issue has been ignored.

Other areas of little attention included *National Content Standards, Teacher Standards, Children-at-Risk*, and *Equity. Affective Domain* and *Student Performance* each dropped 4 points in rank in the last time period, which almost echoes their positioning in relation to *Populations Served*. As mentioned earlier in this

report, *Brain Research,* which ranks low, evolved as a contemporary topic of inquiry requiring methodological sophistication.

Summary Discussion: PART 1

Research has not enjoyed a central place in the mission of most graduate programs in dance. Department cultures and their limited resources are most often focused on the act of dancing, the development of new modes of performance, and the making of new, original dance works. As a broad topic in academe, education is considered by many to be a "soft" science. Outside some purely quantifiable research, it is very hard to be able to nail down exactly what is going on when "education" is happening. In addition to the issue of education's place in the academic pantheon, there are also the practical matters of how dance is perceived in the wider culture.

> Research has not enjoyed a central place in the mission of most graduate programs in dance.

In considering the vitality of dance education research, one must take into account social notions of dance. Dance is often viewed as recreation or competition activity, as "not for males", or as a prelude to sin and debauchery. As the discipline has grown in depth and scope, scholarly as well as artistic activities have become more available and accessible. However, the more academic or theoretical interests in dance are not visible to the general public, and are thus not widely recognized. The popular notion simply does not involve the dancer as empiricist.

In the 76 years of inquiry covered in the RDE study, there is much work defining dance's intellectual and artistic boundaries and articulating what – if anything – the "dance experience" has to offer the educational world. There is little focused inquiry on the strategic development of the field both in terms of policy to achieve goals and the funding that can enable goals to be pursued.

The *Issues, Populations Served,* and *Areas of Service* identified within the *Grid Matrix* offer the definition of topics that range in historical relevance within the dance community. Some topics have a history (*Health* as an *Issue* in dance education). There are also issues that have existed throughout history that have been side-stepped: *Early Childhood, Funding,* and *Uncertified Teachers.*

Other topics have had little research focused on them due to the fact that they are more contemporary in their identification: *Children-at-Risk, Assessments at National, State, and LEA* levels, and *Brain Research*. It is worth noting that the national education community has only recently delineated some of the *Issues, Populations Served,* and *Areas of Service* cited in RDE as discreet categories. Although some of the topics included in the *Grid Matrix* may be "hot items" of discussion within contemporary education-policy communities, their importance to the local business of many graduate programs in dance is limited to the degree to which faculty have taken an interest in bringing these matters to light. With most graduate faculty focused on what comes next on the college production calendar, it should come as no surprise that issues that may be contemporarily vital in the hothouse climate of national (or even state) educational policy do not appear on the "radar screens" of graduate programs in dance.

Much of what has been done in unpublished research in dance education 1929–2002, has been done to answer basic and broadly focused questions that outline program characteristics in dance education, discuss the creative process, articulate basic components of dance activity, or clarify characteristics of dance in historical and cultural contexts. Inquiry focused on populations outside those representing traditional educational contexts has not received significant attention in dance education research – at least at these levels of inquiry. Perhaps the broadest recommendation to be made at the end of Part 1 of this chapter is that the *Issues, Populations Served,* and *Areas of Service* that appear in the RDE *Grid Matrix* need now to be made useful and of vital interest to dance faculty. In many cases these topics are almost exclusively the business of arts advocates, personnel in government education offices, or arts-education funding agencies.

It may be politically wise for dance research graduate education programs to begin focusing on *Issues* of concern to U.S. education if dance is to assume a more prominent position in American education. Greater integration with the larger educational community would provide an important platform for dance educators to clarify dance pedagogy and the contributions they might make to education.

> It may be politically wise for dance research graduate education programs to begin focusing on *Issues* of concern to U.S. education if dance is to assume a more eminent position in American education.

Many kinds of questions arise when considering these data from the perspectives of their "placement" within the *Grid Matrix*:

- How are *Issues, Populations Served,* and *Areas of Service* – and the efforts of dance education researchers - related to matters of geography and time?
- What influence do mentors – and their own experiences in education – have on the research directions chosen by their students?
- How can we work with our colleagues in dance programs to develop interest and support for quality dance education programs at undergraduate and graduate levels?
- What influences can advancements in technology have on the evolution of quality research in dance education?
- How can the field most effectively extend and develop its potential through focused inquiry and research?
- Is the field ready for a strategic consideration of future directions in dance education research?

The search for answers to these and other like questions will continue. The significance of *patterns, trends*, and *gaps* in relation to *Issues, Populations Served,* and *Areas of Service* in unpublished documents will evolve through use of the RDE database by new scholars, new eyes, and new educators who will bring their own contemporary, historical, and culturally enriched investigations to the field of dance education.

One might ask, where will all the students come from who are to fill the undergraduate dance programs in the future, if not from the studios of a good dance educator? Today, dance is compared to its sister arts. In this regard, consider the degree to which – in any of the arts – education or research are recognized as important. It might be wise for those in the dance field to make a case for a thoughtful dance education among our own selves. Providing good teacher preparation programs and supporting research in dance education at graduate, doctoral, and professional levels is key if dance is someday to enjoy the same kind place in our schools that programs in art and music (and in some cases, theater) do.

PART 2

In Part 2, data are reviewed for research methods used, research techniques cited and the presence of essential research characteristics. The following Tables 7–9 (pages 24, 25, and 26) rank order research methods, techniques, and research characteristics and illustrate *patterns, trends,* and *gaps* for research in dance education 1929–2002.

Research Methods, Techniques, and Essential Research Characteristics

Qualitative research methodologies are most commonly used in educational research. Qualitative research designs seek to study the complexities of human activities in meaningful ways and were developed by early practitioners of anthropology. As in the investigation of cultures and societies, educational research looks at complex human interactions that – more often than not – demand active interpretation, the sophisticated juxtaposition of ideas, thoughtful conjecture, subtle opinion, and reasoned argument.

When one looks at Tables 7–8 (below), one can discern where dance education researchers have invested their interests and efforts in the scope and kinds of qualitative (and some quantitative) research methods and techniques. Both tables reflect the actual number of documents. The total number of methodologies and techniques, however, will total more than the number of documents in the database, due to the fact that a study can utilize more that one research methodology/technique in a single document.

Table 7. Unpublished Documents 1929-2002: Research Methods *

Research Method	1929–1950 (n=69)	1951- 1964 (n=83)	1965 – 1979 (n=168)	1980-2002 (n=523)	All (N=843)
Descriptive	55	67	121	393	636
Co/Comparison	11	16	47	70	144
Ethno/Anthropology	2	6	7	44	59
Evaluation	12	24	46	148	230
Individual	7	9	30	81	127
Program	6	11	14	63	94
Curriculum	15	15	21	106	157
Historical/Biographic	16	11	25	67	119
Primary	8	5	19	39	71
Secondary	12	7	18	27	64
Philosophical	6	13	25	75	119
Experimental	-	-	-	-	-
Quasi-Experimental	2	5	25	45	77

* Data reflect actual numbers of documents

Rank Ordered Research Methods Used Overall:
1. Descriptive (n=636; 75.4%)
2. Evaluation (n=230; 27.3%)
3. Curriculum (n=157; 18.6%)
4. Correlation/Comparison (n=144; 17.1%)
5. Evaluation/Individual (n=127; 15.1%)
6. Historical/Biographical (n=119; 14.1%)
7. Philosophical (n=119; 14.1%)
8. Evaluation/Program (n=94; 11.2%)
9. Quasi-Experimental (n=77; 9.1%)
10. Historical/Biographical-Primary Sources (n=71; 8.4%)
11. Historical/Bibliographical-Secondary Sources (n=64; 7.6%)
12. Ethnography/Anthropological (n=59; 7.0%)
13. Experimental (n=0; 0.0%)

Table 7. Discussion: Research Methods
Descriptive and evaluative methods dominate the research designs for the literature reviewed here. This finding is expected, as qualitative methodologies are the primary means for organizing inquiry into human phenomena. Conversely, there is no purely experimental research due to the difficulty of finding a random sampling and regulating variables in an educational setting. Although educational leaders and legislators clamor for "causality" to explain student achievement, the educational and artistic experience remains too fluid to peg neatly.

Table 8. Unpublished Documents 1929-2002: Research Techniques *

Technique	1929-1950 (n=69)	1951-1964 (n=83)	1965-1979 (n=168)	1980-2002 (n=523)	Total (N=843)
Anecdotal	13	9	22	144	188
Action Research	2	4	14	66	86
Case Study	6	11	36	139	192
Computer Simulation	-	-	-	-	-
Content Analysis	13	21	55	129	218
Focus Gr./Interview	8	13	19	120	160
Meta-Analysis	-	-	-	-	-
Observation	7	16	50	136	209
Survey/Question.	19	23	33	85	160
Thinking Aloud	-	3	1	15	19

* Actual numbers of documents

Rank Ordered Research Techniques Used Overall

1. Content Analysis (n=218; 25.9%)
2. Observation (n=209; 24.8%)
3. Case Study (n=192; 22.7%)
4. Anecdotal (n=188; 22.3%)
5. Survey/Questionnaire (n=160; 19.0%); Focus Group/Interview (n=160; 19.0%)
6. Action Research (n=86;10.2%)
7. Thinking Aloud (n=19; 2.3%)
8. Meta-Analysis (n=0; 0.0%); Computer Simulation (n=0; 0.0%)

Table 8. Discussion: Research Techniques

The majority of theses and dissertations are designed to allow students to apply previous knowledge to a given question or series of questions. Therefore, it is logical that *Content Analysis* would be used most widely as a research technique. Similarly, the experiential nature of dance education lends itself to observational data. *Case Study* and *Anecdotal, Interview, Focus Groups, Questionnaire,* and *Survey* are commonly used as research techniques, they are accessible and provide concrete means for managing both quantifiable and qualitative data.

A fair share of *Action Research* was reported, but hardly enough considering the span of almost 76 years. *Action Research* provides a great potential for exploring, dissecting, describing, and revealing the educational experience. *Action Research* can use quantitative, qualitative, descriptive, experimental, comparative, evaluative, ethnographic, and other techniques within the same project. Projects in *Action Research* can encourage partnerships to help higher education explore beyond its own boundaries and enter the arena of the greater public community.

At the time of this reporting, no data were collected using *Meta-Analysis* and *Computer Simulation.* As was previously mentioned, most research in the area of *Unpublished Documents* was conducted by graduate students, and thus is limited in its scope and application. In addition, attention to inquiry that is macroscopic requires time and funding, both of which are limited in graduate programs. Although *Computer Simulation* is currently growing as an artistic and choreographic tool, its employment as a research technique in dance is minimally engaged. It is expected that this research technique will increase in frequency of use in the future.

Although rank ordered information on the methods and techniques used provides us with information on *patterns*, commenting on the efficacy of the methods and techniques chosen and used over many decades is difficult at best. One important review consideration, beyond the purview of the RDE project, was an assessment of whether or not appropriate methods and techniques had been chosen and used for each

study, given the nature of the question posed or the hypotheses suggested. Perhaps, again, the most telling information we have, from considering these data in terms of methods and techniques used, is included in commentary by Field Reviewers as they assessed answers to the questions considered in Table 9 (below).

Essential Research Characteristics

Essential to any research design are considerations about quality and the degree to which researchers employ controls and systematically approach a project from start to finish. For the purposes of RDE, six questions, titled essential research characteristics, were considered in the assessment and review of all documents. The six questions posed were the following:

1. Does the research design pose clear and unambiguous question(s), problem(s), or effect(s)?
2. Does the design include a clear and reasoned discussion of appropriate methodologies for addressing a question(s), problem(s), or effect(s)?
3. Does the design include an organized and comprehensive review of related literature?
4. Does the design present clear and reasoned discussion of techniques and methods for collecting, recording, and storing data?
5. Does the design include a clear and concise analysis of the data and present a clear and organized set of conclusions?
6. Does the design present an organized and relevant set of references and bibliographic citations?

In Table 9 (below), data regarding essential research characteristics are organized by four time periods and by the question posed. For the purposes of determining *patterns, trends,* and *gaps* in field attention to any of the essential research characteristics (and because the matter of whether or not attention to any characteristics involved a "yes" or "no" response), the aggregate number of "yes" checks were recorded. The term "All" used within the table, indicates that for the number of corresponding documents, all essential research characteristics were checked "yes."

Table 9. Unpublished Documents 1929-2002: Research Characteristics*

Question	1929–1950 (n=69)	1951–1964 (n=83)	1965–1979 (n=168)	1980–2002 (n=523)	Total (N=843)	%
'All'	23	40	85	159	307	36.4
# 1	61	78	159	431	729	86.5
# 2	42	56	115	249	462	54.8
# 3	40	68	137	304	549	65.1
# 4	37	56	111	226	430	51.0
# 5	45	55	128	286	514	61.0
# 6	55	78	154	368	655	77.7

* Date reflect actual numbers of documents

Rank Ordered Research Characteristics – "Yes" Checked - Overall

1. Question #1: Clear posing of research question (n=729; 86.5%)
2. Question #6: Organized set of references and citations (n=655; 77.7%)
3. Question #3: Appropriate and Comprehensive Literature Review (n=549; 65.1%)
4. Question #5: Clear and concise discussion of analysis and conclusions (n=514; 61.0%)
5. Question # 2: Clear Discussion of Appropriate Research Methodology (n=462; 54.8%)
6. Question #4: Clear Discussion of Methods for Collecting and Storing Data (n=430; 51.0%)
7. All Characteristics Checked "Yes" (307; 36.4%)

Table 9. Discussion: Essential Research Characteristics

Looking at Table 9 (above) for all unpublished documents examined (N=843), 86.5% clearly posed a research question or problem and 77.7% presented an organized and relevant set of references and citations.   Less than two-thirds of unpublished documents, 65.1% provided an appropriate and comprehensive review of literature, and 61.0% posed a clear and concise discussion of analysis and conclusions.

The chief finding included in Table 9 is that the weakest essential research characteristics were identified by*:*

- Question #2, *Does the design include a clear and reasoned discussion of appropriate methodologies for addressing a question(s), problem(s), or effect(s)?* Approximately half of unpublished works (54.8%) had "yes" checked.

- Question #4, *Does the design present clear and reasoned discussion of techniques and methods for collecting, recording, and storing data?* Approximately half of unpublished works (51.0%) had "yes" checked.

- One-third (36.4%) met All essential research characteristics*.*

Both of these questions involve clarification of research methods: first, designing an appropriate methodology to address research question(s), problem(s), or effect(s); and, second, developing methods for collecting, recording, and storing data appropriate to the research study. These data suggest that disconnects exist between posing and articulating interesting questions, developing inquiry using clear and sound methodologies, and developing mature arguments in support of analyses and conclusions.

Summary Discussion: PART 2

Review of the methods, techniques, and research characteristics for these data provide us with an overview of the tools dance educators have used over 76 years to collect, organize, and make sense of an issue, a practice, a system of working, or other phenomena in dance.

> In concluding Part 2 of this report, it has become obvious that, like it or not, it is increasingly important that practitioners skillfully measure the results, practices, and applications of dance.

Dance is a field in which questions and answers, lived experiences, and direct observations of the thing itself seem to tell us more about what it means to dance than does breaking the dancing moment up into its constituent parts, and in good empiricical fashion, putting it back together again. Breaking dance down into quantifiable component parts, in the hopes of measuring these for the purposes of knowing dance better, deeply challenges most dancers.   Unlike physical education, dance is not about movement that lends itself to measurement, to rules, to spatial fields of play, to boundaries, and to the sophisticated application of science toward enhancing its end result in performance. In the struggle that dance in education has undertaken over these many years to separate itself from education of a physical nature and in becoming "art," have we tossed the "baby out with the bathwater"? Our field is not wholly divorced from measurement, but it is largely so. We all can wrap our minds around the efficacy of knowing more about the appropriate depth of a plié, but we seem to struggle with topics that go further than that.

In concluding Part 2 of this report, it has become obvious that, like it or not, it is increasingly important that practitioners skillfully measure the results, practices, and applications of dance. Furthermore, it is critical that practitioners of dance articulate the benefits, or lack thereof, of dance as an educational medium. After supervising this part of the RDE project, it has become obvious that much of what has been done for and in dance education, within the confines of higher education and by the community of which we are a part, has been provincial, limited in its scope, and focused on determining what manageable thesis project can be accomplished given limited resources and field attention.

Hopefully, RDE will stimulate field interests in research. Perhaps, now that the Research in Dance Education database (RDEdb) is accessible to practitioners, artists, and administrators, it will be easier to educate and research the field of dance education. The RDE project information and database will provide the kind of background the field needs to lift itself up onto a new stage of substantiated, defined and yes—measured—participation in American education.

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[1] Shambaugh, M. (1929). "The place for folk dancing in the program of physical education for elementary and secondary schools." Thesis, University of Southern California, Los Angeles, California.
Windham, R. (1929). "A study of modern schools of dancing." Thesis, University of California-Berkeley, California.

[2] Gardner, H. (1983). *Frames of Mind*. New York: Harper Collins.

[3] National Dance Association/American Alliance for Health, Physical Education, Recreation and Dance. (1994*). National Standards for Dance Education: What Every Young American Should Know and Be Able to Do in Dance.* Pennington, NJ: Princeton Book Company, Publishers.

Chapter 3. Published Literature in Dance Education

By Karen Bradley and Loren Bucek, Ph.D.

As of the date of this report, 1,131 articles in the content area of *Published Literature in Dance Education* were reviewed for the RDE project. This figure includes literature from journals of dance and dance education that fit the RDE study as defined by the *Grid Matrix*. Data were reviewed in relation to *U.S. Education Issues, Populations Served,* and *Areas of Service* in the field of dance. In this report, data are analyzed in answer to the question: What are the *patterns, trends,* and *gaps* in research in published literature in dance education?

These data were collected from journals published between the years 1926 and 2002 (N=1,131). The documents identified and reviewed in the four time periods were: 1926-1950 (n=202; 17.9%), 1951-1964 (n=134; 11.8%), 1965-1979 (n=213; 18.8%) and 1980-2002 (n=582; 51.5%). The quantity of studies collected in the four eras showed a significant one-third drop in the second era (1951-1964), a rebound in the third era (1965-1979), and a two-fold increase in the last era (1980-2002).

This chapter references several types of data: (1) statistics indicating the actual number of documents in the database that contain information about one specific *Issue*, *Population Served*, *Area of Service*, research method, and research technique; (2) composite reference numbers indicating the number of cross-references from two or more *Issues*, *Populations Served*, or *Areas of Service;* and (3) data focusing on the titles and content of the work in relation to its historic time frame as well as the *Issues, Populations Served*, and *Areas of Service* as outlined in the RDE *Grid Matrix*. Data that cite titles are provided generally to give examples of specific phenomenon that are referenced in the text from database fields. Data from titles are not intended to be recommendations for quality of research but, rather, are intended to provide documentation that the studies are available for further reference by the reader. Title citations represent content, not statistics.

Data in this chapter are reviewed both by time periods and by decade. It is believed this review facilitates understanding the contextual framework of *Published Literature in Dance Education*. The report also examines the research methods and research techniques used by authors in *Published Literature in Dance Education* and concludes with a summary discussion of results in *Issues*, *Populations Served,* and *Areas of Service*.

Historical Analysis

Whether the texts were research-based or not, the majority offer insight into naming, defining, examining, challenging, reflecting, and/or redefining particular genres of pedagogy practice. Journal articles invited readers to learn about new dance education teaching practices, reflect on dance education's historical development, and envision an agenda for dance education research. The field also moved from a concern with health issues as they related to dance (1926–1950), to concerns about creative process (1951–1979), and back to concerns about health issues (1980–2002), albeit with a more specific focus.

The opportunity to note trends over the entire RDE was great. In the area of published dance education research, the sheer number of items provided a rich databank for noting details of *trends* and *patterns*. Determining the kinds of studies people were doing in each period provides an overview of what was important to scholars in the field at that time.

Published articles included in this research investigation may be broadly categorized into three general strands: historical research in dance education, pedagogical practice research in dance education, and more recently, research about dance education research.

The decade-by-decade reporting within each of the four time periods defined in the RDE study allows for close examination of the types of issues that were important or lacking.[1] Some issues appeared repeatedly: for example, the issue of boys and men in dance was addressed in every decade, as was advocacy for the field. As far back as the 1930s, the role of dance in physical education was being questioned and articles about the placement of dance in education were present throughout the database.[2] Such articles reoccurred in every decade, as did articles on creativity and how to develop creative approaches to dance making.

1926–1950

The earliest referenced document in *Literature in Dance Education* was an article by Ione Johnson, written in 1930 for the *Journal of Health and Physical Education*.[3] It was evidently written six months after the creation of the journal. This marked the beginning of *Literature in Dance Education* for the purposes of the RDE study.

Table 10 (below) illustrates the actual number of documents for *Issues, Populations Served,* and *Areas of Service* defined in the *Grid Matrix* of the RDE study. The table references the period 1926-1950 although the first article collected appeared in 1930. Data represent actual numbers of documents and are rank ordered to best view the number of documents in each field, reflecting their frequency of attention or lack thereof.

Table 10. Literature in Dance Education 1926–1950: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank	Issues	n=202	Populations Served	n=202	Areas of Services	n=202
1.	Arts Education	135	Higher Education	110	Technique	48
2.	Creative Process	34	9-12	81	Performing	43
3.	Health	23	5-8	78	Historical Cult Contexts Opportunities to Learn	40
4.	Integrated Arts	22	K-4	70	Pedagogy	39
5.	Multicultural Educ	19	Artists	32	Advocacy	34
6.	Kinesthetic Learning	12	Community & Family	27	Creating & Choreograph	31
7.	Equity	8	Private Studios	21	Teach Prep & Train	26
8.	Uncertified Teachers	6	World Cultures	6	Creative Process Curriculum & Sequent Lrng	20
9.	Learn Styles & Theory	5	Admin & Policy Mkrs After School	5	Child Development	15
10.	Affective Domain Teacher Standards Interdisciplinary Educ	4	Outreach Different Abilities Seniors & Elderly Early Childhood	2	Resources Research	14
11.	Student Achievement	3			Somatic Body Therapies	10
12.	Policy Certification	1			Critical Analysis	7
13.	Student Performance Funding Children-at-Risk National Content Stds Brain Research	0			Interdisciplinary Education	6
14.					Artists in Schools	5
15.					Cognitive Development Dance Science & Medicine	3
16.					Hi Order Think & Problem Assessments: Program Certification	1
17.					State & LEA Standards Assmts: Stud & Teachers Assmts: Natl, State, LEA Licensure Technology	0

* Data reflect actual numbers of documents

The rank ordered *Issues* outlined in Table 10 (above) highlight the overarching prominence of dance as *Arts Education*. Particular interest focused on the *Creative Process*, the reflective inquiry that explored the newly found freedom in the expressive dance forms of "natural dance" and "rhythm," the precursors to the development of modern dance. *Health* placed high in the ranking order as documentation gave credence to dance as a healthful activity to promote the inclusion of dance in women's physical education departments.

It is also important to examine *Issues* that did not receive attention in order to gain a true picture of the field. The only *Issue* relating to *Policy* that received attention was in reference to *Uncertified Teachers*. As dance entered institutions of learning, the question begged examination: Who was qualified to teach? In spite of this, *Teacher Standards* were scrutinized at a lesser degree and *Certification* hardly at all. Policy discussions, in general, were minimal in discourse throughout the history of *Literature in Dance Education*. Concern focused on the making and learning of dance. The personal benefits of dance education were not heavily examined in this era. Absent from the arena were studies relating to the *Issues* of *Student Performance, Funding, Children-at-Risk, National Content Standards,* and *Brain Research.*

> Particular interest focused on the *Creative Process*, the reflective inquiry that explores the newly found freedom in the expressive dance forms of "natural dance" and "rhythm," the precursors to the development of modern dance.

As is made clear from the information in Table 10 (above), *Higher Education* was the primary population served and the focus was on dance *Technique* and *Performing.* The *K-12* population received secondary attention, as did the *Areas of Service* involving *Historical and Cultural Contexts* and *Opportunities to Learn*. Virtually no literature included the populations of *Early Childhood, Different Abilities, Seniors and Elderly,* and *Outreach.*

1930s

Much of the early work included in the RDE study involved philosophical reflections upon the nature of creative movement and "the dance." This was balanced by work exploring the social styles of dance: ballroom, folk dance, and other participatory forms. Literature relating to dance in K–12 education focused on "rhythm," both in terms of the relationship of movement to rhythmic structure and as a term used to describe expressive movement. Most journal articles of this decade were included in publications of physical education and approached the teaching and learning of dance as an activity.

1940s

Despite the Depression Era in the 1930s and World War II in the early-to-mid-1940s, journal articles emerged to reflect on dance education's newly found position at the college and university level and on issues related to its academic affiliation with physical education departments. Early dance education literature focused on:

- Descriptions of social, folk, square, and expressive dance pedagogy theories and practices.
- Organization of (dance) folk festivals, especially those including pageantry (pageants based on ethnic dance forms included Spanish, Chinese, Japanese, and American Indian cultures).
- Discussions of dance teacher training methods, curricular content, and administration.
- Naming, characteristics, and early history of modern dance theory and practice, including natural dance, rhythms, composition, music, pedagogy. (The WPA—Works Progress Administration—supported dance in the 1930s and several articles reflected on the history and influence of the WPA on modern dance. The dance program in the summers at Bennington warranted notice.)
- Naming and genus of movement analysis systems, including kinesiological and Laban-based studies.
- Early discussions of liturgical dance.

After a decade of writing about dance and dance education issues, dance scholar Lloyd Shaw wrote, in 1939, that the practice of dance education had withered.[4] Shaw argued that dance education practices needed revitalization; his solution was to instill essential rhythms and body patterns into the community dances performed by all.

During World War II, the number of articles on dance in general dropped. Yet, teaching in community settings was revitalized throughout the 1940s. Discussions pursued about the proper place for dance during wartime and the dialogue moved people to reevaluate and reorganize what and who was important in life.[5] Following the end of World War II, articles proliferated in dance education that defined folk dance and delineated building community through folk, social, and creative dance. Most of these articles were categorized in the RDE project as multicultural *Issues* and as world dance under *Populations* (, above 10); hence, the high ranked placement of this *Issue* for the early time period.

1951–1964

Table 11 (below), provides actual numbers for *Issues, Populations Served,* and *Areas of Service* defined in the *Grid Matrix* of the RDE study for the second time period, 1951-1964. While the first time period 1926-1950 is 25 years in duration, this second time frame covers 15 years, 10 years less than the first time period. The significantly lower numbers reflect this difference. Data are rank ordered to best view the number of documents in each field, reflecting their frequency of attention, or lack thereof.

Table 11. Literature in Dance Education 1951–1964: Rank Ordered Issues, Population Served, and Areas of Service *

Rank Order	Issues	n=134	Populations Served	n=134	Areas of Services	n=134
1	Arts Education	85	Higher Education	68	Teacher Prep & Training	24
2	Creative Process	36	9-12	37	Technique	23
3	Integrated Arts	16	5-8	34	Pedagogy	22
4	Multicultural Educat Health	14	K-4	30	Historic & Cultural Context	20
5	Learn Styles/Theories	12	Artists	23	Creating & Choreograph	19
6	Uncertified Teachers	8	Community & Family	16	Advocacy	18
7	Kinesthetic Learning	6	World Cultures	14	Creative Process	17
8	Affective Domain Policy	5	Admin & Policy Mkrs	12	Opportunities To Learn	15
9	Student Achievement Funding Equity	4	Private Studios	8	Curriculum & Sequent Lrng	14
10	Interdisciplinary Educ	3	After School	5	Performing	13
11	Certification	2	Outreach	4	Hi Order Think & Problem	12
12	Teaching Standards	1	Early Childhood Different Abilities	3	Resources	11
13	Student Performance Children-at-Risk National Content Stds Brain Research	0	Seniors & Elderly	0	Child Development Somatic Body Therapies	9
14					Critical Analysis Research	8
15					Assmts: Stud & Teachers	5
16					Artists in Schools Interdisciplinary Education	4
17					Cognitive Development Dance Science & Medicine	3
18					Assessment: Program	2
19					Certification	1
20					Standards: State & LEAs Assmts: Natl, State, LEAs Licensure Technology	0

* Data reflect actual numbers of documents

As Table 11 (above) illustrates, *Arts Education* and *Creative Process* continued to dominate *Issues* from 1951–1964 with *Integrated Arts, Multicultural Education,* and *Health* remaining a secondary focus.

Higher Education and the K-12 populations (*9-12, 5-8,* and *K-4*) remained the prime foci of research in this era. As professional development gained importance for teachers, *Teacher Preparation and Training*, *Technique,* and *Pedagogy* proved to be prime *Areas of Service* as well.

Equally noticeable are the voids observed: *Issues* (e.g., *Student Performance, Children-at-Risk, National Content Standards,* and *Brain Research); Populations Served (e.g., Seniors and Elderly); and Areas of Service* (e.g., *Licensure, Technology, State and LEA Standards,* and *National, State and LEA Assessments*). Most of the aforementioned were not yet recognized as contemporary issues nor had they become part of the national dialogue in arts education.

1950

Articles written in the 1950s reflected a growing interest in community-based pedagogy practice and learning world dance forms. During the period between 1946 and 1960, many articles explored the relationship between "democratic principles" and folk, ethnic, and international dance. "Democratic Skills Through Dance," by Barbara Kidd Mach, reflects some of these ideas at a time in history when the Marshall Plan was being implemented.[6] Kidd suggests democratic ideals (for example, group problem solving and goal setting) and she stresses the importance of determining content from diverse sources of ideas and group process work, all of which could be incorporated in modern dance choreography. Articles written during this time period supported and extended the notion of peace and rebuilding after a devastating war by encouraging the community participation in, and development of, folk and national dances.

> Writers now noted Laban's systematic approach to analyzing and notating movement, consequently influencing future generations of U.S. dance educators.

Published writing in dance education in the 1950s reflected the field's need to name, define, and characterize dimensions of the dance discipline as something to know and something to study. Studies on the use of improvisation for creative dance classes became more abundant. Philosophical articles illustrated real-world explorations of body-mind connections, relating these to dance study. Liturgical dance articles denoted purpose, instructional methodology, and performance practice. Prior to this decade, the body-mind connections were taken for granted, unspoken, and left unexamined. Writers now noted Laban's systematic approach to analyzing and notating movement, consequently influencing future generations of U.S. dance educators. Other notation systems for dance also continued to be developed.

1960s

In the early 1960s, "internationalism" or cross-cultural recognition of dance in the service of democracy gave way to a more reflective focus. A plethora of articles on *Creative Process* and synthesis ensued. Although folk dance was still an area of interest, especially in relationship to community and group dance, dance educators were clearly moving in the direction of creative dance for the classroom.[7] Articles on the philosophical issues in dance continued the investigations begun in the 1950s of the meaningfulness and purpose of dance in the arts and humanities.

In this era, *Uncertified Teachers* continued to be discussed, although *Issues* of *Certification* and *Teacher Standards* continued to lag. For the second time period, no literature was found about *Student Performance, Children-at-Risk, National Content Standards,* and *Brain Research*. These surfaced after the 1960s as more contemporary issues.

1965-1979

Table 12 (below), illustrates the actual numbers of documents for *Issues, Populations Served*, and *Areas of Service as* defined in the *Grid Matrix* of the RDE study for the third time period, 1965–1979. Data are rank ordered to best view the number of documents in each field, reflecting their frequency of attention or lack thereof.

Table 12: Literature in Dance Education 1965-1979: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank Order	Issues	n=213	Populations Served	n=213	Areas of Services	n=213
1	Arts Education	128	Higher Education	104	Technique	54
2	Creative Process	52	5-8	94	Pedagogy	51
3	Kinesthetic Learning	34	K-4	91	Teacher Prep and Training	40
4	Health	29	9-12	65	Advocacy Opportunities to Learn	39
5	Affective Domain	25	Artists	45	Historic & Cultural Context	36
6	Policy	21	Community & Family	28	Creative Process	33
7	Multicultural Educ Integrated Arts	20	Admin & Policy Mkrs Private Studios	20	Curriculum & Sequent Lrng	32
8	Funding	13	World Cultures	14	Performing	29
9	Interdisciplinary Educ	11	Early Childhood	13	Child Development	27
10	Equity	10	Different Abilities	12	Creating & Choreography	23
11	Certification	9	After School	4	Somatic Body Therapies	15
12	Student Achievement	8	Seniors & Elderly	2	Interdisciplinary Education	13
13	Lrng Styles & Theory Children-at-Risk	6	Outreach	1	Artists in Schools Resources	11
14	Student Performance	5			Research	10
15	Uncertified Teachers	4			Hi Order Think & Problem Assessments: Program	6
16	National Content Stds	3			Dance Science & Medicine	5
17	Teaching Standards	2			Critical Analysis Certification Technology	4
18	Brain	0			Cognitive Development Assmt: Student & Teacher	2
19					Standards: State & LEAs Assmts: Natl, State, LEAs Licensure	0

* Data reflect actual numbers of documents

Data in Table 12 (above) illustrate that *Arts Education* and *Creative Process* remained the dominant *Issues* between 1965 and 1979, just as they had from 1926-1964. Similarly, *Higher Education* and K-12 (*5-8, K-4,* and *9-12*) were the major foci of research interest in this era; and *Artists* and *Community* populations assumed an important secondary position. Still, little attention was directed at underserved populations including *Early Childhood, Different Abilities, After School, Seniors and Elderly,* and *Outreach*.

Technique, Pedagogy, and *Teacher Preparation and Training* remained the top three *Areas of Service* to which interest was directed between 1951 and 1979.

1960

In the later 1960s, the National Endowment for the Arts galvanized artist-in-residence programs at the elementary school, middle school, high school, and college levels. *Kinesthetic Learning,* in the broad sense of learning movement or learning through movement, joined *Arts Education* and *Creative Process* as a priority in dance education. Writers in the field of dance education began to reflect upon arts education as personal learning, writing about kinesthetic learning, and studies in the affective

domain to a much greater degree. There was new interest in interdisciplinary education and integrated arts approaches as new educational theories gained application.

During the era of 1965–1979, dancers and choreographers were visiting artists in public schools and interest focused on investigating K–8 school programs. Education literature from this era discussed dance as either a participatory form of cultural expression and social grace or as an art form of innovation and aesthetic principles.[8]

1970s

The 1970s saw the largest growth in the number and range of articles on dance education. Some researchers began reflective analysis of the history of dance education. Although the past

New awareness about cognitive processes brought discussion about how the teaching of dance is informed by motor learning and developmental movement.

decades had seen innumerable articles on Margaret H'Doubler (the founder of the first college dance major at the University of Wisconsin in 1926), the 1970s brought about an influx of articles that continued the discussions of earlier years. Such articles provided a landscape of discourse about the place of dance in physical education vs. the art of dance placed with fine arts or within other disciplines.

Articles addressed analysis of class progressions, especially warm-ups, how to teach folk dance, modern dance, ballet, social dance, and the use of mime in dance education. New awareness about cognitive processes brought discussion about how the teaching of dance is informed by motor learning and developmental movement. Dance classes in the open classroom, in magnet arts programs, and in recreational settings became more popular. The first articles appeared on scheduling and *Opportunity to Learn* issues that dance programs faced in public schools. Dance for *Different Abilities* emerged as an area of interest. Interest also grew in *Program Evaluation*. Television and video brought attention to new media as an evaluation tool for dance.

The structure and organization of schools that valued the arts came under scrutiny in the 1970s. Magnet arts programs, arts programs in comprehensive high schools, and dance in the open classroom were examined.

Dance educators wrote about ballet career issues, movement analysis, improvisation in the classroom, and other areas of dance that reflected growing social awareness. Dance classes that impact learning in the *Affective Domain*, particularly violence, busing, and attendance issues were just emerging during the 1970s. There was a small interest in looking at exotic dance as a social phenomenon. Interest in the growing fields of dance therapy and somatics were also reflected in the writing.

Awareness of different *Learning Styles and Theory* had not yet been realized; consequently, this issue is ranked in the bottom five categories. Other areas that had not yet emerged as *U.S. Education Issues* were: *Student Performance, Children-at-Risk, Uncertified Teachers, Teacher Standards*, and *Brain Research*.

1980-2002

Table 13 (below) provides actual numbers of documents for *Issues, Populations Served,* and *Areas of Service* defined in the *Grid Matrix* of the RDE study for the last era, 1980-2002. *Issues* are rank-ordered to best view the number of documents in each field, reflecting their frequency of attention, or lack thereof.

Table 13. Literature in Dance Education 1980–2002: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank Order	Issues	n=582	Populations Served	n=582	Areas of Services	n=582
1	Arts Education	192	Higher Education	318	Dance Science & Medicine	148
2	Health	168	9-12	234	Pedagogy	137
3	Creative Process	74	5-8	223	Curriculum & Sequent Lrng Teacher Prep and Train	91
4	Multicultural Educat	55	K-4	201	Advocacy	86
5	National Content Stds	52	Artists	153	Historic & Cultural Context	82
6	Policy	48	Private Studios	105	Technique	71
7	Lrng Styles & Theory	45	Community & Family	63	Teacher Prep and Training	47
8	Kinesthetic Learning	44	Admin & Policy Mkrs	33	Somatic Body Therapies	46
9	Interdisciplinary Educ	31	World Cultures	28	Creative Process	43
10	Affective Domain	28	Different Abilities Early Childhood	21	Creating & Choreography	35
11	Student Performance	27	Seniors & Elderly	17	Interdisciplinary Education	34
12	Integrated Arts	26	After School	13	Critical Analysis	33
13	Student Achievement	25	Outreach	8	Child Development	31
14	Funding	23			Opportunity to Learn	29
15	Equity	22			Artists in Schools Performing	18
16	Certification	13			Research Technology	16
17	Teaching Standards	11			Cognitive Development Assmt: Student & Teacher Resources	7
18	Children-at-Risk	9			Assessments: Program	6
19	Uncertified Teachers Brain	4			Certification	5
20					Hi Order Think & Problem Assmts: Natl, State, LEA	3
					Licensure	2
					Standards: State & LEA	1

* Data reflect actual numbers of documents

By examining the five top *Issues* in rank order, it is evident that, first and foremost, research in dance continued to be characterized as *Arts Education* across all *Populations* and *Areas of Service*. Inquiry about *Heath* received greater attention than in the previous eras, which most likely reflects the establishment of the International Association for Dance Medicine and Science and the publication of its journal. Exploration of the *Creative Process* also continued. The articles reflect more specific *Health* concerns with nutrition and eating disorders in dancers and the further development of somatics practices (Bartenieff Fundamentals, the Alexander Technique, yoga, Feldenkrais' Awareness through Movement, and so forth), aerobics, and strength training programs for the betterment of dancers' healthy functioning and technical prowess.

Patterns and *trends* most notable in this time frame were:

- Much greater concern about the *National Content Standards, Funding,* and other *Policy* issues.
- The inclusion of at least some research about all of the *U.S. Educational Issues* as defined in the *Grid Matrix*.
- Greater recognition of contemporary issues of *Equity, Children-at-Risk, Uncertified Teachers, Student Performance,* and *Brain Research.* However, although there is "greater" attention in these areas, these still rank as the five lowest categories with minimal research from which to create policy decisions.

1980s

After the explosion of articles in the 1970s, the 1980s look like a continuation of the same. *Higher Education* regained its position as primary population with K–12 next in focus. Throughout data collected for the RDE study, *Private Studios* and *Artists* received far less attention.

Cultural and personal identity became a concern. Jazz dance was explored as cultural expression and particularly as part of black history. The term "multicultural" adopted a different meaning and no longer referred to national and world dance forms, but rather to cultural identity and heritage of world populations. Articles on cross-cultural dance forms emerged. Instead of articles on men and boys in dance, there began an influx of articles on feminism in dance, gender, race, and issues of sexual orientation.

With the continued support for professional dance residencies in institutions of learning by the National Endowment for the Arts, evaluations and critical reflections on residencies by professional dance companies proliferated. Career issues of dancers were also explored.

The 1980s also brought about a number of articles on advocacy and policy issues. The increasing political sophistication of arts educators in regard to funding, research issues, and policy making is reflected in the dance literature.

1990s

The 1990s can be noted as the decade in which dance education went "under the microscope." Many of the issues of the previous decades were reexamined through a contemporary lens and the resulting proliferation of new issues proved impressive. In this era, studies generally compared programs, looked at kinesthetic learning and interdisciplinary education, and examined cognitive effects of dance (especially on reading). Articles reported on dance programs that used Eastern philosophy and movement practices as a function of creative process.

The 1990s also brought continued interest in educational reform with the origination and implementation of the voluntary *National Standards for Dance*

> In this era, studies generally compared programs, looked at kinesthetic learning and interdisciplinary education, and examined cognitive effects of dance (especially on reading).

Education: What Every Young American Should Know and Be Able To Do in Dance (1994).[9] A good number of journal articles appeared based on the content and process of developing the standards. Interest grew in related issues involving teacher preparation, teaching in the urban school, and adapting curricula for children-at-risk. Articles described integrating Motif Notation, or Motif Writing, with dance making instruction so students could develop, record, and share dances made by themselves or others.[10] Of particular interest, was the connection made to alternative instructional strategies as motivators for children-at-risk.[11]

Considering the emphasis in education of children-at-risk in the early twenty-first century, this literature should be of keen interest to policymakers. The research is small in number, fairly new, and certainly not conclusive. At best, current policy is informed by a limited number of studies. Needless to say, research is sorely needed on the children-at-risk *Population*.

The parsing of investigations extended to dance science. Educators considered the following important topics in dance science: screening for postural and anatomical anomalies with the goal of preventing injuries; somatic training programs (e.g., Bartenieff Movement Fundamentals); the impact of dance training on the adolescent dancer; eating disorders and amenorrhea; HIV/AIDS; and smoking. As an example of how specific the research in dance education became in the 1990s, articles on aerobic capacity and body fat composition became common. Dance Science literature also reveals the physical and emotional toll dance training can have through dancer burnout, fatigue, aging, and overtraining.

2000–2002

Since 2000, dance science and medicine has become digitalized with the integration of technology. Studies now pursue magnetic resonating images (MRIs) to evaluate specific body parts (knees, feet, and limbs) pre- and post-event. In a vastly different use of technology, studies are emerging in which camcorders, computers, and choreographic software programs elucidate or document artistic and learning processes.

Conversely, a more global perspective appears to be contextualizing world dance styles and forms. Investigators now share an inquiry-based approach to data analysis that offers broad interpretations of dance rituals and folk forms; and, there is an increased awareness of, and exposure to, indigenous cultural dance. From the turn of the century, multicultural education focuses more on the role of dance in the overall learning experiences of students from other cultures within the United States. In earlier years, multicultural education predominately focused on participation in a variety of dances from folk cultures. Although both approaches support cross-cultural appreciation, the more recent studies reflect deeper understanding of the ways the act of creating and experiencing dance support all children learning across disciplines as well as across cultures.

> The more recent studies reflect deeper understanding of the ways the act of creating and experiencing dance support all children learning across disciplines as well as across culture.

Research Methods and Research Techniques for All Years: 1926–2002

Research Methods

The cohort of documents reviewed under the category of *Literature in Dance Education* (n=1,131) included 76 years of articles in journals that were not primarily research-based. The *Journal of Health and Physical Education (JOHPE)* and its later evolution into the *Journal of Physical Education, Recreation and Dance (JOPERD)*, for example, published 699 (61.8%) of the 1131 articles included in this analysis; and, only 12 articles (1.7%) met essential research characteristics for *Literature in Dance Education*, or .005% of the entire study (N=2,339). Most were abbreviated articles that may have been extracted from research but were not inclusive of methodologies, literature reviews, and a formal research format. Many of the articles, especially in the first decades of these publications, were reflective anecdotes, interviews, or advocacy pieces.

Due to the above limitations, only 159 (14%) documents in this content area met essential research characteristics as defined by the RDE study and required further explanation and "unpacking" of methodology in a "B" Form. This low percentage was in spite of the fact that the articles published in journals for dance were often written by authors from higher education about the population of higher education. Many of these articles were abstracted summaries of in-depth research, but did not follow protocols for research methodologies.

Tables 14 and 15 (below) reference the actual numbers of documents in *Literature in Dance Education* used for each research method and research technique as defined in by the RDE study. The "n" number reflects the actual number of documents included in each time frame. Research methods and research techniques have not been listed in rank order as their placement varies from era to era.

As mentioned earlier, the greatest percentage of the research done in *Literature in Dance Education* was *Descriptive*; and this was true in every era. It is interesting to note that, except in the most recent time frame, *Philosophical* research was the second most widely used methodology in *Literature in Dance Education*. *Evaluative* research ranked third favoring program evaluation over individual evaluation. The lack of individual evaluation reflects the lack of research evidenced in both *Student Achievement* and *Student Performance*.

Table 14. Literature in Dance Education 1926-2002: Research Methods *

Research Methodology	1926-1950 n=202	1951-1964 n=134	1965-1979 n=213	1980-2002 n=582	1926-2002 N=1,131
Descriptive	65	74	145	346	630
Correlational/Comparative	2	1	9	41	53
Ethnographic/Anthropological	1	5	12	36	48
Evaluative	15	11	26	21	173
Curricular	9	15	46	62	132
Historical/Biographical	5	13	24	35	77
Philosophical	20	26	17	63	126
Quasi Experimental	0	1	5	20	26
Experimental	0	0	0	0	0

* Data reflect actual numbers of documents

Proportionately, the highest percentage of *Curricular* research in *Literature in Dance Education* was produced in the middle two time periods. As dance programs in American education institutions burgeoned across the nation, questions prevailed about what to teach and how to teach it. By the final time period, (1980-2002), institutions required the more statistical information of evaluative study, which grew six-fold in quantity from the previous period and doubled the number of *Curricular* documents.

For the many reasons mentioned earlier in this and previous chapters, true experimental methodologies were not pursued in *Literature in Dance Education.* It is only in the most recent era that the microscope has been applied through *Quasi-Experimental* examination. Current advocacy for the field requires confirmation of causality. Even so, correlational evidence is the closest the field can supply in an artistic and educational experience that truly defies control.

Within the cohort of research studies, both quantitative and qualitative methodologies have gradually developed in sophistication and scope throughout the past century. Unquestionably, the range of research methods has expanded and the rigor has increased.

Research Techniques

Table 15 (below) provides the actual numbers of documents in *Literature in Dance Education* in research techniques, as defined in the RDE study.

Table 15. Literature in Dance Education 1926-2002: Research Techniques *

Research Techniques	1926-1950 n=202	1951-1964 n=134	1965-1979 n=213	1980-2002 n=582	1926-2002 N=1,131
Anecdotal	79	37	109	325	550
Action Research	8	5	10	21	44
Case Study	10	11	8	86	115
Computer Simulation	0	0	0	3	3
Content Analysis	0	6	5	41	52
Focus Group/Interview	2	4	2	31	39
Meta Analysis	0	0	0	1	1
Observation	1	6	3	82	92
Survey/Questionnaire	11	5	3	36	55
Thinking Aloud	0	1	1	9	11

* Data reflect actual numbers of documents

It is clear *Anecdotal* research prevailed throughout the 76 year history of the RDE project; however, two other research techniques closely aligned with *Anecdotal*, *Case Studies* and *Observation*, showed significant growth in the last timeframe (1980–2002).

Although *Content Analysis, Surveys and Questionnaires* increased, each accounted for approximately 7% of the research methodologies used in the last timeframe (1980-2002) and less than 5% of research methods used in 76 years (1926-2002). Qualitative methods and emergent designs proliferated.

From 1926 to the present, dance educators appeared increasingly sophisticated in using an array of qualitative and quantitative research methods. More recent articles were research based and used quasi-experimental methods to correlate dance with cognitive and social outcomes. From statistical trends in the RDE, it appeared that the newer journals (*Journal of Dance Medicine and Science* and *Journal of Dance Education)* and the less recent journals (*Dance Research Journal* and *American Journal of Dance Therapy*) published a higher percentage of research-based studies. Still, the majority of studies in *Literature in Dance Education* were *Anecdotal,* not research-based.

Summary

The summary discussion for *Literature in Dance Education* provides data for *Issues* in relation to *Areas of Service* and *Populations Served* from 1926-2002. Table 16 (below) provides rank order of actual numbers of documents identified and reviewed in *Issues, Populations Served, and Areas of Service* for all time periods, 1926-2002.

Table 16. Literature in Dance Education 1926-2002: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank Order	Issues	N=2,339	Populations Served	N=2,339	Areas of Service	N=2,339
1	Arts Education	1,102	Higher Education	1,292	Pedagogy	466
2	Health	455	5-8	717	Advocacy	427
3	Creative Process	396	K-4	716	Curric & Sequent Lrng	364
4	Kinesthetic Lrng	295	9-12	714	Histor & Cultural Contex	363
5	Lrng Style & Theor	252	Artists	439	Dance Science & Med	359
6	Multicultural Educ	191	Private Studios	344	Technique	345
7	Integrated Arts	188	Comm & Family	186	Creating & Choreograph	263
8	Policy	170	Admin & Pol Mkrs	171	Creative Process	251
9	Affective Domain	142	World Cultures	113	Teacher Prep & Train	229
10	Interdiscip Educ	135	Different Abilities	93	Performing	203
11	Student Achvmt	130	Early Childhood	91	Child Development	177
12	Equity	68	Seniors & Elderly	43	Critical Analysis	154
13	Natl Content Stnds	66	After School	25	Interdisciplinary Educ Opportunity to Learn	152
14	Funding	58	Outreach	21	Somatics & Body Therp	145
15	Student Perform	49			Resources	121
16	Children-at-Risk	42			Research	116
17	Certification	40			Artists in Schools	80
18	Teacher Stnds	38			Assmts: Stud & Teacher	64
19	Uncertif Teachers	26			Technology	56
20	Brain	21			Cognitive Development	51
					Hi Order Think & Prob Assmts: Program Effect	38
					Certification	20
					Assmts: Natl, State, LEA	12
					Stands: State & LEA	7
					Licensure	5

* Data reflect composite reference numbers

Dance education in published literature was, for the most part, about *Arts Education*. Although a great number of the articles published in the content area were in journals of physical education, the literature remained clear in every era that dance is an art, not a sport. The *Issue* of *Health* continued to rank high in recent time frames due to both the continued inclusion of articles in journals of physical education and the proliferation of dance science and medicine studies and journals. Current interest in healthful practices in dance training and performance have contributed to the *Issue* of *Health* rising to second place in relation to *Populations Served.*

Some *Issues, Populations Served,* and *Areas of Service* received a high overall rank order even though there was little research interest in the first three time periods. This was due to a flurry of research in the fourth era (1980-2002). *National Content Standards* showed zero to negligible research in the first three time periods; yet, with research centered on the creation of *National Standards for Dance Education* in 1994, *National Content Standards* appeared as a historically active issue in Table 16 (above). Similarly, *Policy* ranked historically low from 1926 through 1979; however, aggregately, it ranked 8 in Table 16.

 Policy and a host of other *Issues* (*Student Achievement, Equity, Funding,* and *Student Performance*) were brought to the attention of Americans in three important books published about arts education: *Coming to Our Senses* (1977);[12] *A Nation at Risk* (1983);[13] and *Toward Civilization* (1988).[14] These publications which focused on the importance—and dearth—of arts education in American schools, served as a wake-up call for America.

Today, with the increased focus on accountability in education, there is still little research to document some of the same—and now even more—*Issues (Policy, Funding, Equity, Student Achievement, Student Performance, Interdisciplinary Education, Integrated Arts, National Content Standards, Certification, Teacher Standards, Uncertified Teachers,* etc.). As a result*,* there remains inadequate research to inform, or give direction to, policy and funding at national, state, and local levels.

The ranked order for *Areas of Service* and *Populations Served* remained fairly consistent throughout the 76-year history. In all four time frames, *Higher Education* dominated the research followed by *K–4, 5-8,* and *9-12* education*.* Data in Table 16 (above) show that *Technique* and *Performing* remained of interest in *Areas of Service* throughout the years while dance migrated as an art form from departments of physical education to colleges of fine arts. Populations of *Artists* and *Private Studios* received less attention.

Filling in the *Gaps*

By comparing Tables 10-13 (pages 30, 32, 34, and 36), and the composite Table 16 (above), it is evident that *Issues* related to dance education received more attention in literature and research as the eras progressed, and especially so in the last two eras (1959-1979 and 1980-2002). Unquestionably, research grew considerably in quantity, content, and scope. *Gaps* evident in earlier years received more attention as contemporary *Issues, Populations Served,* and *Areas of Service* aligned with a national focus, or lack of interest in arts education in the United States.

The major *gaps* in *Issues* remain respectively: *Equity, National Content Standards, Funding, Student Performance, Children-at-Risk, Certification, Teacher Standards, Uncertified Teachers,* and *Brain Research.* All of these issues provide fertile ground for new and important research. The fact that these categories are considered to be major areas of educational policy development and that very little research exists to give a sense of direction to such policies is cautionary. We run the risk of developing policies based on very little real information. The authors wish to point out that research in these areas would serve the field of dance education and national arts education; indeed, it would serve U.S. education policy.

> Research in these areas would serve the field of dance education and national arts education; indeed, it would serve U.S. education policy.

In reviewing the literature included in the RDE database, it appears that, throughout its 76 year scope, researchers seem unaware of the topics previously researched or methodologies that have both failed or succeeded. A serious problem in the field is that researchers seldom reference or cite previous studies in

the same area of inquiry. With the RDE database, dance educators can now know and build upon what has already been studied.

The preponderance of articles in *Published Literature in Dance Education* are not research based nor do they reflect the decided scholarly approach that is expected in academe today. At first, one might assume that the authors of this reviewed literature were writing for the practitioner and did not conform to the scholarly formats of their day. At a deeper level, a second look reveals that

> The fact that the literature speaks overwhelmingly of arts education indicates a disconnect between the field of dance as *Arts Education* and its historical platform, dance as physical education.

most of the authors were dance educators working under the umbrella of physical education at varying educational levels. The majority of the intended readership was physical educators, *not* dance educators. The fact that the literature speaks overwhelmingly of *Arts Education* indicates a disconnect between the field of dance as arts education and its historical platform, dance as physical education. One hopes that, for the twenty-first century, dance education research finds its voice in arts education venues and brings the heretofore marginalized populations, *Artists,* and those teaching in *Private Studios,* into the national discourse about dance education.

[1]All of the evidence for the statements exists within the RDE database, which is searchable.

[2] Murray, R. (1937). "Dance in Physical Education," *Journal of Health and Physical Education,* 8(1) Jan, 10–14,59.
 Howe, E. (1937). "What Business Has the Modern Dance in Physical Education?" *Journal of Health and Physical Education*, 8(3) Mar, 131–133, 187–188.

[3] Johnson, I. (1930). "Program Building with the Dance," *Journal of Health and Physical Education*, 1(6) June, 17-19, 44-45.

[4] Shaw, L. (1939). "Bring 'Em Back Alive," *Journal of Health and Physical Education*, 10(10) Dec, 563–566.

[5] Deane, M. B. (1944). "In the School in Wartime, " *Journal of Health and Physical Education*, 15(12) Dec, 545–547, 578–579.

[6] Mach, B. K. (1953). "Democratic Skills Through Dance," *Journal of Health and Physical Education,* 24(1) Jan, 19-20.

[7] Stodelle, E. (1960). "Reflections on the 1959 Conference on the Creative Teaching of Dance to Children," *Dance Observer*, 27(5) May, 70–72.

[8] The database reveals the explosion of topics around this discussion, especially in 1965.

[9] National Dance Association/American Alliance for Health, Physical Education, Recreation and Dance. (1994). *National Standards for Dance Education: What Every Young American Should Know and Be Able to Do in Dance* Pennington, NJ: Princeton Book Company, Publishers.

[10] Labanotation, Motif Notation, and Language of Dance, Sutton, and Bensch are forms of dance notation that are based upon symbolic representation of bodily movement.

[11] Kominski, R.; Jamieson, A; & Martinez, G. (2001). "At-Risk Conditions of U.S School-Aged Children." Working paper, Series No. 52. Population Divisions. U.S Bureau of the Census, Washington, DC.

[12] Arts, Education and Americans Panel. (1977). *Coming to Our Senses: The Significance of the Arts for American Education.* New York: McGraw-Hill.

[13] National Commission on Excellence in Education, (1983). *A Nation at Risk: The Imperative for Educational Reform.* Washington, DC: U.S. Department of Education.

[14] National Endowment for the Arts. (1988). *Toward Civilization: Overview from A Report on Arts Education.* Washington, DC: Government Printing Office.

Chapter 4. Published Literature in Other Disciplines

By Susan Koff, Ed.D. and Sara Lee Gibb, M.S.

Searching literature outside of dance for references to dance studies provided an interesting perspective into the extent dance education influenced other disciplines. The articles in the literature were written almost exclusively by dancers and not by authors in other disciplines writing about dance. Clearly, there is an absence of recognition of dance education by authors of other disciplines in the rest of the research world. However, of the research studies that were published in other disciplines, it is clear that other disciplines were accepting of interdisciplinary work.

Of the total documents identified and reviewed in the RDE study (N=2,339), the total number of documents in *Published Literature in Other Disciplines* (n=365; 15.6%) was significantly less than in the other two content areas – *Unpublished Documents* (n=843; 36.0%) and *Literature in Dance* (n=1,131; 48.4%).   The largest collection of published articles about dance education in journals of other disciplines was found in periodicals addressing different aspects of education, related arts, child development, and movement science.

It is noteworthy that as the decades of the twentieth century progressed and the availability of articles increased in *Other Disciplines*, the content provided insight into (1) the *U.S. Education Issues* in which dance became involved; (2) the *Populations* most penetrated; (3) the *Areas of Service* most relevant to other disciplines; and (4) the research methods, research techniques, and essential research characteristics used by *Other Disciplines*.

Data presented in this chapter provide a synopsis of patterns found in the four time periods in *U.S. Education Issues*, *Populations Served,* and *Areas of Service* as well as in research methods, techniques, and essential research characteristics. The concluding section summarizes prominent *trends* and *gaps* evident in all years, 1926-2002; and, finally, offers recommendations that are intended to support collaborations with *Other Disciplines* crossing boundaries of arts, education and research communities.

Time Period: 1926–1950

Relatively few articles published in journals of other disciplines from 1926–1950 involved *U.S. Education Issues* in relation to dance *Populations Served* or dance *Areas of Service*, as defined by the *Grid Matrix*. During this time period, only 26 individual articles were located in a scant few journals, cited here to reflect the date of earliest publications identified for this chapter of the RDE project: *Childhood Education* (1927), *Research Quarterly* (1930), *Music Educators Journal* (1934), *Child Development* (1937), *Journal of Aesthetics and Arts Criticism* (1941), and *Elementary English Review* (1942).

Table 17 (below), shows the actual number of documents in *Other Disciplines* that addressed *Issues, Populations Served,* and *Areas of Service* defined in the *Grid Matrix* of the RDE study between 1926 and 1950. Data represent actual numbers of documents and are rank ordered to best view the number of documents in each field, reflecting their frequency of attention, or lack thereof. In some instances, titles of works have been referenced to provide historical context and content.

By looking at the *Issues,* one may appreciate how infrequently dance interacted with, or was of interest to, other disciplines during these early years in twentieth century education. Data indicate that dance literature found in *Other Disciplines* most frequently interacted with issues in *Arts Education*, *Kinesthetic Learning*, *Integrated Arts*, *Health*, and *Creative Process*. These are referenced by early works crossing boundaries in health and kinesiology,[1,2] arts and creative process,[3,4,5,6] and early childhood education.[7,8,9] Even as early as 1930, dance educators were writing in journals of other disciplines about objective testing methods and curriculum.[10,11,12]

The *Issues* in which there were voids – e.g., no references found in *Other Disciplines* – involved *Student Performance, Funding, Certification, Uncertified Teachers, Equity*, *Children-at-Risk, Interdisciplinary Education,* and *Brain Research*. Generally, these were not yet issues of contemporary significance.

The *Populations* most involved in the work of dance with *Other Disciplines* were *Higher Education* and *K-4*, *5–8*, and *9–12*, respectively. This *pattern* parallels those revealed in the two earlier content areas of *Unpublished Documents* and *Literature in Dance Education.*

Table 17. Other Disciplines 1926–1950: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank Order	Issues	n=26	Populations Served	n=26	Areas of Services	n=26
1	Arts Education	7	Higher Education	14	Child Development	6
2	Kinesthetic Learning Integrated Arts	5	K-4	11	Advocacy	5
3	Health Creative Process	4	5-8	9	Curriculum & Sequent Learning Critical Analysis Historical Cult Contexts Interdisciplinary Education Pedagogy	3
4	Learn Styles/Theories Multicultural Education Teacher Standards	2	9-12	8	Technique Creative Process Assessments: Stud & Teachers Teach Prep & Train	2
5	Student Achievement Affective Domain Policy Nat'l Content Standards	1	Early Childhood	4	Performing Somatic Body Therapies Dance Science & Medicine Assessments: Program Effect Opportunities to Learn	1
6	Student Performance Funding Certification Uncertified Teachers Equity Children-at-Risk Interdisciplinary Education Brain Research	0	Artists	3	Artists in Schools Creating & Choreograph Cognitive Development Hi Order Think & Problem State & LEA Standards Assessments: Nat'l, State, LEA Certification Licensure Resources Research Technology	0
7			World Cultures	1		
8			Different Abilities Seniors & Elderly After School Outreach Private Studios Admin & Policy Mkrs Community & Family	0		

* Data reflect actual numbers of documents

Minimal representation was found in the populations of *Early Childhood*, *Artists*, and *World Cultures*. No references were found of dance working with *Different Abilities*, *Seniors and Elderly*, *After School* and *Outreach* programs, *Private Studios*, *Administrators and Policy Makers,* and *Community and Family.* This is not surprising given many of these populations were not yet contemporary education issues. It is also quite likely that work in these populations was already in progress, but not yet visible in the writings of *Other Disciplines. Private Studios*, although long existing and firmly established in the business community, did not commonly work in liaison with public schools during these early years.

As Table 17 (above) indicates, the *Areas of Service* that most intersected with *Other Disciplines* involved: *Child Development* and *Advocacy*; and, to a lesser extent *Curriculum and Sequential Learning, Critical Analysis, Historical and Cultural Contexts, Interdisciplinary Education, and Pedagogy.* Some of the earliest works that crossed disciplines with *Technique* and *Creative Process* were written by Maler (1942),[13] Benton (1944),[14] and Alkire (1949).[15]

Table 17 (above) also illustrates 16 *Areas* in which there was little, or no connection to dance in broader categories involving components of:

(a) dance education (*Performing, Somatic Body Therapies, Creating and Choreographing, Artists in School, and Dance Science and Medicine, Resources,* and *Technology*);

(b) developmental skills (*Cognitive Development*, and *Higher Order Thinking and Problem Solving)*; and

(c) state and national education policy (*Assessments in Program Effectiveness, Certification, Assessments at National, State and LEA levels, State and LEA Standards, Licensure, Opportunities to Learn,* and *Research*).

Research Methods, Techniques, and Essential Research Characteristics

Of the 26 documents located in this time period in *Other Disciplines* (N=26), the most frequently used research methods included: *Descriptive* (n=7), *Correlational/Comparative* (n=6), and *Philosophical* (n=6). [Appendix D2: Research Methods.]

Similarly, research techniques favored in *Other Disciplines* included: *Action Research* (n=6), *Observation* (n=4), *Survey/Questionnaire* (n=4), and *Anecdotal* (n=4) with little representation in *Content Analysis*, *Thinking Aloud,* and *Focus Group/Interview*.

The essential research characteristics, based on "yes" checked off, were rank ordered as follows:

Question #1: Clear posing of research question (n=22; 84.6%)

Question #2: Clear discussion of appropriate research methodologies (n=12; 46.1%)

Question #6: Organized set of references and citations (n=12; 46.1%)

Question #5: Clear and concise discussion of analysis and conclusions (n=10; 38.4%)

Question #3: Appropriate and comprehensive literature review (n=7; 26.9%)

Question #4: Clear discussion of methods for collecting and storing data (n=7; 26.9%)

Recommended for further analysis: (n=8; 30.7%)

A high percentage (84.6%) of the literature in *Other Disciplines* between 1926 and 1950 provided a clear posing of research questions. Nearly half of the articles reviewed (46.1%) presented both a clear discussion of appropriate research methodologies and an organized set of references and citations. The remaining questions, however, were not particularly strong and only 30.7% required more in-depth analysis to understand methodology.

Time Period: 1951–1964

During the second era, 1951-1964, only 12 articles were uncovered in journals of *Other Disciplines* that met the parameters of the RDE study. The work of dance educators was found in periodicals including *Childhood Education*, *Research Quarterly*, *Journal of Aesthetic Art Education*, *Journal of Applied Psychology,* and *Theory into Practice*.

Table 18 (below) illustrates the ways in which dance interacted with *Other Disciplines* in *Issues, Populations Served*, and *Areas of Service* for the era spanning 1951-1964. Dance education appeared to integrate with *Other Disciplines* on issues involving: *Student Achievement*;[16,17,18] and, to a lesser extent *Arts*

> Dance education appeared to integrate with *Other Disciplines* on *Issues* involving *Student Achievement* and to a lesser extent *Arts Education, Kinesthetic Learning,* and *Health.*

Education, Kinesthetic Learning, and *Health.* Mere traces of interest were found in literature addressing *Creative Process*, *Student Performance*, *Multicultural Education,* and *Equity*.

Given the review of literature at this time, no references could be found that focused on major areas of teaching and learning that involved:

(a) developmental skills (*Learning Styles and Theories, Affective Domain, Children-at-Risk,* and *Brain Research);*

(b) education policies (*Policy, Funding, Certification, Uncertified Teachers, Teachers Standards*, and *National Content Standards);* and

(c) pedagogy (*Integrated Arts* and *Interdisciplinary Education).*

Many of these *Issues* were not a part of the social consciousness and educational awareness in the middle part of the century to the same extent as in later decades.

The *Populations* most served by dance in *Other Disciplines* were most notably *Higher Education*, *Artists*, and K-12, the categories of which parallel those identified in the content areas of *Unpublished Documents* and *Literature in Dance Education* – only vastly smaller in quantity.

As in the earlier time period (1926-1950), no citations were found for dance in *Other Disciplines* with populations of *Different Abilities*, *Seniors and the Elderly*, *After School* and *Outreach* programs, *Private Studios*, *Administrators and Policy Makers,* and *Community and Family.* These populations became a greater concern in education during later decades.

Table 18. Other Disciplines 1951–1964: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank	Issues	n=12	Populations Served	n=12	Areas of Services	n=12
1	Student Achievement	5	Higher Education	9	Advocacy Technique Critical Analysis Child Development Somatic Body Therapies Dance Science & Medicine	2
2	Health Kinesthetic Learning Arts Education	2	Artists	3	Curriculum & Sequent Learning Creating & Choreograph Performing Creative Process Historical Cult Contexts Assessments: Stud & Teachers Opportunities to Learn Pedagogy	1
3	Creative Process Student Performance Equity Multicultural Education	1	K-4 5-8	2	Artists in Schools Cognitive Development Hi Order Think & Problem Interdisciplinary Education State & LEA Standards Assessments: Program Effect Assessments: Nat'l, State, LEA Teach Prep & Train Certification Licensure Resources Research Technology	0
4	Learn Styles/Theories Affective Domain Policy Funding Certification Uncertified Teachers Teacher Standards Children-at-Risk Integrated Arts Interdisciplinary Education Nat'l Content Standards Brain Research	0	9-12 Early Childhood World Cultures	1		
5			Different Abilities Seniors & Elderly After School Outreach Private Studios Admin & Policy Mkrs Community & Family	0		

* Data reflect actual numbers of documents

Due to the small number of documents identified and reviewed in *Other Disciplines* during this era (n=26) and the even distribution of attention in the 27 *Areas of Service,* all fields received only traces of attention. The greatest concentration in any category was two articles.

Dance interacted with *Other Disciplines* in *Areas of Service* involving: *Advocacy, Technique, Critical Analysis, Child Development, Somatic Body Therapies,* and *Dance Medicine and Science*. Articles addressed the relative contributions of dance to education and health,[19] work on audio-perceptual skill building,[20, 21] the impact of dance on child growth and development,[22,23] and discussion on dance as aesthetic arts.[24,25,26]

The *Areas of Service* that received scant attention involved aspects of education policy (*Pedagogy, Assessments, Opportunities to Learn, Curriculum and Sequential Learning,* and *Historical and Cultural Contexts*) and dance education (*Creating and Choreographing, Performing,* and *Creative Process*).

As Table 18 (above) illustrates, nearly one-half of the 27 *Areas of Service* (n=13) remained void. Again, these *gaps* existed is broad categories including:

    (a) Developmental skills (*Cognitive Development*, and *Higher Order Thinking and Problem Solving)*;
    (b) Pedagogy (*Interdisciplinary Education, Artists in School, Research, Resources,* and *Technology,*)
    (c) Education policy (*Assessments in Program Effectiveness, Assessments at National, State and LEA levels, State and LEA Standards, Certification, Licensure,* and *Teacher Preparation and Training).*

Research Methods, Techniques, and Essential Research Characteristics

Of the 12 documents located during the time period (1951-1964) in *Other Disciplines*, the most frequently used research methods included: *Correlational/Comparative* (n=6) and *Descriptive* (n=5) followed by *Evaluation* (n=2), *Curriculum* (n=2) and *Quasi-Experimental* (n=2) with voids in all other methodologies. [Appendix D2: Research Methods.]

Similarly, research techniques favored in *Other Disciplines* included: *Action Research* (n=3), *Case Study* (n=3) and *Content Analysis* (n=3) followed by *Observation* (n=2), *Anecdotal* (n=2) and *Focus Group/Interview* (n=2). The remaining research techniques were not represented in the literature reviewed.

Most surprising was the high percentage of documents that met the essential research characteristics in all categories; however, this too reflected the limited number of documents included in this era.

The essential research characteristics, based on "yes" checked off, were rank ordered as follows:

Question #1: Clear posing of research question (n=12; 100%)

Question #6: Organized set of references and citations (n=11; 91.6%)

Question #5: Clear and concise discussion of analysis and conclusions (n=11; 91.6%)

Question #2: Clear discussion of appropriate research methodologies (n=9; 75%)

Question #3: Appropriate and comprehensive literature review (n=9; 75%)

Question #4: Clear discussion of methods for collecting and storing data (n=9; 75%)

Recommended for further analysis: (n=9; 75%)

Time Period: 1965–1979

During this era, 47 articles were identified and reviewed in journals of *Other Disciplines* that involved *Issues* in relation to dance *Populations Served* and *Areas of Service*, as defined by the *Grid Matrix.* During the time frame 1965-1979, dance programs grew in higher education and graduate programs expanded throughout the country. Gradually, research emerged from the graduate programs that reflected the work dance educators were accomplishing in liaison with *Other Disciplines*. Both the quality and quantity of research began to emerge externally to the field.

> Over time, research emerged from the graduate programs that reflected the work dance educators were accomplishing in liaison with *Other Disciplines.*

From data illustrated in Table 19 (below), it appears *Other Disciplines* involved dance in issues relating to *Kinesthetic Learning*, *Learning Styles and Theories*, *and Arts Education*; and, to a lesser extent in *Student Achievement* and *Health.* There appeared to be a slight increase in exploring *Affective Domain, Interdisciplinary Education* and *Integrated Arts* as these issues entered dialogue in national education. Almost no attention was awarded *Funding* despite the establishment of the National Endowment for the Arts (1965) and the Artists-in Education programs that brought artists into schools.

Table 19. Other Disciplines 1965–1979: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank	Education Issues	n=47	Populations Served	n=47	Areas of Service	n=47
1	Kinesthetic Learning	18	K-4 Higher Education	18	Advocacy	15
2	Learning Styles & Theory	12	5-8	12	Child Development Pedagogy	9
3	Arts Education	11	Different Abilities	7	Interdisciplinary Education	8
4	Student Achievement	8	Early Childhood Admin & Policy	6	Curriculum/Sequential Learning Dance Science/Med	6
5	Health	6	9-12	6	Creative Process	5
6	Creative Process Policy Multicultural Education	5	Private Studios	5	Critical Analysis Historical & Cultural Context	4
7	Affective Domain Interdisciplinary Education	3	Community/Family	4	Cognitive Development	3
8	Integrated Arts	2	Artists World Cultures	2	Artists in Schools Dance Technique Assessments: Student Teachers Assessments: Program Effect Teacher Preparation & Training	2
9	Student Performance Funding	1	Seniors & Elderly After School Outreach	1	Creating/Choreograph High Order Thinking & Problem Assessment Nat'l, State, LEA Research	1
10	Certification Uncertified Teachers Teacher Standards Equity Children-at- Risk Nat'l Content Standards Brain Research	0		0	Performing Somatic Body Therapy State and LEA Standards Opportunity to Learn Certification Licensure Resources Technology	0

- Data reflect actual numbers of documents

No references were cited for dance in the literature of *Other Disciplines* in areas of education policy and pedagogy involving: *Dance Certification, Uncertified Teachers, Teacher Standards, Equity, Children-at-Risk, National Content Standards,* and *Brain Research*.

Again, referring to Table 19 (above), it appears that *Other Disciplines* were most notably involved with populations in dance focused on *K–4* education and *Higher Education*, and *5-8*, as in the previous two eras. For the first time, *Different Abilities* showed some field interest. Resnick (1973),[27] Emes (1978),[28] and Duehl (1979)[29] investigated the use of creative movement with visually impaired students in public education. One of the first studies identified and reviewed in the literature of *Other Disciplines* involved gifted students, written by Kaemmerleu (1979).[30]

As in previous eras, 1926-1950 and 1951-1964, no references were found in *Populations* involving *Seniors and the Elderly*, *After School*, and *Outreach.* It is likely field work in dance was emerging in these areas with *Other Disciplines; however,* it was not yet visible in the literature of *Other Disciplines* reviewed to date.

From data illustrated in Table 19 (above), it appears that *Other Disciplines* most frequently interfaced with dance as subject matter in: *Advocacy*; *Child Development* and *Pedagogy, Interdisciplinary Education, Curriculum and Sequential Learning, Dance Science and Medicine,* and *Creative Process.*

Few or no references were reported in *Other Disciplines* in two broad categories of importance: (a) dance arts education (*Artists in Schools, Creating and Choreographing Dance*, *Performing Dance, and Somatics and Body*

Therapies; and (b) education policy (*State and LEA Standards, Opportunities to Learn, Certification, Licensure,* and *Assessments of Program, National, State and LEA).*

Research Methods, Techniques, and Essential Research Characteristics

Of the 47 documents located for the period 1964-1979 in *Other Disciplines,* the research methods most frequently used were: *Descriptive* (n=22) and *Correlational/Comparative* (n=14); *Curriculum* (n=7) and *Evaluation* (n=7) studies. [Appendix D2: Research Methods.]

Similarly, research techniques favored in *Other Disciplines* included: *Observation* (n=7), *Content Analysis* (n=6), *Anecdotal* (n=4); and to a lesser extent *Action Research* (n=3), *Survey/Questionnaire* (n=3), and *Thinking Aloud* (n=3). *Meta-analysis and Computer Simulation* were not present as research techniques in the literature uncovered for this time period.

Essential research characteristics to which "yes" was ascribed were rank ordered, as follows:

Question #1: Clear posing of research question (n=43; 91.4%)

Question #6: Organized set of references and citations (n=32; 68%)

Question #5: Clear and concise discussion of analysis and conclusions (n=23; 48.9%)

Question #2: Organized discussion of appropriate research methodologies (n=20; 42.5%)

Question #3: Appropriate and comprehensive literature review (n=19; 40.4%)

Question #4: Clear discussion of methods for collecting and storing data (n=18; 38.2%)

Recommended for further analysis: (n=18; 38.2%)

The percentages for essential research characteristics are much lower in this time frame than in previous eras. It appears more writing was being accomplished, but less as formal research in *Other Disciplines.*

Time Period: 1980–2002

During this time frame of 23 years, 280 documents were published in *Other Disciplines.* This accounted for 76.7% of all documents identified and reviewed in *Other Disciplines* between 1926 and 2002. Table 20 (below) illustrates the ways in which *Other Disciplines* interacted with dance in education *Issues*, *Populations Served*, and *Areas of Service* from 1980–2002.

For composite data 1980-2002, it appears dance was predominantly involved with *Other Disciplines* in *Issues* related to *Health*, *Learning Styles and Theories*, *Kinesthetic Learning, Arts Education, Policy, and Student Achievement*. Common to earlier eras, *Health, Kinesthetic Learning, and Arts Education* remained prime *Issues* of focus interfacing with the *Populations* of *Higher Education* and K-12 education. These factors largely reflect the placement of dance throughout time in physical education and the focus on both dance as a physical activity in health education, and dance as an artistic process in arts education.

> Dance was predominantly involved with *Other Disciplines* in *Issues* related to *Health, Learning Styles and Theories, Kinesthetic Learning, Arts Education, Policy* and *Student Achievement*.

Attention to individual learning preferences emerged in *Affective Domain*, *Children-at-Risk*, and *Student Performance*. Finally, education policy issues became more visible in literature in *Other Disciplines* (*Certification, Funding, Teachers Standards, Equity, National Content Standards, Brain Research,* and *Uncertified Teachers*). For the first time in *Other Disciplines*, all *Issues*, *Populations Served*, and *Areas of Service* were awarded some attention in the literature.

Most notable among the *Areas of Service*, is the significant cross-over and dominance of articles about the dancing body and injuries published in fields of physical education and medicine science. Articles about *Dance Science and Medicine* (n=92) accounted for 33% of all documents reviewed in this period (1980-2002) in *Other Disciplines.* Many of these articles were published in periodicals of other disciplines including: *Medical Problems of Performing Artists*, *Research Quarterly in Exercise and Sport*, *Medicine and Science in Sports and Exercise*, and *Perceptual Motor Skills*.[31] The research methodologies and designs were often exemplary. The articles tended

toward the scientific measure of muscles and other aspects of body function and performance, rather than on dance aesthetics and creativity. As such, they were more quantifiable in nature but less directed to general education. Consequently, we have accumulated a well-researched concept of the dancing body and the effects of dance on the body.

Table 20. Other Disciplines 1980–2002: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank Order	Education Issues	n=280	Populations Served	n=280	Areas of Service	n=280
1	Health	97	Higher Education	116	Dance Science/Medicine	92
2	Learn Styles & Theories	64	K-4	95	Advocacy	77
3	Kinesthetic Learning	62	Private Studios	86	Pedagogy	53
4	Arts Education	49	9-12	81	Dance Technique	43
5	Policy	43	5-8	77	Interdisciplinary Education	36
6	Student Achievement	39	Admin/Policy Makers	44	Curriculum & Sequential Learning	33
7	Creative Process	22	Artists	38	Teacher Preparation & Training	30
8	Integrated Arts	19	Community & Family	19	Child Development	28
9	Interdisciplinary Education	18	Different Abilities	17	Historical & Cultural Contexts	26
10	Affective Domain	15	World Cultures	15	Creative Process	20
11	Multicultural Education	13	Early Childhood	10	Performing Dance	17
12	Children-at-Risk	12	After School	4	Assessments: Student & Teacher	16
13	Student Performance	11	Seniors & Elderly	2	Artists in Schools	13
14	Certification Funding	8	Outreach	1	Creating & Choreographing Cognitive Development Research	12
15	Teachers Standards Equity	6			Critical Analysis	10
16	Nat'l Content Standards	5			Somatic Body Therapies	9
17	Brain Research	3			Assessments: Program Effect Opportunities to Learn	6
18	Uncertified Teachers	1			Certification	5
19					Resources State and LEA Standards Assessments: Nat'l, State, LEA	4
20					Technology Hi Order Think & Problem Solving	3
21					Licensure	2

* Actual numbers of documents

Both *Dance Technique* and *Pedagogy* are strongly associated with *Dance Medicine and Science* as common *Areas of Service*; and, thus, they too show increased research interest as well. Similarly, *Student Achievement* was an issue that frequently was associated with dance medicine and science.

Research Methods, Techniques, and Essential Research Characteristics

Of the 280 documents located during this period in *Other Disciplines*, the research methods most frequently used were *Descriptive* (n=165) and *Correlational/Comparative* (n=102), followed by *Evaluation* (n=47), *Philosophical* (n=45), and *Curriculum* (n=39). [Appendix D2: Research Methods.]

Similarly, research techniques favored in *Other Disciplines* included: *Survey/Questionnaire* (n=52), *Observation* (n=33*), Content Analysis* (n=30), *Case Study* (n=27*), Thinking Aloud* (n=24*), and Anecdotal* (n=24). The first *Computer Simulation* (n=1) appeared in *Other Disciplines* in this most recent time frame.

Most noteworthy in this era are the large number of documents and corresponding high percentage of documents to have met the essential research characteristics.

Essential research characteristics to which "yes" was ascribed were rank ordered, as follows:

Question #1: Clear posing of research question (n=274; 97.8%)

Question #6: Organized set of references and citations (n=217; 77.5%)

Question #3: Appropriate and comprehensive literature review (n=170; 60.7%)

Question #5: Clear and concise discussion of analysis and conclusions (n=168; 60%)

Question #2: Clear discussion of appropriate research methodologies (n=150; 53.5%)

Question #4: Clear discussion of methods for collecting and storing data (n=123; 43.9%)

Recommended for further analysis: (n=132; 47.1%)

Given the large percentage of medicine and science articles included in this last time period (1980-2002), it is not surprising that nearly 60% of the Literature from *Other Disciplines* was *Descriptive* research followed by *Correlational/Comparative* and *Evaluation*. All six essential research characteristics were relatively high, and 47.1% of the documents required more in-depth analysis.

Summary of *Trends* and *Gaps*: 1926–2002

U.S. Education Issues

In reviewing literature published in *Other Disciplines* framing 76 years (Table 21, below), *Health, Kinesthetic Learning, Learning Styles and Theories, Arts Education,* and *Student Achievement* were ranked the top five major *Issues;* and, generally, each ranked among the top *Issues* in individual time periods as well.

Table 21. Other Disciplines 1926–2002: Rank Ordered Issues, Populations Served, and Areas of Service *

Rank	Education Issues	N=365	Populations Served	N=365	Areas of Service	N=365
1	Health	109	Higher Education	155	Dance Science/Medicine	101
2	Kinesthetic Learning	87	K-4	126	Advocacy	99
3	Learn Styles & Theories	78	5-8	100	Pedagogy	70
4	Arts Education	69	9-12	95	Dance Technique	49
5	Student Achievement	53	Private Studios	90	Interdisciplinary Education	47
6	Policy	49	Admin/Policy Makers	50	Child Development	45
7	Creative Process	32	Artists	45	Curriculum & Sequential Learning	43
8	Integrated Arts	26	Different Abilities	24	Teacher Preparation & Training	35
9	Interdisciplinary Education Multicultural Education	21	Community & Family	22	Historical & Cultural Contexts	34
10	Affective Domain	19	Early Childhood	21	Creative Process	29
11	Student Performance	13	World Cultures	20	Assessments: Student & Teacher	21
12	Children-at-Risk	12	After School	4	Performing Critical Analysis	19
13	Funding	9	Seniors & Elderly	2	Cognitive Development	15
14	Teachers Standards Certification	8	Outreach	1	Creating & Choreographing	14
15	Equity	7			Research	13
16	Nat'l Content Standards	6			Somatic Body Therapies	11
17	Brain Research	3			Assessments: Program Effectiveness Artists in Schools	9
18	Uncertified Teachers	1			Opportunities to Learn	8
19					Certification State and LEA Standards Assessments: Nat'l, State, LEA	5
20					Resources Hi Order Think & Problem Solving	4
21					Technology	3
					Licensure	2

* Actual numbers of documents

Given the placement of dance with physical education, it is not surprising that *Other Disciplines* connected with *Areas of Service involving Dance Science and Medicine, Advocacy,* and *Pedagogy.* Throughout the 76 year data collection time frame, dance educators were writing about dance in physical education and dance as an aesthetic

education in the arts. Educators were measuring the physical and kinesthetic components of dance activity and they were publishing in journals associated with sports science and medicine. Educators were advocating for dance to be included in the curriculum of both higher education and K-12 education.

Another significant change over the years was evidenced with *Kinesthetic Learning.* Earlier the term referenced "learning movement" which supported the social and healthful benefits of dance in education. However, in more recent decades, a broader definition evolved to include "learning through movement" – or acquiring knowledge through the medium of bodily movement – which now is a concept adopted by contemporary artists and educators and in the RDE study as well. [Appendix A: Grid Descriptors.].

As mentioned earlier, other *Areas of Service* directly connected to dance's inclusion in health education and its migration to the arts. These are reflected in the literature and research evident in *Pedagogy, Dance Technique, Interdisciplinary Education,* and *Child Development.* Increased attention to *Curriculum and Sequential Learning,* and *Teacher Preparation and Training* are partially a result of pedagogical debates as dance was increasingly instituted in both physical education and arts programs in U.S. education.

Significant *gaps* existed in issues that concerned policy (*Children-at-Risk, Funding, Assessments* and *Standards* for teachers and students, *Certification, Equity, National Content Standards,* and *Uncertified Teachers*). These were generally not addressed until the fourth time period 1980–2002. Undoubtedly, these policy issues became more significant in the latter twentieth century when *Other Disciplines* began developing their own discipline-specific content standards and when education began focusing on assessments, teacher certification, and licensure. This focus continues today with the advent of voluntary *National Standards for Dance Education* (1994)[32] and the National Assessments in Education Progress (NAEP) assessments for benchmark grades in 1995 and 1997, and proposed NAEP assessments for 2008. Legislation of both the Clinton (*Goals 2000: Educate America Act*; 1994) and Bush (*No Child Left Behind*; 2001) administrations clearly shift early twenty-first century emphases to policy issues in U.S. education.

It is important to look at dance through the lens of *Other Disciplines*—especially through the ways dance, when taught as arts education and when partnered with *Other Disciplines,* contributes to the larger in-school course curriculum mainly evident in *Integrated Arts, Interdisciplinary Education, and Multicultural Education.* Generally, since 1926, these issues shifted from areas of no, or low, importance to areas of moderate-to-high importance as they became more contemporary issues in education. Similarly, as content in dance changed dramatically over the years embracing more dance process (creating, performing, and critical analysis) in education, the discipline has gained more opportunity to impact teaching and learning in and through dance in integrated, interdisciplinary and multicultural education.

> It is important to look at dance through the lens of *Other Disciplines*—especially when dance is taught as arts education partnered with *Other Disciplines*—and how it contributes to the larger in-school course curriculum mainly evident in *Integrated Arts, Interdisciplinary Education, and Multicultural Education.*

During the 1980-2002 time frame also came increased recognition of the importance of the individual learner, as evident in the numbers of studies in *Learning Styles and Theory*, *Affective Domain, Children-at-Risk, Creative Process, Student Performance and Student Achievement*. Again, quality dance education can support educating the "whole" child in ways not previously recognized and in ways not yet articulated.

Populations Served

The same four *Populations* remained a prime focus in education throughout the 76 years, perhaps slightly shifting in rank order: *Higher Education, K–4, 5–8,* and *9–12*. Only *Early Childhood*, *Artists*, and *Administrators and Policy Makers* approached fifth rank in levels of importance which is unique to *Other Disciplines.*

Generally, significant *gaps* appear in literature and research that addresses the populations of *After School and Outreach, and Seniors and Elderly.* Current funding opportunities reach out to some of these populations so, through building partnerships at local and state level, it is quite likely that collaborative research proposals could be developed and funded to the benefit of the dance community and *Other Disciplines*.

Areas of Service

Advocacy remained one of the two top *Areas* served in dance education throughout the 76 years reviewed in the RDE study (1926-2002). It is interesting to note that advocacy appeared to be directed in three apparent channels under data for populations: (1) up-line to *Administrators and Policy Makers*; (2) down-line to immediate schools and community environs; and (3) horizontally across populations to *Other Disciplines.* As evidenced in Table 21 (above), *Administrators and Policy Makers* ranks just below the internal and external populations served through liaisons with the dance arts education community – e.g., *Higher Education, K-4, 5-8, 9-12* education*, and Private Studios;* and it should be emphasized that *Other Disciplines* is the only content area to reach out to *Administrators and Policy Makers* in any substantive ranking after 1965. The *Populations* served across disciplines included dance education internal to the school (K-12), and external to the school (*Higher Education, Artists,* and *Private Studios* and schools of dance).

The majority of *Areas* served connected, as one might expect, with *Dance Science and Medicine*, *Pedagogy, Dance Technique, Interdisciplinary Education, Child Development, Curriculum and Sequential Leaning, Teacher Preparation and Training,* and *Historical and Cultural Contexts.*

Significant *gaps* appeared in *Certification, Licensure, Assessments* (national, state, and LEA), and *Standards* (national, state, and LEA). These were areas in which zero or little literature was published over 76 years and as such could be considered external policy areas. *Policy*, as observed under *Issues* from the 1980s forward, mostly addressed internal areas associated with in-class pedagogy and curriculum – a subtle, but important difference.

Research Methods, Techniques, and Essential Research Characteristics

Of the documents reviewed 1926 – 2002 in *Other Disciplines* (N=365), 54% were *Descriptive* (n=199) research, and 35% were *Correlational/Comparative* (n=128) research. *Evaluation* (n=59), *Philosophical* (n=56), and *Curriculum* (n=50) research were of moderate importance representing 16% to 13% of research methods used over 76 years. [Appendix D2: Research Methods.]

Similarly, research techniques favored in *Other Disciplines* included: *Survey/ Questionnaire* (n=59), *Observation* (n=46), *Content Analysis* (n=41), *Anecdotal* (n=33), *Case Study* (n=32*), Thinking Aloud* (n=29), and *Action Research* (n=27). *Focus Groups* (n=14), *Computer Simulation* (n=1), and *Meta Analyses* (n=0) received little or no references of use in *Other Disciplines* relating to dance.

Essential research characteristics to which "yes" was ascribed were, in ranked order:

Question #1: Clear posing of research question (n=351; 96.1%)

Question #6: Organized set of references and citations (n=272; 74.5%)

Question #5: Clear and concise discussion of analysis and conclusions (n=212; 58%)

Question #3: Appropriate and comprehensive literature review (n=205; 56.1%)

Question #2: Clear discussion of appropriate research methodologies (n=191; 52.3%)

Question #4: Clear discussion of methods for collecting and storing data (n=157; 43%)

Recommended for further analysis: (n=167; 45.7%)

As discussed for the time period 1980-2002, a large percentage of documents from medicine and science accounted for 55% of the *Descriptive* and 35% of the *Correlational/Comparative* research designs reviewed for *Other Disciplines* over 76 years. Research identified and reviewed in *Other Disciplines* generally met the six essential research characteristics with more success than did the other content areas of *Unpublished Documents* and *Published Literature in Dance Education.* A high percentage of all documents reviewed in *Other Disciplines* required more in-depth analysis (n=167; 34.5%).

> Research identified and reviewed in *Other Disciplines* generally met the six essential research characteristics with more success than did the other content areas of *Unpublished Documents* and *Literature in Dance Education*.

Summary Discussion: *Other Disciplines* 1926-2002

From the 365 articles reviewed in the RDE study from *Other Disciplines,* it is evident that the practice of dance in all its many facets is relevant to colleagues in broader areas of education working in human development, body science, health practices, developmental psychology, and brain development and function, to name but a few. However, the various contextual frameworks in which dance exist need more investigation from a research base using appropriate modes of inquiry.

Since "dance education" in the teachings of *Other Disciplines* focuses mostly on dance's instrumental value to education, it would be advisable for dance educators to investigate this area of inquiry further. Equally important, our discipline should be able to provide *Other Disciplines* with data addressing aesthetic, educational, and cognitive values of dance arts education as well. Such research would likely involve investigations into the artistic processes of performing, choreographing, creating, and analyzing dance. Both the instrumental and intrinsic benefits of dance arts education are important to identify and articulate for educators and administrators in dance as well as for educators and administrators in *Other Disciplines*.

> Both the instrumental and intrinsic benefits of dance arts education are important to identify and articulate for those of us in dance as well as those of us in *Other Disciplines*.

We know there are a variety of research methods and techniques available to artists, educators, and administrators to support them in various research inquiry processes. As individuals within the discipline and as cohorts among *Other Disciplines*, our field needs to expand research in dance education—regardless of the environment—to include (1) a sincere grounding in the importance of research to dance and our work in *Other Disciplines*; and (2) training in research methods and technique so we know how to frame questions and gather, analyze, and report data. Part of the grounding process should involve understanding how practice informs the research process, which in turn informs the practice to research. In other words, research informs practice and practice informs research in a never ending cycle of inquiry, whether one is a student, professional artist, educator, administrator, or purely a lover of the dance.

Another point that is illuminated in these 76 years of research is that the dance field needs to make earnest attempts to communicate beyond the dance discipline. This means expanding both written and verbal communications to *Other Disciplines* through such means as: (1) disseminating existing work to *Other Disciplines* at their national conferences and in their discipline's professional journals; and (2) building new partnerships among dance environments (K–12, higher education, performing arts organizations, private schools of dance, outreach programs, and community centers) to undertake research projects capitalizing on the classroom as a laboratory in educational experiences for diverse populations. Relatively speaking, this remains virgin territory. As mentioned earlier in the chapter, current funding opportunities reach out to underserved populations and programs in *Other Disciplines*. It is quite likely that, through building partnerships at local and state levels, collaborative research proposals could be developed and funded to benefit both the dance community and *Other Disciplines*.

Finally, it is clear from the good proportion of work accepted in journals of *Other Disciplines* that the requirements for inclusion in these particular disciplines require a more formal research format. If the Research in Dance Education database (RDEdb) is studied from this perspective, it could well inform dance educators about the perspectives of *Other Disciplines* while it simultaneously provides information about research methodologies and techniques required to partner more successfully with *Other Disciplines.* This cross-pollination can only enhance research partnerships by expanding our own knowledge base while, at the same time, expanding the knowledge base in *Other Disciplines*. We have much to contribute to education in *Other Disciplines;* and they, in turn, have much to share with dance.

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Chapter 5. Synthesis and Comparison of Content Areas: Unpublished Documents, Published Literature in Dance Education, and Published Literature in Other Disciplines

By Rima Faber, Ph.D. and Jane M. Bonbright, Ed.D.

The collection of documents for the Research in Dance Education (RDE) study begins with the year 1926, the advent of the first major program for dance in higher education. In the 76 year span covered in the RDE project, a total of 2,339 studies in dance education were reported as of 28 August, 2002 (N=2,339). Of these documents, 36% were *Unpublished Documents* (n=843)*,* 48.4% were *Published Literature in Dance Education* (n=1,131), and 15.6% were *Published Literature in Other Disciplines* (n=365) (Table 22, below).

In reviewing the work of 76 years, literature clearly illustrated the academic, intellectual and artistic health and relevance of dance as a field of study from 1926 – 2002. As scholarship evolved in the field, literature addressed the professional, social and educational aspects of dance. It is evident that dancers were being trained in the art of dance, and that dance was an issue in education at a time when pedagogy and curricula were being debated. This discourse on educational dance marked the study of dance as a discipline.

Although the first undergraduate dance major program was instituted in 1926 at the University of Wisconsin-Madison, it wasn't until 1927[1] that the first examples of research endeavors emerged in the RDE study. Data in Table 22 (below) show the escalation of documents identified and reviewed in the RDE project during the four eras: 1926-1950 (n=297; 12.7%); 1951-1964 (n=229; 9.8%); 1965-1979 (n=428; 18.3%); and 1980-2002 (n=1,385; 59.2%). The middle two time frames (1951-1964 and 1965-1979) each covered ten fewer years than did the first and last time frames (1926-1950 and 1980-2002).

Data illustrate the growth in unpublished and published studies that began to escalate in the third time frame (1965-1979). The most dramatic increases occurred in the last time frame (1980-2002) with the proliferation of undergraduate dance minor and major programs in colleges and universities in the United States,[2] and the subsequent increased opportunities to produce research from graduate programs in dance. Historically, this dovetailed with the emergence of the National Endowment of the Arts' Dance Touring Program, Artists in Schools programs, and a gradual decentralization of professional dance to rural America.[3] These decades also evidenced heightened awareness of arts education in the United States partially due to publications such as *A Nation At Risk*,[4] *Coming To Our Senses*,[5] and *Toward Civilization*[6] alerting Americans to the dearth of arts education in U.S. schools.

Table 22. All Content Areas 1926-2002: Comparative Chart for Unpublished Documents, Literature in Dance Education, and Other Disciplines in Four Time Periods and All Time Periods *

Time Period	Unpublished Docs	Literature in Dance Education	Other Disciplines	Totals
	n=843	n=1,131	n=365	N=2,339
1926-1950	69	202	26	297
1951-1964	83	134	12	229
1965-1979	168	213	47	428
1980-2002	523	582	280	1,385

* Data reflect actual numbers of documents

Methodology

The following report analyzes and synthesizes findings for each of the three content areas included in the RDE study: *Unpublished Documents, Published Literature in Dance Education,* and *Published Literature in Other Disciplines.* As clarified in previous chapters, these content areas are referred to throughout the Report as: *Unpublished Documents*, *Literature in Dance Education,* and *Other Disciplines.* Data were cross-referenced and analyzed to reveal *patterns, trends,* and *gaps* in dance education research in each of the three content areas, four time frames, and overall 1926-2002.

This chapter is organized into six sections. Section I provides brief summaries of data derived from the three content areas. Sections II, III and IV address respectively *Populations Served, Areas of Service,* and *U.S. Education Issues.* In turn, each section addresses the *patterns* and *trends* evidenced in each of the four time periods (1926-1950, 1951-1964, 1965-1979, and 1980-2002); the predominant area(s) of research and *gap(s)* observed in four time periods and collectively 1926-2002; and, areas in need of more research. Section V provides an overview of research methods, techniques, and essential research characteristics. Finally, Section VI puts the report in context with current discussions at national and state levels concerning values placed on quantitative and qualitative research, and on intrinsic and instrumental learning.

Data Collection

In keeping with data management protocols outlined in previous chapters, this report engages the use of several types of data: (1) statistics indicating the actual number of documents containing information about one specific *Issue, Population Served, Area of Service,* research method, and research technique; (2) composite reference numbers indicating the number of cross-references from two or more *Issues, Populations Served,* or *Areas of Service*; (3) composite totals which are sums of the composite reference numbers totaled vertically or horizontally across the *Grid Matrix* [Appendix D1, D2]*;* and (4) data citing specific titles or content pertinent to historic time frames, *Issues, Populations Served,* and *Areas of Service.* Documents cited by title and content provide support for the discussion at hand and should not be construed as recommendations for good methodologies or research quality.

Section I: Overview of the Three Content Areas

Unpublished Documents

The most rigorous research in the RDE study clearly emerged from higher education in the form of *Unpublished Documents* (N=843). Of the 2,339 total documents included in the RDE report, 662 (28.3%) are dissertations (n=178; 7.6%) and theses (n=484; 20.7%).

The earliest research based studies collected in *Unpublished Documents* were dated 1929 – three

> The most rigorous research in the RDE study clearly emerged from higher education in the form of *Unpublished Documents* (N=843).

years after the first dance major program was established at the University of Wisconsin-Madison. As Table 22 (above) illustrates, the quantity of research in dance education increased substantially from 1926-2002 as dance major programs grew in colleges and universities across the nation: 1926-1950 (n=69; 8.2%); 1951-1964 (n= 83; 9.8%); 1965-1979 (n=168; 20.0%); and 1980-2002 (n=523; 62.0%).

With the advent of major studies in dance, higher education became the milieu from which dance education research emerged as dance educators began to conceive and implement research projects designed to define the processes and value of dance education, implement dance programs in American schools, and study the developmental potential of dance in the physical, emotional, social, and cognitive maturation of students.

Literature in Dance Education

Table 22 (page 57) also shows the total number of documents identified and reviewed in *Literature in Dance Education* (N=1,131). A significant portion of the published work over the years appeared as short articles in various manifestations of the professional journals published by the American Alliance for Health, Physical Education, Recreation and Dance, among which included: JOHPE, JOHPER, JOPER, JOPERD[7] (n=699; 61.8%). The majority of these articles were not research based nor did they include traditional research components such as an abstract, introduction, review of the literature, limitations and delimitations, data collection procedures, methods for analyzing data, and discussion and conclusions.

The professional journals commonly used by dance educators in the first decades of the twentieth century, most often served as a platform for philosophizing and theorizing than as a vehicle for discussion of focused inquiry. Professional

> In most recent years, the introduction of journals specifically focused on dance related research have significantly changed the scope and breadth of literature published in dance education.

dance artists such as Ruth St. Denis, Ted Shawn and Jose Limon eloquently wrote about their individual beliefs and artistic points of view. Margaret H'Doubler, Mabel Ellsworth Todd, Ruth Murray and Martha Hill, pioneers of dance education, presented descriptive and anecdotal accounts of their practices, or expounded on their convictions advocating for the field.

In most recent decades, the introduction of journals specifically focused on dance related research have significantly changed the scope and breadth of literature published in dance education. For example, the International Association of Dance Medicine and Science (IADMS) started publishing the *Journal of Dance Medicine and Science* in 1997 which added significantly to field knowledge about the effects of dance on the human body. *Impulse: The International Journal of Dance Science, Medicine, and Education*, a short-lived journal published in the 1990s (and named after the influential dance journal *IMPULSE* published from 1951-1970), made important contributions to inquiry and application of dance pedagogy in arts and education. Similarly, the *American Journal of Dance Therapy,* published by the American Dance Therapy Association, added significantly to field knowledge since 1972 regarding the effects of dance education on mental health.

Published Literature in Other Disciplines

A much smaller base of information in dance education was gleaned from *Published Literature in Other Disciplines* (N=365). As Table 22 (page 57) illustrates, articles about dance education in other disciplines of study were rare before 1980: 1926-1950 (n=26; 7.1%), 1951-64 (n=12; 3.3%), and 1965-1979 (n=47; 12.9%). As data indicate, outside fields demonstrated more interest in dance education in the last era, 1980-2002 (n=280; 76.7%).

Much of the work appeared in journals of sports medicine, psychology, or anthropology, fields in which scientific rigor is expected. It is important to note that it is not researchers from other disciplines who were doing the writing, but educators from within the field of dance who were striving to reach out. *Issues* such as *Health* gained significant attention in *Other Disciplines*.

In recent years, as the potential of interdisciplinary learning has become increasingly recognized for its importance, there has been a corresponding increase in the number of such dance education articles in journals representing *Other Disciplines*. These data show that dance researchers are not only actively working in other disciplines, but their studies examine intrinsic and instrumental values of dance, articulate issues in arts and education, and contribute to the knowledge base in teaching and learning in and through dance. It is important that dance education researchers publish their work in a variety of venues to strengthen and disseminate research, and to further inclusion of dance in educational discourse.

Section II: Overview of *Populations Served*

The RDE study defined 14 *Populations* in the field of dance education – people to whom dance was delivered and to whom research applied. These *Populations* are listed in Table 23 (below) [Appendix A2: Descriptors].

Table 23 (below) provides summary data for *Populations Served* in each of four time periods (1926-1950, 1951-1964, 1965-1979, and 1980-2002) and collectively over 76 years (1926-2002). Data are reported in actual numbers of documents.

Table 23. All Content Areas 1926-2002: Populations Served *

Populations	1926-2002 N=2,339 Rank Ordered		1926-1950 n=297		1951-1964 n=229		1965-1979 n=428		1980-2002 n=1,385	
Higher Education	1,292	55.2%	180	60.6%	142	62.0%	246	57.5%	724	52.3%
5-8	717	30.7%	99	33.3%	46	20.1%	131	30.6%	441	31.8%
K-4	716	30.6%	93	31.3%	41	17.9%	135	31.5%	447	32.3%
9-12	714	30.5%	105	35.3%	61	26.6%	95	22.2%	453	32.7%
Artists	439	18.8%	42	14.1%	49	21.4%	80	18.7%	268	19.4%
Private Studios	344	14.7%	27	9.1%	16	7.0%	35	8.2%	266	19.2%
Comm and Family	186	8.0%	30	10.1%	19	8.3%	34	7.9%	103	7.4%
Admin & Policy Makers	171	7.3%	11	3.7%	19	8.3%	37	8.6%	104	7.5%
World Cultures	113	4.8%	11	3.7%	18	7.9%	21	4.9%	63	4.6%
Different Abilities	93	4.0%	2	0.7%	5	2.2%	27	6.3%	59	4.3%
Early Childhood	91	3.9%	7	2.4%	4	1.8%	24	5.6%	56	4.0%
After School	43	1.8%	6	2.0%	9	3.9%	5	1.2%	23	1.7%
Seniors & Elderly	25	1.1%	2	0.7%	0	0.0%	4	0.9%	19	1.4%
Outreach	21	0.9%	3	1.0%	4	1.8%	1	0.2%	13	0.9%

* Data reflect actual numbers of documents

The "n" numbers in this section of the report refer to the actual numbers of documents found in the RDE study as of August 30, 2002. The accompanying percentage refers to the relative amount the "n" number is part of the whole in a given time period.

As data in Table 23 (above) demonstrate for all years, 1926-2002, *Higher Education* received over half of the total research attention (n=1,292, 55.2%) and K-12 education (*K-4*, *5-8* and *9-12*) received approximately one-third of research attention (n=716; 30.6%). This left the remaining ten *Populations* significantly under-researched and underserved: *Artists, Private Studios, Community and Family, Administrators and Policy Makers, World Cultures, Different Abilities, Early Childhood, After School, Seniors and Elderly,* and *Outreach*.

Patterns and *Trends*
1926-1950
The literature in all three content areas focused on the two prime *Populations: Higher Education* (n=180; 60.6%) and K-12 education (average n=99; 33.3%). The literature within K-12 education was evenly distributed among, in order of predominance: *9-12* (n=105; 35.3%), *5-8* (n=99; 33.3%), and *K-4* (n=93; 31.3%). In this era, only two other *Populations* received more than 10% of research interest: *Artists* (n=42; 14.1%) and *Community and Family* (n=30, 10.1%).

Prime interest in *Higher Education* and K-12 education (*K-4, 5-8,* and *9-12*) is not surprising given 1926-1950 frames the beginning and first substantial development for dance in the academy. This is borne out in the content of the literature that focuses on defining historical contexts of dance, on clarifying the nature and

scope of dance as arts education in *Higher Education*, and on the gradual incorporation of dance into K-12 education. The *Populations* of *Higher Education* and K-12 education were important to the research questions in the era, and to teaching dance in physical education during the formative years of the discipline.

All remaining *Populations* received less than 10% of the focus in this era and are considered significant *gaps*.

1951-1964

Higher Education (n=142; 62.0%) continued to be the prime focus of dance education interest while the next two most researched *Populations* received significantly less attention: K-12 education (average n=49; 21.4%) and *Artists* (n=49; 21.4%).

During this era, there was a perceptible shift in focus within K-12 education research. In the years from 1926-1950, the majority of studies were fairly evenly distributed among grades *K-4*, *5-8*, and *9-12.* In the time period 1951-1964, grades *9-12*

> Data indicate that much of the research focused on dance education in the college and university setting making *Higher Education* both the source, and focus, of inquiry.

(n=61; 26.6%) received greater emphasis than did grades *5-8* (n=46; 20.1%) and *K-4* (n=41; 17.9%).

Data indicate that much of the research focused on dance education in the college and university setting making *Higher Education* both the source, and focus, of inquiry. The fact that research endeavors secondarily targeted populations in traditional education settings (K-12) is not surprising given *Higher Education* served K-12 education in teacher preparation, professional development, and in-service programs; and given the gradual incorporation of dance into public and private K-12 school environments.

All remaining *Populations* received less than 10% of the focus in this era and are considered *gaps*.

1965-1979

As with the preceding eras, more than one-half of the literature pursued in this era focused on *Higher Education* (n=246; 57.5%). Secondarily, literature also targeted K-12 education (average n=120; 28.1%); and *Artists* (n=80; 18.7%) continued to lag significantly behind.

Focus within K-12 education gravitated to grades *K-4* education (n=135; 31.5%) and *5-8* (n=131; 30.6%) and away from *9-12* (n=95; 22.2%), for the first time in three eras.

With such a strong focus on *Higher Education* and K-12 education, and moderate interest in *Artists*, all remaining *Populations* received less than 10% of researchers' attention and are considered *gaps*. As a result, they remain largely unexplored and underserved.

1980-2002

Throughout this era, the prime focus remained on *Higher Education* (n=724; 52.3%), and K-12 education (average n=447; 32.3%). Lagging significantly behind were *Artists* (n=268; 19.4%); and, *Private Studios* (n=266; 19.2%) emerged for the first time in 76 years as a *Population* awarded even modest attention.

The focus of literature in K-12 education resumed for the third time period on grades *9-12* (n=453; 32.7%) with slightly less attention attributed to *K-4* (n=447; 32.3%) and *5-8* (n=441; 31.8%).

All remaining *Populations* received less than 10% of the research focus in this era and are considered *gaps*.

The Prominent *Populations*: *Higher Education* and K-12 Education
Higher Education
Of the 2,339 actual number of documents reviewed in the RDE study, fully half of the documents involved analysis of dance as it was practiced, organized or otherwise taught in *Higher Education* (n=1,292; 55.2%).

Throughout the 76 years, the content in the literature of *Higher Education* suggested the need to articulate and refine an evolving discipline in the environment within which it was taught. Thus, from 1926-

2002, much research was executed by, and focused on, *Higher Education.* The *Issues* most commonly researched in higher education included *Arts Education* (n=665; 51.4%), *Health* (n=240; 18.6%), and *Creative Process* (n=221; 17.1%) [Appendix D1: Grid Matrix].

The *Areas of Service* most frequently researched in higher education, referenced in RDEdb actual numbers, included: *Pedagogy* (n=266; 20.6%), *Dance Science and Medicine* (n=230; 17.8%), *Technique* (n=229; 17.7%), *Advocacy* (n=213; 16.5%), and *Historical and Cultural Contexts* (n=212; 16.4%).

Unquestionably, *Higher Education* is the *Population* most generously served throughout the history of research in dance education in the United States. However, the attention paid dance in *Higher Education* left many of the other 13 important *Populations Served* poorly represented in the current research information base.

K-12 Education

Of the 2,339 actual documents reviewed in all three content areas of the RDE project, Table 23 (page 60) shows that approximately one-third of literature was written about dance in K-12 education, with an average of 716 actual documents (30.6%) evenly distributed between *K-4* (n=716; 30.6%), *5-8* (n=717; 30.7%)*,* and *9-12* (n=714; 30.5%). Most frequently, *9-12* was the predominant grade level under investigation; however, most studies overlapped with *K-4* and *5-8* as well.[8]

Most of the literature in K-12 came from journal articles and not from unpublished documents (theses and dissertations, etc.). In reviewing the K-12 education literature in *Unpublished Documents*, it was evident that many studies lasted only for the duration of the dissertation or thesis project; and, in addition, most resultant programs did not become an ongoing part of the school's educational mission. These factors are unfortunate for both dance programs and research in the United States.

The most prominent *Issues* addressed in K-12 education included *Arts Education* (n=1,085), *Creative Process* (n=353), *Health* (n=315), and *Policy* (n=288) [Appendix D1: Grid Matrix]. These reflect the placement of dance in K-12 education in physical education (*Health*) and arts education (*Arts Education* and *Creative* Process) as well as the federal, state, and LEA policies associated with those environs.

The *Areas of Services* most frequently researched in K-12 education, referenced in RDEdb actual numbers, included: *Pedagogy* (n=466), *Advocacy* (n=427), *Curriculum and Sequential Learning* (n=364), *Historical and Cultural Contexts* (n=363), *Dance Science and Medicine* (n=359), and *Dance Technique* (n=345). Literature here too reflected the placement of dance in K-12 curriculum (physical education and fine arts), and advocacy thereof; the decades of discussion about teaching content, methods, and process; and the naturally emerging bond between technique and dance science and medicine.

Gaps in *Populations Served:* 1926-2002

Populations Served receiving less than 10% of field attention spanning the time period are considered significant *gaps* and in need of more research. Table 23 (page 60) illustrates that between 1926-2002, eight of the 14 total *Populations Served* received less than 10% of field attention: *Community and Family, Administrators and Policy Makers, World Cultures, Different Abilities, Early Childhood, After School, Seniors and Elderly,* and *Outreach.*

> *Populations* receiving less than 10% of field attention spanning the time period are considered significant *gaps* and in need of more research.

1926-1950

During this early time period, 1926-1950, all 14 *Populations Served* received some attention; however, eight *Populations Served* received 10% or less and constitute significant *gaps* in our research knowledge base.

Table 23 (page 60) shows the data for the eight *Populations* identified as *gaps* in the time frame 1926-1950: *Private Studios, Administrators and Policy Makers, World Cultures, Early Childhood, After School, Outreach, Seniors and Elderly,* and *Different Abilities.* Worthy of note are the five *Populations* that received

truly minimal attention: *Early Childhood,* (n=7; 2.4%), *After School (n=6; 2.0%),* *Outreach* (n=3; 1.0%), *Seniors and Elderly* (n=2; 0.7%), and *Different Abilities* (n=2; 0.7%). This is not surprising given these *Populations* did not emerge until later as societal concerns in education.

1951-1964

Research interest in *Populations Served* changed little during the era from 1951-1964. Basically, the same *Populations* identified in 1926-1964 received 10% or less of research foci in this era 1951-1964. As illustrated in Table 23 (page 60), research *gaps* existed in nine *Populations Served*: *Community and Family, Administrators and Policy Makers, World Cultures, Private Studios, After School, Different Abilities, Early Childhood, Outreach,* and *Seniors and Elderly.*

In comparison with the era before, research interest increased in *Policy Makers and Administrators* (n=19; 8.3%), *World Cultures* (n=18; 7.9%), and *After School* (n=9; 3.9%), *Different Abilities* (n=5; 2.2%), and *Outreach* (n=4; 1.8%). Conversely, research interest decreased in *Private Studios* (n=16; 7.0%), *Community and Family* (n=19; 8.3%), *Early Childhood* (n=4; 1.8%), and *Seniors and Elderly* (n=0; 0.0%).

1965-1979

Research foci changed very little between 1965 and 1979. As with the 1951-1964 time period, the same nine *Populations Served* received 10% or less of aggregate research attention. Table 23 (page 60) shows the data for *Populations* identified as *gaps*, in descending order*: Administrators and Policy Makers, Private Studios, Community and Family, Different Abilities, Early Childhood, World Cultures, After School, Seniors and Elderly, and Outreach.* It should be noted that three of the above *Populations* received 1% or less of research attention throughout the entire time frame 1965-1979: *After School* (n=5; 1.2%), *Seniors and Elderly* (n=4; 0.9%), and *Outreach* (n=1; 0.2%).

In comparison with the era before, research interest increased moderately in *Administrators and Policy Makers* (n=37; 8.6%), *Private Studios* (n=35; 8.2%), and *Seniors and Elderly* (n=4; 0.9%); and, increased significantly in *Different Abilities* (n=27; 6.3%), and *Early Childhood* (n=24; 5.6%). Percentage-wise, research interest decreased in *Community and Family* (n=34; 7.9%), *World Cultures* (n=21; 4.9%), *After School* (n=5; 1.2%), and *Outreach* (n=1; 0.2%).

> It should be noted that three *Populations* received less than 1% of research attention throughout the entire time frame: *After School, Seniors and Elderly,* and *Outreach.*

1980-2002

Over half of all documents reviewed in the RDE project were written during the last era of the RDE study 1980-2002. However, despite the significant increase, the same eight *Populations* (of nine in the era before), received 10% or less of the research focus and constitute *gaps* in our research base of knowledge. These data are illustrated in Table 23 (page 60): *Administrators and Policy Makers, Community and Family, World Cultures, Different Abilities, Early Childhood, After School, Seniors and Elderly,* and *Outreach.*

Though negligible, three *Populations* demonstrated increased attention for this era over the preceding era: *After School* (n=23; 1.7%), *Seniors and Elderly* (n=19; 1.4%), and *Outreach* (n=13; 0.9%). Conversely, five *Populations* demonstrated a relative percentage decrease in attention in this era when compared to the 1965-1979 time frame. *Administrators and Policy Makers* (n=104; 7.5%), *Community and Family* (n=103; 7.4%), *World Cultures* (n=63; 4.6%), *Different Abilities* (n=59; 4.3%), and *Early Childhood* (n=56; 4.0%). Data are surprising given these vastly under-researched *Populations* embody contemporary issues and private and public monies often subsidize programs and research in these populations.

Populations Served in Need of More Research

The eight *Populations Served* currently in need of more research are the same that, historically, received 10% or less of research focus throughout all four eras 1926-2002: *Community and Family, Administrators and Policy Makers, World Cultures, Different Abilities, Early Childhood, After School, Seniors and Elderly, and Outreach.* In addition, *Private Studios* has been included due to the fact that it was identified as a *gap* in three consecutive time frames (1926-1979) and remains largely under-researched and underserved. *Artists* has been included at the end of the discussion as the *Population* ranged from 14% to 21% in field attention over the span of 76 years. Clearly, the above *Populations* offer significant research potential. Data are referenced to Table 23 (page 60).

Community and Family (n=186; 8.0%) encompassed the human and financial resources inherent in a community or family.

The earliest works addressed festivals, dance recreational activities and dance as civic or democratic education. However, the major trend over decades focused on social and folk dancing, international relations, and community building through dance.[9] Many documents overlapped with *World Cultures.*

Administrators and Policy Makers (n=171; 7.3%) included principals, superintendents, chairs, deans, legislators, governors, and administrators in positions to create and change policy.

> It is worth noting that the lack of research in *Administrators and Policy Makers* parallels the lack of research focused on the *Issue* of *Policy* (n=170; 7.3%).

As early as 1937, dance educators questioned the placement of dance in the curriculum, a dialogue that continued throughout the decades. Articles generally addressed: curriculum, dance genres, development of dance in academic programs, state and arts associations and, again, the channel of delivery. It is worth noting that the lack of research in *Administrators* and *Policy Makers* parallels the lack of research focused on the *Issues* of *Policy* (n=170; 7.3%). Informed decisions by *Administrators* and *Policy Makers* require a strong base of research.

World Cultures (n=113; 4.8%) included ethnic groups and cultural foci both within and outside of the United States.

Articles written in the earlier decades focused on documenting and teaching folk and social dance while articles written in the latter decades focused on the social contexts and implications of the dance forms. Authentic cultural dance forms were explored in terms of cultural values, beliefs and the passage of heritage.

A challenge today is to explore how populations from different *World Cultures* relate to movement, and can best learn in and through movement. Research conducted within the past decade by Park (1997, 1997, 2000), White (1992), and Trulillo (1979) provide a formidable foundation for further study.[10]

Different Abilities (n=93; 4.0%) included gifted students as well as students with physical, mental, health, or emotional challenges.

Research regarding students of *Different Abilities* has historically been underserved, but this population is gaining recognition. Only seven of the 93 documents regarding *Different Abilities* predated 1965.

In reviewing the literature, it is evident that language regarding differently-abled persons has evolved over the decades as Americans became increasingly more aware and respectful of personal challenges. Before the 1980s, descriptors often included "mentally retarded," "handicapped," "disabled," and "impaired." Changes in terminology reflect larger changes in American attitudes.

Often research in *Different Abilities* can be supported with federal and state funds targeted for special interest populations or with money from special interest foundations. As society becomes more aware of *Different Abilities*, research opportunities become more available.

Early Childhood and **Pre-Kindergarten** (n=91; 3.9%) included children 0-4 years of age.

It is important to note that only 11 documents in the RDE study in *Early Childhood* were written before 1965: 1926-1950 (n=7; 2.4%) and 1951-1964 (n=4; 1.8%). The majority of documents were written during the latter two eras between 1965 and 1979 (n=24; 5.6%) and 1980-2002 (n=56; 4.0%).

Research in *Early Childhood* remains minimal considering the important links between motor development and learning in the early years of childhood.

Clearly, *Early Childhood* was not a population of significant interest to dance education researchers in the first half of the twentieth century. "Movement Patterns in the Young Child,"[11] a study completed in 1964, demonstrated a new era of understanding about the educational benefits of dance for children.

Research in *Early Childhood* remains minimal considering the important links between motor development and learning in the early years of childhood. Many agencies at federal, state and local levels support *Early Childhood* education programs and teaching and learning in *Early Childhood*. Curricula and funding for programs in *Early Childhood* must benefit from informed data about the impact of dance education in early childhood. Coupled with federal and state interest and support, *Early Childhood* provides fertile ground for future research.

After School Programs (n=43; 1.8%**)** and **Outreach Programs** (n=21; 0.9%) encompassed programs that occurred after normal school hours in a K-12, college, or university facility; and, they were not part of the academic school day. *Outreach Programs* were part of academic curricula; however, they too occurred off the school's premises and students were transported off-site to a facility to receive dance education experience(s).

The majority of the studies focused on dance recreation from a physical education perspective, the earliest of which relate to community folk dancing[12] in the 1940s and 1950s.

Since the 1960s and into the twenty-first century, federal funds have lent support to *After School* programs, especially when associated with violence prevention and drug-free schools. More recently, government funding in spring 2002 allocated a substantive 7.5 million dollars to support *After School* programs in the arts. Continued funding may very well stimulate research in these underserved areas. They surely present sound areas for inquiry.

Researchers might consider evaluating program effectiveness and student achievement when the arts are taught *After School* and in-school as core curricula. Researchers might also consider the statistics gleaned from the 1997 National Assessments of Educational Progress (NAEP) study that reflect frequency of arts education and teaching qualifications of those who teach arts education.[13] Such examples as the above provide fertile ground for research; and, importantly, can inform education policy.

Seniors and Elderly (n=25; 1.1%) included persons 55 years of age and older. Only two articles were written in the 1940s[14] and 23 studies were written after 1969.

Currently, dance programs for *Seniors and Elderly* are growing in number as parents of baby-boomers age, and as baby boomers, themselves, grow older. Medical professionals must better understand and appreciate the healthful benefits associated with the physical, emotional, and social activity of dancing. Except for the medical research emerging from the field of dance science, the literature on *Seniors and Elderly* is mostly anecdotal. As the population of *Seniors and Elderly* continues to grow in numbers and significance, research is going to continue to be of paramount

importance to both teaching and learning in this *Population*. Future research might well consider research designs that explore appropriate and medically sound pedagogies for teaching *Seniors* and *Elderly.*

Private Studios (n=344; 14.7%) included private and class dance instruction which ranged from career-track professional preparation programs to local studios and schools of dance, and dance taught in recreation and community centers. The emphasis in teaching and learning was on dance, not academics.

Data included in Table 23 (page 60) illustrate that of 2,339 actual documents reviewed in all three content areas of the RDE project, only one-seventh of RDE research made inquiry into *Private Studios* of dance. This is surprising given *Private Studios* provide most early dance experiences to individuals who study or learn in dance. In addition, *Private Studios* frequently prepare the students who enroll in college and university dance programs; and they provide training for many of the artists and educators who go on to teaching in higher education, PreK-12 education, performing arts organizations, and community and cultural centers. Considering the fact that most dance artists and teachers receive substantial training in private studios of dance, the *Population* of *Private Studios* is in great need of focused research.

Artists (n=439; 18.8%) included choreographers and performers working in the art of dance. The RDE project focused on the artist in dance education and the impact of the artist on processes and outcomes in teaching and learning in dance.

> However, considering 2,339 documents were identified and reviewed for the RDE study covering 76 years, relatively few studies were conducted on *Artists* (n=439; 18.8%).

Throughout the four time periods, *Artists* ranked fourth among all *Populations Served*. However, considering 2,339 actual documents were identified and reviewed for the RDE study covering 76 years, relatively few studies were conducted on *Artists.*

It is surprising, for a variety of reasons, that more research was not found on the education of *Artists.* For one thing, many colleges and university programs focus on dance as the product and processes of *Artists;* and, *Higher Education* served as both the source, and focus, of inquiry for 76 years of literature reviewed in the RDE project 1926-2002. For another, administrators, teachers, and artists in public education have for decades encouraged a cross-pollination of the arts and education to create professional Artist-Educators, Visiting Artists, Artists-in-Schools, Teaching Artists and more. There is virtually no research on these populations, processes, or programs. Finally, more states are developing alternative certification programs to place *Artists* in schools as they matriculate through certification programs. Such specialty areas as mentioned above offer great research potential to future generations.

Section III: Overview of *Areas of Service*

The RDE study defined 27 *Areas of Service* in the field of dance education; areas in which dance was delivered and to which the research applied. Table 24 (below) provides summary data for *Areas of Service* in each of four time periods (1926-1950, 1951-1964, 1965-1979, and 1980-2002), and collectively for 76 years.

In the following analysis covering four time periods (1926-2002), the interest in research data was more evenly distributed among the 27 *Areas of Service* than it was in either *Populations Served* or *Issues*. Consequently, no one *Area* stood out as predominant, and *Areas* of leading interest did not receive a large proportion of attention.

The "n" number in this section of the report refers to the actual number of documents found in the RDE study. The accompanying percentage rate refers to the relative amount the "n" number represents to the total number of documents in the given time frame.

Table 24. All Content Areas 1926-2002: Areas of Service *

Areas of Service Rank Ordered	1926-2002 N=2,339		1926-1950 n=297		1951-1964 n=229		1965-1979 n=428		1980-2002 n=1,385	
Pedagogy	466	19.9%	57	19.2%	36	15.7%	93	21.7%	280	20.2%
Advocacy	427	18.3%	50	16.8%	41	17.9%	97	22.7%	239	17.3%
Curriculum and Sequential Learning	364	15.6%	37	12.5%	27	11.8%	60	14.0%	240	17.3%
Historic and Cultural Contexts	363	15.5%	67	22.6%	35	15.3%	66	15.4%	195	14.1%
Dance Science and Medicine	359	15.3%	11	3.7%	15	6.5%	44	10.3%	289	20.9%
Technique	345	14.7%	55	18.5%	35	15.3%	80	18.7%	175	12.6%
Creating and Choreographing Dance	263	11.2%	42	14.1%	43	18.8%	51	11.9%	127	9.2%
Creative Process	251	10.7%	30	10.1%	37	16.2%	68	15.9%	116	8.4%
Teacher Preparation and Training	229	9.8%	38	12.8%	35	15.3%	55	12.9%	101	7.3%
Performing	203	8.7%	49	16.5%	26	11.4%	36	8.4%	92	6.6%
Child Development	177	7.6%	21	7.1%	14	6.1%	54	12.6%	88	6.4%
Critical Analysis	154	6.6%	17	5.7%	21	9.2%	27	6.3%	89	6.4%
Interdisciplinary Education	152	6.5%	15	5.1%	7	3.1%	27	6.3%	103	7.4%
Opportunity to Learn	152	6.5%	44	14.8%	19	8.3%	42	9.8%	47	3.4%
Somatics and Body Therapies	145	6.2%	12	4.0%	12	5.2%	27	6.3%	94	6.8%
Resources	121	5.2%	27	9.1%	21	9.2%	22	5.1%	51	3.7%
Research	116	5.0%	16	5.4%	12	5.2%	22	5.1%	66	4.8%
Artist-in-Schools	80	3.4%	7	2.4%	7	3.1%	21	4.9%	45	3.2%
Assessments: Student and Teacher	64	2.7%	5	1.7%	9	3.9%	9	2.1%	41	3.0%
Technology	56	2.4%	1	0.3%	3	1.3%	14	3.3%	38	2.7%
Cognitive Development	51	2.2%	3	1.0%	4	1.7%	9	2.1%	35	2.5%
Higher Order Thinking and Problem Solving	38	1.6%	2	0.7%	12	5.2%	8	1.9%	16	1.2%
Assessments: Program Effectiveness	38	1.6%	3	1.0%	4	1.7%	10	2.3%	21	1.5%
Certification	20	0.9%	1	0.3%	1	0.4%	6	1.4%	12	0.9%
Assessments: National, State, and LEAs	13	0.6%	0	0%	0	0%	1	0.2%	12	0.9%
State and LEA Standards	8	0.3%	0	0%	0	0%	1	0.2%	7	0.5%
Licensure	5	0.2%	0	0%	0	0%	0	0%	5	0.4%

* Data reflect actual numbers of documents

Patterns and *Trends*

1926-1950

As dance entered educational institutions, literature in dance education addressed *Areas* that facilitated its inclusion in curriculum. This is illustrated in Table 24 (above) in those *Areas* that received the most field attention between 1926 and 1950: *Historical Cultural Contexts* (n=67; 22.6%), *Pedagogy* (n=57; 19.2%), *Technique* (n=55; 18.5%), *Advocacy* (n=50; 16.8%), *Performing* (n=49; 16.5%), *Opportunity to Learn* (n=44; 14.8%), *Creating and Choreographing* dance (n=42; 14.1%), *Teacher Preparation and Training* (n=38; 12.8%), *Curriculum and Sequential Learning* (n=37; 12.5%), and *Creative Process* (n=30, 10.1%).

The early twentieth century ushered in a new era of creative dance forms and it was evident from the numbers of actual documents written during this period that the focus had begun to shift toward creative endeavors. However, greatest interest targeted *Historical and Cultural Contexts* and much of the work addressed folk and social dance forms. Documents about "Natural Dance," "Aesthetic Dance," "Rhythm," or emerging modern dance forms often focused on the phenomenological or ethnographic educational and cultural impact.

Worthy of note, 1926-1950 is the only time frame in which *Opportunity to Learn* was not identified as a *gap. Opportunity to Learn* concerns were reflected throughout the early writings of this period in discussion regarding the placement of dance in curriculum, staffing, scheduling, and facilities.

The remaining 17 *Areas* received less than 10% of attention in literature and research; and, thus were considered *gaps* in *Areas of Service.*

1951-1964

Notable trends emerged in this time frame despite the fact that this era was ten years shorter and fewer documents were found (n=229) than in the preceding era (n=297). As referenced in Table 24 (above): (1) the same nine *Areas of Service* attended to in the last era (1926-1950) received similar attention this era (1951-1964); (2) several *Areas of Service* increased significantly in this era; (3) nine *Areas of Service* decreased in field attention; and, (4) 17 *Areas of Service* received less than 10% of field interest and were identified as *gaps* in the information knowledge base.

The nine *Areas* that received 10% or more of field attention included, in descending order: *Creating and Choreographing, Advocacy, Creative Process, Pedagogy, Technique, Teacher Preparation and Training, Historical and Cultural Contexts, Curriculum and Sequential Learning,* and *Performing.* Again, as in the era before, many of these *Areas* reflected the teaching of dance as art in education and the curriculum of dance as art process.

The three *Areas of Service* that received zero research interest (n=0; 0.0%) continued to focus on policy: *National, State and LEA Assessments, State and LEA Standards,* and *Licensure*.

Among the nine areas that received increased attention were *Creating and Choreographing* (n=43; 18.8%) and *Creative Process* (n=37; 16.2%). Much of the literature relating to these two areas examined modern dance as a valued and creative art form and supported the place of dance in education curricular. Other *Areas of Service* that showed increased attention, though identified as *gaps*, reflected new thinking about educational reform and the importance of individualized educational and psychological processes: *Critical Analysis,* the use of *Higher Order Thinking* and *Problem Solving* skills, *Student and Teacher Assessments*, and *Cognitive Development.*

The nine *Areas of Service* that received decreased research interest involved policy, teaching methods, and content: *Pedagogy* (n=36; 15.7%)*, Technique* (n=35; 15.3%) *, Historic and Cultural Contexts* (n=35; 15.3%), *Curriculum and Sequential Learning* (n=27; 11.8%), *Performing* (n=26; 11.4%), *Opportunity to Learn (n=19; 8.3%); Research* (n=12; 5.2%), *Interdisciplinary Education (n=7; 3.1%)*; and, developmental skills, C*hild Development* (n=14; 6.1%).

In all, 18 *Areas* received less than 10% of field attention and were identified as *gaps* in the field's information knowledge base.

1965-1979

Table 24 (above) illustrates that the two prime *Areas of Service* during 1965-1979 focused on *Advocacy* (n=97; 22.7%) and *Pedagogy* (n=93; 21.7%). Much of the literature written in these two *Areas* helped provide the groundwork for the "Dance Boom" of the 1970s. Dance educators, as in the era before 1951-1964, continued to advocate for dance as an art form, discuss its placement in the curriculum, and share information on teaching process and methodologies as evidenced by literature in *Areas: Technique* (n=80;

18.7%), *Creative Process* (n=68; 15.9%), involvement with *Historic and Cultural Contexts* (n=66; 15.4%), *Curriculum and Sequential Learning* (n=60; 14%), *Creating and Choreographing* (n=51; 11.9%), and *Teacher Preparation and Training* (n=55; 12.9%). *Dance Science and Medicine* (n=44; 10.3%) emerged as a specialized *Areas of Service*. Scientific applications in methodologies for dance education research became more stringent and teaching applications focused on the dancing body and dance techniques.

Child Development (n=54; 12.6%) received significantly more research focus in this era than it did during the two preceding eras, 1926-1950 and 1951-1964. Interesting new articles in child development appeared in the late 1970s that included: "Movement and Cognition,"[15] "Learning to Move, Moving to Learn,"[16] "Learning Spatial Concepts Through Dance Type Activities,"[17] and "Learning Language Arts Through Movement,"[18] to mention only a few.

All other 17 *Areas of Service* received less than 10% of literature attention in dance education and were designated as *gaps* in the information research base.

1980-2002

Six *Areas of Service* demonstrated research interest above 10%, in descending order: *Dance Science and Medicine* (n=289; 20.9%), *Pedagogy* (n=280; 20.2%), *Curriculum and Sequential Learning* (n=240; 17.3%), *Advocacy* (n=239; 17.3%), *Historic and Cultural Contexts* (n=14.1%), and *Technique* (n=175; 12.6%).

The International Association of Dance Medicine and Science formed in 1989 and their official publication, *The Journal of Dance Medicine and Science*, contributed significantly to rigorous research in the field.

All remaining 21 *Areas* were awarded field attention below 10%; and, thus, constituted *gaps*.

The International Association of Dance Medicine and Science (IADS) formed in 1989 and their official publication, *The Journal of Dance Medicine and Science*, contributed significantly to rigorous research in the field. Of the total number of documents reviewed in this era in *Dance Science and Medicine* (n=289; 20.9%), the majority of these documents were published in *The Journal of Dance Medicine and Science* (n=184; 63.7%), *Medical Problems of Performing Artists* (n=47; 16.3%), and *Medicine and Science in Sports and Exercise* (n=21; 7.2%). Only a small proportion of documents were found in dissertations, theses, monographs, and unpublished papers (n=37; 12.8%).

There was a sustained focus in *Pedagogy* with increased emphasis in *Curriculum and Sequential Learning* as U.S. education entered the national standards and assessments movements of the 1990s. Other Issues related to standards showed increased interest as well, though still considered *gaps*: *Interdisciplinary Education* (n=103; 7.4%), *Critical Analysis* (n=89; 6.4%), and *Cognitive Development* (n=35; 2.5%). Even after the advent of voluntary national standards (1994) and national assessments (1995, 1997), interest in researching standards and assessments remained minimal.

The Prominent *Areas of Service*: 1926-2002

As Table 24 (page 67) shows, there was no one predominant *Area of Service;* however, there were *Areas of Service* that hovered around 20% research interest and that remained a moderate focus throughout the four time periods. *Pedagogy* (n=466; 19.9%) and *Advocacy* (n=427; 18.3%) were of prime interest throughout the 76 years of the study. *Curriculum and Sequential Learning* (n=364; 15.6%) and *Dance Science and Medicine* (n=359; 15.3%), ranked third and fourth, were not of great concern until the most recent era. Attention was strongest in the first three time frames for *Technique* (n=345; 14.7%), *Creating and Choreographing Dance* (n=263; 11.2%, and *Creative Process* (n=251; 10.7%).

Gaps* in *Areas of Service

Table 24 (page 67) illustrates *gaps* existed in 19 of 27 *Areas of Service* between 1926-2002: *Teacher Preparation and Training, Performing, Child Development, Critical Analysis, Interdisciplinary Education, Opportunity to Learn, Somatics and Body Therapies, Resources, Research, Artists-in-Schools, Assessments of Student and Teachers, Technology, Cognitive Development, Higher Order Thinking and Problem Solving, Assessments in Program Effectiveness, Certification, Assessments (National, State and LEAs), LEA and State Standards, and Licensure.*

1926-1950

In summary, 17 *Areas of Service* ranked as *gaps* between 1926 and 1950. These *Areas* included: *Resources, Child Development, Critical Analysis, Research, Interdisciplinary Education, Somatics and Body Therapies, Dance Science and Medicine, Artist-in-Schools, Assessments for Students and Teachers, Cognitive Development, Assessments for Program Effectiveness, Higher Order Thinking and Problem Solving, Technology,* and *Certification, Assessments of Students and Teachers, State and LEA Standards,* and *Licensure.* This was the only era in which *Opportunity to Learn* was not identified as a *gap* in the information knowledge base.

Worthy of note are the nine *Areas of Service* that received minimal attention (0-2%) in the course of 25 years: (inclusive of 1926 and 1950) *Assessments for Students and Teachers* (n=5; 1.7%), *Cognitive Development (n=3; 1.0%), Assessments for Program Effectiveness* (n=3; 1.0%), *Higher Order Thinking and Problem Solving* (n=2; 0.7%), *Certification* (n=1, 0.3%), and *Technology* (n=1, 0.3%); and, three *Areas* void of documents, *Assessments (National, State, and LEAs), State and LEA Standards*, and *Licensure* (n=0; 0.0%). Dance education was still on the threshold of entering public and educational awareness. How well it was done, or by whom it was taught, was not yet of issue.

Another neglected area in early literature pertained to information about developmental thought

> A noticeably neglected area in early literature pertained to information about developmental thought processes in relation to dance education.

processes in relation to dance education. Only two documents addressed *Higher Order Thinking* and *Problem Solving Skills* (n=2; 0.7%) and three examined *Cognitive Development* (n=3; 1%). This reflects that little research focused in service of *Child Development* (n=21, 7.1%).

1951-1964

The same kinds of *gaps* existed in *Areas of Service* for the period 1951-1964 as they did for the years 1926-1950. Only *Opportunities to Learn* (n=19; 8.3%), was added as an 18th *gap* in this era. Data for those 17 *Areas* are referenced in Table 24 (page 67).

The *gap Areas* that received the most attention included: *Critical Analysis* (n=21; 9.2%), *Resources* (n=21; 9.2%), *Opportunities to Learn* (n=19; 8.3%), *Dance Science and Medicine* (n=15; 6.5%), *Child Development* (n=14; 6.1%), *Research* (n=12; 5.2%)*, Higher Order Thinking and Problem Solving* (n=12; 5.2%)*,* and *Somatics and Body Therapies* (n=12; 5.2%).

All other *Areas of Service* involving pedagogy and education policy were minimally addressed: *Student and Teacher Assessments (*n=9; 3.9%), *Interdisciplinary Education* (n=7; 3.1%), *Artists-in-Schools* (n=7; 3.1%), *Assessments in Program Effectiveness* (n=4; 1.7%), *Cognitive Development* (n=4; 1.7%), and *Technology* (n=3; 1.3%). Worthy of note are the four education policy areas virtually void of field interest: *Certification* (n=1; 0.4%), *Assessments at National, State and LEA* levels (n=0; 0.0%), *State and LEA Standards* (n=0; 0.0%), and *Licensure* (n=0; 0.0%).

The increased focus in *Higher Order Thinking Skills and Problem Solving* coincided with publication of Benjamin S. Bloom's *Taxonomy of Educational Objectives* published in 1956.[19] Educational objectives shifted from the acquisition and understanding of knowledge to those of cognitive skills that provided

students with educational experiences promoting higher level thinking skills (e.g., application, analysis, synthesis, and evaluation).

1965-1979

As illustrated in Table 24 (page 67), *gaps* existed in 17 *Areas* similar to those in the preceding time frame 1951-1964. This was the only era, 1965-1979, in which *Child Development* (n=54; 12.6%) was not considered a *gap* in *Areas of Service;* and *Performing* (n=36; 8.4%) became a *gap* unlike the two preceding eras.

Although quite small, *Areas of Service* that demonstrated increased field interest addressing pedagogy and developmental skills included: *Opportunities to Learn* (n=42; 9.8%), *Interdisciplinary Education* (n=27; 6.3%), *Somatics and Body Therapies* (n=27; 6.3%), *Artists-in-Schools*' programs (n=21; 4.9%), *Technology* (n=14; 3.3%), and *Cognitive Development* (n=9; 2.1%).

Areas of Service that showed, percentage-wise, decreased field attention during this era included: *Performing* (n=36; 8.4%), *Critical Analysis* (n=27; 6.3%), *Resources* (n=22; 5.1%), *Research* (n=22; 5.1%), *Student and Teacher Assessments* (n=9; 2.1%); and, a significant drop in *Higher Order Thinking and Problem Solving* (n=8; 1.9%).

As in the preceding two frames between 1926 and 1964, *Areas* associated with education policy remained the most underserved: *Assessments* in *Program Effectiveness* (n=10; 2.3%), *Certification* (n=6; 1.4%), *Assessments at National, State and LEA* levels (n=1; 0.2%), *State and LEA Standards* (n=1; 0.2%), and *Licensure* (n=0; 0.0%).

1980-2002

Table 24 (page 67) illustrates the triple quantity of documents identified and reviewed in the RDE project during this era. It also illustrates that 22 of the 27 *Areas of Service* received less than 10% of field interest; and, thus, designated *gaps* in our information knowledge base.

Interest increased in areas involving more current education policy: *Interdisciplinary Education* (n=103; 7.4%), *Assessments for Student and Teachers* (n=41; 3.0%), *National, State and LEA Assessments* (n=12;

> Most apparent are the majority of *Areas of Service* that decreased in percentage of field interest addressing pedagogy, education policy, and developmental skills.

0.9%)*, State and LEA Standards* (n=7; 0.5%), and *Licensure* (n=5; 0.4%). Interest increased as well in *Areas* addressing developmental skills including *Somatics and Body Therapies* (n=-94; 6.8%), *Critical Analysis* (n=89; 6.4%), and *Cognitive Development* (n=35; 2.5%).

Most apparent are the majority of *Areas of Service* that decreased in percentage of field interest addressing pedagogy, education policy, and developmental skills: *Creating and Choreographing* (n=127; 9.2%), *Creative Process* (n=116; 8.4%), *Teacher Preparation and Training* (n=101; 7.3%), *Performing* (n=92; 6.6%), *Child Development* (n=88; 6.4%), *Research* (n=66; 4.8%), *Resources* (n=51; 3.7%), *Artists-in-Schools* (n=45; 3.2%), Technology (n=38; 2.7%), and *Assessments for Program Effectiveness* (n=21; 1.5%), and *Certification* (n=12; 0.9%).

Areas of Service in Need of More Research

A total of 19 out of 27 *Areas of Service* received less than 10% of research attention in the 76 year span of the RDE project, 1926-2002. In an effort to facilitate discussion, the 19 *gaps* in research have been grouped by service functions: Pedagogy (*Interdisciplinary Education, Opportunity to Learn*, *Resources, Research*, *Artists-in-schools, and Performing*); Developmental Skills (*Child Development, Critical Analysis, Cognitive Development, Higher Order Thinking and Problem Solving*); Dance Science (*Somatics* and *Technology*); and Education *Policy* (*Teacher Preparation and Training, Assessment: Student and Teacher, Assessment:*

Program Effectiveness, Certification, Assessment: National, State and LEA, State and LEA Standards, and Licensure).

Pedagogy: *Interdisciplinary Education, Opportunity to Learn, Resources, Research, Artists-in-Schools, and Performing*

Interdisciplinary Education (n=152; 6.5%) as an *Area of Service* intersected with the education *Issue* of *Interdisciplinary Education,* the difference being the function of the category. *Interdisciplinary Education*, as an *Issue*, focused on the "noun," of teaching and learning that involves math, science, language arts, history, civics, government, foreign languages, etc. *Interdisciplinary Education* as an *Area of Service* referred to the "verb;" using movement to teach and learn concepts from other disciplines; using other disciplines to teach and learn movement and movement concepts. Neither category involved teaching and learning in one discipline.

> Research is needed that examines the pedagogy and effects of interdisciplinary dance education and the phenomenon of transference in kinesthetic learning.

There was interest in dance education as *Interdisciplinary Education* in the early years of the study, but momentum for the *Area of Service* did not build until after 1965. The educational reforms of the 1970s and Gardner's Theory of Multiple Intelligences (1983)[20] prompted new understandings. Research is needed that examines the pedagogy and effects of interdisciplinary dance education and the phenomenon of transference in kinesthetic learning.

Opportunities to Learn (n=152; 6.5%) involved curriculum, scheduling, staffing, equipment, facilities, and safety; the resources that support teaching and learning in dance education.

Involvement in this *Area of Service* was proportionally greatest in the earliest time frame, 1926-1950, when there was much discourse in the literature about the placement of dance in academic curriculum, scheduling, and staffing. Interest in OTLs decreased from 1951-1964 and rose again in 1965-79; however, there has been little recent literature relating to this *Area of Service* despite significant voids in our research information base associated with the resources that support pedagogy (curriculum, staffing, scheduling, facilities, and safety) and the significant changes in technologies that impact teaching resources.

Resources (n=121; 5.2%) referred to books, texts, CDs, and videos that impact teaching and learning in dance education. Many of the documents in this category were created to serve as teaching and learning aids, handbooks, or guides. Some were listings of resources, bibliographies, or indexes.

The relative percentage of research about *Resources* produced in 1926-1964 was much greater than in the later two time periods from 1965-2002. Today, many more *Resources* exist for dance education; however, little research exists on *Resources* of either past or current significance.

Research (n=116; 5.0%) included written investigations about the methods and practices of research found in the three content areas (*Unpublished Documents, Literature in Dance Education,* and *Other Disciplines*) that addressed educational *Issues* in the defined *Populations* and *Areas* served by dance education. *Research* included theory, learning, processes and methodologies.

Data show that *Research* relating to the methodologies and practices of research in dance education was minimal throughout all time periods 1926-2002; hovering at 5% in each of the four eras. Bibliographies were included in this category and the RDE project provides the most comprehensive listing of research in dance education to date.

Artists-in-Schools or *Artists-in-Residence* (n=80; 3.4%) referred to dance artists and choreographers who earned their living in the performing arts but who often taught in preK-12 without state dance certification or in higher education without the requisite academic degrees.

Only 80 documents relating to *Artists-in-Schools* were identified and reviewed in the RDE project that spanned 76 years of literature. Most interest in this *Area of Service* occurred in the third era between 1965-1979 following the creation of the National Endowment for the Arts and the federally sponsored *Artist-in-Schools* programs. Even then, *Artists-in-Schools* received only 4.9% of research attention. The remaining three eras generated 2-3% of research interest. This provides a limited research knowledge base.

Considering the predominance of programs and the little, but critical, private and public funding supporting *Artist-in-Schools* and *Artist-in-Residence programs* in both K-12 and higher education, minimal research has been done; thus, vast areas remain unknown.

Performing (n=203; 8.7%) included the execution of movement and the manifestation of choreographic ideas for the purposes of teaching and learning; thus, included under pedagogy.

During the first two eras (1926-1964), as dance was being established in education and its placement in curriculum debated, *Performing* ranged 11% -16% in field interest. Surprisingly, during the last two eras (1965-2002), as artistic performance became the major focus of many college and university programs, field interest in *Performing* declined to 6%-8%.

Given the importance *Performing* is to all aspects of dance education in diverse environments including higher education, K-12, private schools of dance, performing arts organizations, or community centers, this *Area* provides significant opportunities for investigation from process to product.

Developmental Skills: *Child Development, Critical Analysis, Cognitive Development, Higher Order Thinking and Problem Solving*

Child Development (n=177; 7.6%) included teaching and learning of information at developmentally appropriate ages relating to the physical and intellectual growth and maturation of the student. It covers all ages

> Little information exists on children 0-4 years of age in dance education partially resulting in significant *gaps* in the research knowledge base for *Early Childhood* education.

of development, early childhood through higher education years, with the greatest density of information converging on populations *K-4* and *5-8.* Little information exists on children 0-4 years of age in dance education partially resulting in significant *gaps* in the research knowledge base for *Early Childhood* education.

Interest in dance education in *Child Development* increased dramatically in the time period from 1965-1979, a time when educators were rethinking teaching and learning processes to better serve individual needs of children. However, research interest in *Child Development* decreased after 1980s and the back-to-basics conservative backlash from the educational reform methods explored in the 1970s.

Critical Analysis (n=154; 6.6%) encompassed work that outlines intellectual or aesthetic observations and evaluations about composition, structure or the meaning of dance, and processes for developing skills of analytic thought. The critical analysis of dance is necessary whether one is an artist or a knowledgeable connoisseur of dance.

Greatest attention was focused on *Critical Analysis* in the second time frame, 1951-1965, and the most recent years after 1980. Concepts explored in *Critical Analysis* included: aesthetics, Laban Analysis, Semiotics, the theoretical base of dance composition, and the creation of meaning.

Much of the work in this area was developed from theses and dissertations for degree programs at the University of Wisconsin-Madison, Teachers College at Columbia University, and the University of North Carolina at Greensboro.

Cognitive Development (n=51; 2.2%) included the mental process or faculty by which knowledge is acquired at age-appropriate learning progressions. *Cognitive Development* is a contemporary *Area of Service* and a sub-set of *Child Development.* Most literature in *Cognitive Development* related to *Child Development* and was inextricably connected to the RDE *Issues* involving *Learning Styles and Theories*, and the *Populations* of *Early Childhood, K-4,* and *5-8.*

The majority of documents identified and reviewed in the RDE project emerged in the last era (n=35; 2.5%) and research interest hovered at 1-2% throughout 76 years. Though it is considered a contemporary *Area of Service*, one of the earliest documents found was written by H'Doubler in 1932.[21]

Higher Order Thinking and Problem Solving (n=38; 1.6%) involved use of cognitive process as defined by experts studying the acquisition of knowledge (e.g., Bloom, Marzano, and Anderson).[22] Taxonomies explored processes involving comprehension, application, analysis, synthesis, and evaluation.

Research interest in *Higher Order Thinking* and *Problem Solving* is minimally represented in the research knowledge base for dance education. In only one era, 1951-1964, research attention increased to 5% whereas in all other eras research hovered around 1-2%.

Considering current understanding of the impact of creative dance education on problem solving skills and cognitive development, it is surprising more research in this area has not been produced. Much of what does exist was written as advocacy to substantiate the educational value of dance education.

> Considering current understanding of the impact of creative dance education on problem solving skills and cognitive development, it is surprising more research in this area has not been produced.

Since Bloom's *Taxonomy of the Domains of Higher Order Thinking* was published in 1956, the value of higher order thinking skills thorough problem solving has been widely recognized as a major goal of education. This area of research is open territory for exploration; and the research is important to both the discipline of dance and to general education. Future research might:

- Explore plausible correlations in dance education with the development of higher order thinking skills;
- Identify the type(s) of thinking skills developed by different processes of dance education; and
- Examine the phenomenon of transference of knowledge in relation to the development and use of higher order thinking skills.

Dance Science: *Somatics and Body Therapies,* and *Technology*

Somatics (n=145; 6.2%) referred to dance or movement systems or body therapies that involve in-depth understanding and more efficient use of the body – i.e., Alexander Technique, Feldenkrais, Laban Movement Analysis, Pilates, etc. The RDE study was delimited to not include psychological dance therapy. Dance therapy differed from this *Area of Service* in that it suggests emotional pathology involving clinical interception.

Interest in *Somatics* and *Body Therapies* demonstrated a fairly consistent and progressive increase in each successive time period in the RDE study. Interestingly, involvement in this area does not seem to correlate to *Health* as an *Issue* with its dramatic rise in current research. Growth in *Somatics* has been gradual but research has been consistently minimal.

Technology (n=56; 2.4%) involved research about the development or effectiveness of technology; not, research employing technology to study another outcome.

Early in the century, *Technology* included research about film, lighting, and recorded music in dance. An early thesis "Visual instruction as an aid in the analysis of dance techniques" (1932), was authored by Bigelow and Gregory at the University of Wisconsin. Research on video technology appeared in the 1960s with the advent of portable video cameras, and computer hardware, software; and, still later, the internet; computer simulations, and computer music. It included technology of the 1980s and 1990s: videos, camcorders, video taping, CD players, digital cameras, and the web.

Research interest in *Technology* grew progressively throughout the four time periods, but rarely exceeded from 1-3% interest over the 76 years. It remains minimal even in the current era.

It is important that artists and educators keep abreast of technological advances and how best they may be used to facilitate teaching and learning in arts and education. Much research remains to be done on *Technology* and its impact on teaching and learning processes in and through dance.

Education Policy: *Teacher Preparation and Training; Assessments: Student and Teachers; Assessments: Program Effectiveness; Certification; Assessments: National, State and LEA; Standards: State and LEA; and Licensure*

Teacher Preparation and Training (n=229; 9.8%) included the processes, methodologies and requirements addressing teacher competencies, proficiency standards in teaching dance education, and preparation for classroom teachers in education. Although most data in the RDE study can be used to inform teacher preparation, the amount of research addressing issues of *Teacher Preparation* is small.

Teacher Preparation received greater attention during the first three time periods. After 1980, research interest decreased as other *Areas of Service* took precedence. Few of the 229 documents written over 76 years addressed important contemporary education *Issues: Certification, Uncertified Teachers*, and *Teacher Standards.*

As state dance *Certification* and *Teacher Standards* become increasingly important in the United States, it is essential that researchers begin to explore the criteria upon which these policies are built; the conditions under which they are developed, implemented, and sustained; and outcomes to programs and student achievement. Similar research dealing with *Uncertified Teachers* is equally important given policies of "No Child Left Behind" which will undoubtedly impact future legislation in ways not yet understood. Research should provide the knowledge base to inform policy.

Assessments: Student and Teachers (n=64; 2.7%) included evaluating what students and teachers should know and are able to do. *Student and Teacher Assessments* included a variety of evaluative processes and methodologies (rubrics, portfolio, performance, self-evaluation, peer review, checklists, written, journals, interview, observation, etc.).

Although there was minimal research in these *Areas of Service,* interest in assessment grew from 1926 (n=5; 1.7%) to 1980-2002 (n=41; 3.0%). It is not surprising that a good amount of the research relating to assessment employs evaluative, correlation and comparative, or quasi-experimental methodologies. Student assessment is linked to measuring student achievement, and teacher assessment is linked to teacher standards and the certification of "highly qualified" teachers.

Assessments: Program Effectiveness (n=38; 1.6%) involved evaluating the effectiveness of curricular instruction. Most of the literature in

> Evaluation has become an essential aspect of every project and assessment has become of paramount importance in programming.

Assessment of Program Effectiveness focused on evaluating specific programs and not the processes and tools used in program assessment.

Evaluation has become an essential aspect of every project and assessment has become of paramount importance in programming. More research about assessment in dance education would help clarify the types of assessment tools that are most effective for evaluating the dance experience.

Certification (n=20; 0.9%) involved the minimal standards that attest to teacher (beginner or master) competency. Throughout the review of 76 years of literature in dance education, *Certification* represented about 1% of research interest in the four eras: 1926-1950 (n=1; 0.3%), 1951-1964 (n=1; 0.4%), 1965-1979 (n=6; 1.4%) and 1980-2002 (n=12; 0.9%). *Certification* remains virtually unresearched and underserved.

Research in *Certification* provides vast opportunities for investigation. Partially due to the impact of "No Child Left Behind" (2001) legislation, many states are in process of revising state *Certification* requirements in dance. States have to define and implement criteria for what constitutes "highly qualified" and "certified" teachers in content-specific disciplines. It would be beneficial for the discipline

> It would be beneficial for the discipline of dance to research the criteria in which these policies should be grounded, the professional conditions that support *Certification,* and standards associated with teacher competencies.

of dance to research the criteria in which these policies should be grounded, the professional conditions that support *Certification*, and standards associated with teacher competencies, and others. In essence, research should provide the knowledge base upon which policies are built.

Assessments: National, State, and LEA (n=13; 0.6%) included evaluations undertaken at national, state, and local levels. **State and LEA Standards** (n=8; 0.3%) included written standards that were established by a state or LEA (Local Education Agency) which today are often derivatives of the voluntary *National Standards for Dance Education* published in 1994.[23] Usually state standards included the art processes of creating, performing, and critically analyzing works by self or others.

Research in *National, State, and LEA Assessments* and *State and LEA Standards* is almost non-existent. Most of the work written addressing assessments and standards was written mid-1990s by Beal (1993),[24] Purcell (1996),[25] Faber (1997),[26] Bonbright and McGreevy-Nichols (1999),[27] and Rhodes (2002).[28]

Most documents in the RDE study written after 1992 coincide with the development of two federally funded projects: the development and publication of written voluntary *National Standards for Arts Education: Dance, Music, Theatre and Visual Arts* (1994)[29] and the development and implementation of National Assessments in Education Progress (1995, 1997).[30] Again, these areas provide vast and extremely important research opportunities.

Licensure (n=5; 0.2%) included state standards that allow teachers to practice within state law. In the RDE project, *Licensure* also included the operation of private schools of dance and individuals teaching outside K-12 environments. *Licensure* and *Certification* are current priorities in *U.S. Education Issues.*

The earliest documentation identified in the RDE study on *Licensure* was a thesis written by Karst (1992).[31] Research in *Licensure* is virtually non-existent.

Section IV: Overview of *U.S. Education Issues*

The RDE study defined 20 *Issues* important in U.S. education which intersect with teaching and learning in dance education. Table 25 (below) provides summary data for *Issues* in each of four time periods: 1926-1950 (n=297; 12.7%), 1951-1964 (n=229; 9.8%), 1965-1979 (n=428; 18.3%), and 1980-2002 (n=1,385, 59.2%); and, collectively from 1926-2002 (N=2,339; 100.0%). The "n" refers to the actual numbers of documents found in the RDE study. The accompanying percentage rate refers to the relative amount the "n" number represents to the total number of documents in the given time frame.

In the following analysis of literature relating to *U.S. Education Issues* in the four time periods, *Arts Education* stands out as the predominant *Issue*, receiving more than 50% of research focus in the majority of four time periods, and receiving 47% of the focus collectively over 76 years. Respectively, *Creative Process* ranked second in three of four time periods (1926-1979) and *Health* and *Kinesthetic Learning* received moderate to little attention depending on other *Issues* of relevance in the era. The only other issue to exceed 10% field interest in two time frames was *Integrated Arts* education (1926-1964); and Affective Domain exceeded 10% in one time period (1965-1979). *Learning Styles and Theories* exceeded 10% research interest over all years, 1926-2002, due to the surge of attention in the last era (1980-2002). All other *Issues* received less than 10% of research focus and, therefore, were designated *gaps* in our research knowledge base.

Table 25. All Content Areas 1926-2002: U. S. Education Issues

U.S. Education Issues	1926-2002 N=2,339 Rank Ordered		1926-1950 n=297		1951-1964 n=229		1965-1979 n=428		1980-2002 n=1,385	
Arts Education	1,102	47.1%	184	62.0%	145	63.3%	233	54.4%	540	39.0%
Health	455	19.5%	30	10.1%	23	10.0%	74	17.3%	328	23.7%
Creative Process	396	16.9%	50	16.8%	62	27.0%	93	21.7%	191	13.8%
Kinesthetic Learning	295	12.6%	26	8.8%	19	8.3%	93	21.7%	158	11.4%
Learning Styles & Theories	252	10.8%	12	4.0%	15	6.6%	39	9.1%	186	13.4%
Multicultural Education	191	8.2%	24	8.1%	18	7.9%	32	7.5%	117	8.4%
Integrated Arts	188	8.0%	37	12.5%	25	10.9%	33	7.7%	93	6.7%
Policy	170	7.3%	3	1.0%	12	5.2%	31	7.2%	124	9.0%
Affective Domain	142	6.1%	10	3.4%	14	6.1%	50	11.7%	68	4.9%
Interdisciplinary Education	135	5.8%	11	3.7%	10	4.4%	23	5.4%	91	6.6%
Student Achievement	130	5.6%	8	2.7%	14	6.1%	22	5.1%	86	6.2%
Equity	68	2.9%	8	2.7%	7	3.1%	11	2.6%	42	3.0%
National Content Stands	66	2.8%	1	0.3%	1	0.4%	1	0.2%	63	4.6%
Funding	58	2.5%	0	0%	4	1.8%	14	3.3%	40	2.9%
Student Performance	49	2.2 %	0	0%	1	0.4%	7	1.6%	41	2.9%
Children-at-Risk	42	1.8%	0	0%	0	0%	6	1.4%	36	2.6%
Certification	40	1.7%	2	0.7%	2	0.9%	11	2.6%	25	1.8%
Teacher Standards	38	1.6%	8	2.7%	2	0.9%	4	0.9%	24	1.7%
Uncertified Teachers	26	1.1%	8	2.7%	8	3.5%	5	1.2%	5	0.4%
Brain Research	21	0.9%	0	0.0%	0	0.0%	5	1.2%	16	1.2%

* Data reflect actual numbers of documents

Patterns and *Trends*
1926-1950

As Table 25 (above) shows, relatively little work was done in all *Issues* in the era from 1926-1950 (N=297; 12.7%). However, an important *pattern* was established in which *Arts Education* (n=184; 62.0%) dominated field attention, seconded by *Creative Process* (n=50; 16.8%), and followed by *Integrated Arts* (n=37; 12.5%).

Health (n=30; 10.1%) received minimal attention. All other 16 *Issues* received less than 10% of research focus; and, thus, constituted *gaps* in the research knowledge base.

> During the early years of the century the advent of "natural dance" or "aesthetic dance" and creative dance forms as "healthful" physical exercise produced an intellectual divide in research topics.

During the early years of the century the advent of "natural dance" or "aesthetic dance" and creative dance forms as "healthful" physical exercise produced an intellectual divide in research topics. On the one hand, literature included in *Unpublished Documents* and *Literature in Dance Education* was deeply involved with exploring the *Creative Process* of the new dance forms. On the other hand, *Health* issues were of concern in *Literature in Dance* and *Other Disciplines*. Most of the published literature was written for journals of physical education and therefore focused on the physical activity of dancing.

Surprisingly, some *Issues* thought to be contemporary in dance education were cited early in the century: *Integrated Arts (n=37; 12.5%), Kinesthetic Learning* (n=26; 8.8%), *Multicultural Education* (n=24; 8.1%), *Learning Styles and Theories* (n=12; 4.0%), *Interdisciplinary Education* (n=11; 3.7%), *Student Achievement* (n=8; 2.7%), *Teacher Standards* (n=8; 2.7%), and *Uncertified Teachers* (n=8; 2.7%). Worth mentioning is the finding of a 1936 document written by the American Physical Education Association's Committee on Curricular Research that addressed curriculum and standards in dance education[32].

1951-1964

Fewer documents were collected in this time period (N=229; 9.8%) partially reflecting its shorter span of 11 years. *Arts Education* (n=145; 63.3%) remained the dominant *Issue* followed by *Creative Process* (n=62; 27.1%). Lagging considerably behind were *Integrated Arts* (n=25; 10.9%) and *Health* (n=23; 10.0%). All other 16 *Issues* received less than 10% of the focus; and, therefore, were considered *gaps*

The processes of learning dance were under investigation and *Issues* that received attention this era, though considered *gaps*, included: *Kinesthetic Learning* (n=19; 8.3%), *Multicultural Education* (n=18; 7.9%), *Learning Styles and Theories* (n=15; 6.6%), *Affective Domain* (n=14; 6.1%), and *Student Achievement* (n=14; 6.1%).

1965-1979

There was a dramatic increase in the number of documents collected this era (N=428; 18.3%) over the previous era though both spanned approximately 14 years. A*rts Education* (n=233; 54.4%) and *Creative Process* (n=93; 21.7%) remained research priorities while interest grew considerably in *Kinesthetic Learning* (n=93; 21.7%), *Health* (n=74; 17.3%), *and Affective Domain* (n=50; 11.7%). All remaining 15 *Issues* constituted *gaps.*

Research interest grew in some *Issues* that were identified as *gaps: Learning Styles and Theories* (n=39; 9.1%), *Policy* (n=31; 7.2%), *Interdisciplinary Education* (n=23; 5.4%), *Funding* (n=14; 3.3%), *Certification* (n=11; 2.6%), *Student Performance* (n=7; 1.6%), *Children-at-Risk* (n=6; 1.4%), *and Brain Research* (n=5; 1.2%).

1980-2002

Between 1980 and 2002, the total number of documents tripled (N=1,385; 59.2%). *Arts Education* remained the primary *Issue* (n=540; 39.0%). However, *Health* (n=328; 23.7%) surpassed *Creative Process* (n=191; 13.8%) as an *Issue* of interest to researchers. This trend may partially be due to the creation of the International Association of Dance Medicine and Science (1989) and its publication of the *Journal of Dance Medicine and Science* (1997). Also, during this time period, the dance community grew more knowledge-able about matters of safety and kinesiologically sound practices in dance. Focus continued on several

other important aspects of learning such as *Learning Styles and Theories* (n=186; 13.4%) and *Kinesthetic Learning* (n=158; 11.4%).

Arts Education: The Prominent *Issue* in All Content Areas

Arts Education was the most common *Issue* addressed in all content areas included in the RDE study. As data indicate in Table 26 (below) nearly half the documents (N=1,102; 47.1%) explored dance education as *Arts Education*.

From these data, one can see the historical relevance of dance to *Arts Education* during the four eras: the initial period of growth between 1926-1950 (n=184; 62.0%); the decrease in arts education documents between 1951-1964 (n=145; 63.3%); the growth in literature between 1965-1979 (n=233; 54.4%) which predominantly addressed education reform, and restructuring of schools and curricula; and, the surge of research in the last era from 1980-2002 (n=540, 39.0%).

Table 26. All Content Areas 1926-2002: Dance Education as Arts Education*

Content Areas	1926-1950 n=297	1951-1964 n=229	1965-1979 n=428	1980-2002 n=1,385	Total Docs N=2,339
Unpublished Documents	42	58	94	299	493
Literature in Dance Education	135	85	128	192	540
Literature in Other Disciplines	7	2	11	49	69
All Content Areas Total	184	145	233	540	1,102

* Actual numbers of documents

From 1926 forward, physical education provided the most common educational context for dance programs in K-12 education. As early as the 1930s, there was sparring through discourse and dissent about bringing dance into academia through physical education.[33] This discussion continued throughout the 76 year history of this project. For many, whether dance was housed in physical education or the fine arts was not questioned as long as dance was included in the educational offerings of a school, college, or university.[34]

Because of the close relationship between dance and physical education, a great proportion of dance education material was printed in journals for physical education and much of this early writing explored dance as a physical activity. To a great extent, dance research and literature was filtered through the lens of physical education.

Even though dance was historically tied to physical education in the academy, it is apparent from reviewing RDE documents that the processes and products studied in dance were aligned with those of artistic endeavors, and that dance education is an *Arts Education*.   Dance was looked upon as an education based on the processes of doing, making, understanding cultural significance, and engaging in critical analysis of creative works.

> Even though dance was historically tied to physical education in the academy, it is apparent from reviewing RDE documents that the processes and products studied in dance were aligned with those of artistic endeavors, and that dance education is an *Arts Education*.

Gaps in *Issues:* 1926-2002

As in the preceding sections, *Issues* receiving less than 10% of field attention spanning a given time period are considered significant *gaps* and in need of more research. Table 25 (page 77) shows the *gaps* that exist in 15 of the 20 *Issues* cited 1926-2002, from most researched to least: *Multicultural Education, Integrated*

Arts, Policy, Affective Domain, Interdisciplinary Education, Student Achievement, Equity, National Content Standards, Funding, Student Performance, Children-at-Risk, Certification, Teacher Standards, Uncertified Teachers, and *Brain Research.*

As one examines Table 25 (page 77) by time period, a striking observation is the number of *Issues* that were never addressed in each time frame. Attention to different *Issues* evolved and changed as the century progressed, decreasing and increasing as conditions warranted in education and the larger culture. Some *Issues* not attended to in early time periods were of great interest to scholars by the end of the 20th century.

Generally, *Unpublished Documents* and *Literature in Dance Education* were more complete in terms of the number of documents generated and the scope of content. Far less research was uncovered in *Other Disciplines* which meant that educational communities outside of the field of dance education were not receiving information about *Issues* in dance education.

1926-1950

In the time period 1926–1950, only four Issues received 10% or more of research interest (*Arts Education, Creative Process, Integrated Arts, and Health*) which left the remaining 16 *Issues as gaps* in the research information base.

As Table 25 (page 77) illustrates, *gaps* were identified in *Issues* that addressed pedagogy: *Kinesthetic Learning* (n=26; 8.8%), *Multicultural Education* (n=24; 8.1%), *Learning Styles and Theories* (n=12; 4.0%), *Interdisciplinary Education* (n=11; 3.7%), and *Student Achievement* (n=8; 2.7%); and, two *Issues* in which there were complete voids of information, *Student Performance* and *Children-at-Risk* (n=0; 0.0%).

> In general, the *Issues* identified as gaps addressed larger categories in education policy, pedagogy, and developmental skills.

Similarly, gaps were identified in *Issues* that addressed education policy: *Equity* (n=8; 2.7%), *Policy* (n=3; 1.0%), *Teacher Standards* (n=8; 2.7%), *Uncertified Teachers* (n=8; 2.7%), *Certification* (n=2; 0.7%), *National Content Standards* (n=1; 0.3%), and *Funding* (n=0; 0.0%). Those *Issues* related to developmental skills were minimally addressed as well: *Affective Domain* (n=5; 3.4%) and *Brain Research* (n=0; 0.0%).

The voids found in four *Issues* (*Funding, Student Performance, Children-at-Risk,* and *Brain Research*) were not contemporary issues of interest.

1951-1964

In this era, the same four *Issues* (*Arts Education, Creative Process, Integrated Arts* and *Health*) emerged as fields of interest; and, conversely, the same 16 *Issues* identified as *gaps* from 1926-1950 remained *gaps* from 1951-1964. These data are referenced in Table 25 (page 77) and cited in the era 1926-1050 (above).

However several other patterns were evidenced in the data as well. In comparison with the preceding era 1926-1950, five *Issues* increased in field attention: *Affective Domain* and *Student Achievement* (n=14; 6.1%); *Policy* (n=12; 5.2%), *Funding* (n=4; 1.8%), and *Student Performance* (n=1; 0.4%).

Significantly, eleven *Issues* either decreased or remained the same in field attention: *Kinesthetic Learning* (n=19; 8.3%), *Multicultural Education* (n=18; 7.9%), *Learning Styles and Theories* (n=15; 6.6%), *Student Achievement (n=14; 6.1%); Interdisciplinary Education (n=10; 4.4%), and Uncertified Teachers (n=8; 3.5%). The* remaining *Issues* received little or no attention: *Certification* (n=2; 0.9%), *Teacher Standards* (n=2; 0.9%), *National Content Standards* (n=1; 0.4%), and *Children-at-Risk* and *Brain Research* (n=0; 0.0%).

In the preceding era (1926-1950), four *Issues* were void of attention (*Funding, Student Performance, Children-at- Risk, and Brain Research*) whereas in this era (1951-1964), two *Issues* were void of attention (*Children-at-Risk and Brain Research*).

1965-1979

In the period from 1965-1979, there was a marked increase in both the quantity and scope of *Issues* researched. Some of the increases realized were due to the expansion of graduate programs in higher education and the subsequent growth in research.

As Table 25 (page 77) illustrates, the five *Issues* that received more than 10% of the focus in research this era included: *Arts Education, Creative Process, Kinesthetic Learning, Health,* and *Affective Domain;* and, the remaining 15 *Issues* constituted *gaps* in the knowledge information base.

In essence, the same *Issues* left unexplored in the two preceding eras, 1926-1964, were identical to those unattended to in this era with two minor exceptions. *Integrated Arts* became a *gap* in 1965-1979 whereas it was not a *gap* in the earlier two eras (1926-1964); and *Affective Domain*, a *gap* in the preceding two eras (1926-1964) was no longer identified as a *gap* in 1965-1979.

Overall, the *Issues* identified as *gaps* between 1965 and 1979 addressed education policy, pedagogy, and developmental skills. Minor deviations occurred in the number and percentage of field interest exhibited among Issues; thus, slightly altering the rank order of *Issues.*

Those *Issues* in which *gaps* existed that received increased field attention included: *Learning Styles and Theories,* (n=39; 9.1%), *Policy* (n=31; 7.2%)*, Interdisciplinary Education* (n=23; 5.4%), *Funding* (n=14; 3.3%), *Certification* (n=11; 2.6%), *Student Performance* (n=7; 1.6%), *Children-at-Risk* n=6; 1.4%), and *Brain Research* (n=5; 1.2%).

Those *Issues* in which *gaps* existed that received decreased attention included: *Integrated Arts* (n =33; 7.7%), *Multicultural Education* (n=32; 7.5%), *Student Achievement* (n=22; 5.1%), Equity (n=11; 2.6%), *Uncertified Teachers* (n=5; 1.2%), *Teacher Standards* (n=4; 0.9%), and *National Content Standards* (n=1; 0.2%). Unlike the eras before, all *Issues* received attention.

> Those Issues in which gaps existed that received decreased attention included: *Integrated Arts, Multicultual Education, Student Achievement, Equity, Uncertified Teachers, Teacher Standards*, and *National Content Standards*.

1980-2002

In the era of 1980-2002, there was a threefold increase in the number of documents meeting criteria for inclusion in the RDE project. All *Issues* received some research attention.

The five *Issues* that received more than 10% of research attention in this era were: *Arts Education, Health, Creative Process, Learning Styles and Theories,* and *Kinesthetic Learning.* All other 15 Issues constituted *gaps* in the information knowledge base.

Compared to the era before, nine *Issues* increased significantly in field attention during this era. These *Issues* included: *Policy* (n=124; 9.0%), *Multicultural Education* (n=117; 8.4%), *Interdisciplinary Education* (n=91; 6.6%), *Student Achievement* (n=86; 6.2%). *National Content Standards* (n=63; 4.6%), *Equity* (n=42; 3.0%), *Student Performance* (n=41; 2.9%), *Children-at-Risk* (n=36; 2.6%), and *Teacher Standards* (n=24; 1.7%).

Field interest decreased, percentage-wise, in the following national education *Issues*: *Integrated Arts* (n=93; 6.7%), *Affective Domain* (n=68; 4.9%), *Funding* (n=40; 2.9%), *Certification* (n=25; 1.8%), *Brain Research* (n=16; 1.2%), and *Uncertified Teachers* (n=5; 0.4%).

It is important to note the quantity and scope of research attended to this era. *Policy*, though still considered a *gap* in research knowledge, continued to rise for the fourth era between 1926 and 2002. The influx of documents and attention to *Issues* identified in the RDE project may reflect some of the following conditions: (1) many of the *Issues* included in the RDE study were identified by the U.S. Department of Education in a 1998 study and are considered contemporary *Issues* and thus more relevant to researchers in this era; (2) issues like *Brain Research, Kinesthetic Learning* and *Affective Domain* emerged over the years as topics of importance to dance education researchers; and (3) there has been a broadening vision for the potential intrinsic and instrumental value dance may have on teaching and learning in education.

Issues in Need of More Research

In summary, a total of 15 out of 20 *Issues* received less than 10% of research attention in the 76 year span of the RDE project, 1926-2002. In an effort to focus discussion, the *gaps* in research have been grouped by service functions: Pedagogy (*Multicultural Education*, *Integrated Arts*, *Interdisciplinary Education, and Children-at-Risk);* Developmental Skills (*Affective Domain* and *Brain Research*); and Education Policy (*Funding, Equity, National Content Standards, Certification, Teacher Standards, Uncertified Teachers, Student Achievement,* and *Student Performance*).

Pedagogy: ***Multicultural Education*, *Integrated Arts*, *Interdisciplinary Education*, *Student Achievement, Student Performance,* and *Children-at-Risk***

Multicultural Education (n=191; 8.2%) included teaching and learning that embraced more than one cultural perspective or view; understanding same or different viewpoints or perspectives from two or more cultures; and learning from a variety of cultures.

Much of the literature on *World Dance* was categorized as *Multicultural Education.* Perspectives in these works developed from an early interest in international styles, to a more contemporary understanding of the relationship of movement forms to cultural values and beliefs of a society.

Multicultural Education has been important in U.S. education for decades since census data have signaled teaching methods, processes, and content needed to adapt to minority populations as majority populations, and vice versa. Unquestionably, this remains an *Issue* in U.S. education.

> Some research now exists that may provide a foundation for further exploration – e.g., research by Park[1] and White[1] regarding learning style preferences among different cultures; and, Trulillo on the effects of multicultural curriculum on self concept and academic performance.

Some research now exists that may provide a foundation for further exploration – e.g., research by Park (1997, 1997, 2000)[35] and White (2002)[36] regarding learning style preferences among different cultures; and, Trulillo (1979)[37] on the effects of multicultural curriculum on self concept and academic performance.

Integrated Arts (n=188; 8.0%) included teaching and learning processes that involved cross teaching in the art forms (dance, music, visual arts, theatre, media, and creative writing).

Greatest interest in *Integrated Arts* was evidenced in the first era 1926-1950, pre- and post-World War II; and, thereafter, interest waned over the three following eras, 1951-2002, to less than 7%.

Since 1994, dance has been included with other arts (music, visual arts and theatre) in legislation and standards, specifically referencing the "Goals 2000: Educate America Act" (1994) and "No Child Left Behind" (2001), and the *National Standards for the Arts: Dance, Music, Visual Arts and Theatre* (1994).[38] One content standard in the national standards references "crossing other disciplines" in education. These policies for the arts, and for dance in particular, should provoke both inquiry and opportunity for future researchers in dance as arts, *Integrated Arts,* and *Interdisciplinary Education*.

Interdisciplinary Education (n=135; 5.8%) included teaching and learning more than one academic subject at a time (math, science, language arts, history, civics, government, foreign languages, etc.). Research and writing are often important components in integrated arts and interdisciplinary education; however, they need not be necessary conditions in *Interdisciplinary Education.* Teaching one subject does not qualify.

Over the 76 years of literature and research reviewed in the RDE study, interest in *Interdisciplinary Education* ranged from 3.7% (1926-1950) to 6.6% (1980-2002). These data indicate that interest in *Interdisciplinary Education* increased during later decades as the syncretic nature of teaching and learning gained in appreciation. However, overall, research inquiry has remained minimal.

Again, one may reference the legislation and national standards cited under *Integrated Arts* to attest to the importance of dance in teaching and learning in both *Integrated Arts* and *Interdisciplinary Education*. These areas provide significant opportunities for future research.

Student Achievement (n=130; 5.6%) included documents that addressed measuring student progress using samples of student work (portfolio, performance, journal entries, self-review, documentation of process, etc.). It included quantitative analyses (GPAs, state test scores, grades, subject test scores, developed rubrics, checklists); and observation, peer review, anecdotal, etc. It was important to look at multiple ways of assessing any type of student achievement based on student work.

Generally, research interest in *Student Achievement* ranged from 2.7%-6.2% throughout the 76 years of literature reviewed in the RDE project. Given the emphasis in education on outcomes based learning from the l950s through today, it is surprising not more quantitative information has been developed to address components of student achievement and outcomes. Opportunities for research in *Student Achievement* remain fertile ground.

> Given the emphasis in education on outcomes based learning from the l950s through today, it is surprising not more quantitative information has been developed to address components of student achievement and outcomes.

Student Performance (n=49; 2.2%) included a broader concept of measuring student progress through indicators beyond student achievement – e.g., socio-economic indicators such as drop out rate, college entrance rate, vocational choices, employment rate, sick days, etc.

Between 1926 and 2002, research interest in *Student Performance* ranged from zero (n=0; 0.0%) to 2.9%. It is surprising that more quantitative data has not been researched by the field considering; first, the emphasis on outcomes based learning and performance at all levels of education; and, second, the availability of government databanks that can be used to pursue research – e.g., the National Assessment of Education Progress data and the Fast Response Survey System I and II data.

Children-at-Risk (n=42; 1.8%) included students who were identified as children most likely not to complete K-12 education. Shared characteristics among at-risk students often included: students from single parent homes, or homeless children; children who qualified for free lunch programs, or for whom English was a second language; and, children who evidenced drug use, or high pregnancy rates.

Research interest in *Children-at-Risk* was minimal and it didn't even surface as an educational *Issue* until 1965. Merely six documents were found written between 1965 and 1979 and 36 additional documents were found written after 1980. Among the more recent research was interesting work by Unrau [39] which focused on dance education and gang members.

Developmental Skills: *Affective Domain* and *Brain Research*

Affective Domain (n=142; 6.1%) included documents that measured changes in preferences, attitudes, emotional affects, personality and/or behavioral changes, and values of the student.

Interest in *Affective Domain* ranged between 3.4% (1926-1950) to a high of 11.7% (1965-1979) with a decline to 4.9% in the last era (1980-2002). Much of the work accomplished in this area focused on student self-esteem, confidence, cooperation, and motivation.

Though popular in our field to measure changes in the *Affective Domain,* little research has been produced in this issue of importance. The area of *Affective Domain* remains highly researchable.

Brain Research (n=21; 0.9%) included studies that examined changes in structure, function or development of the brain in relation to, or stimulated by, bodily movement or dance.

Not surprisingly, *Brain Research* didn't surface as an *Issue* until the last two eras (1965-1979 and 1980-2002) in which a total of 21 documents were found demonstrating a 1.2% research interest respectively in each era.

Recent technological advances that trace the functional patterns of the brain have led to *Brain Research* becoming a new frontier of inquiry in dance education research. Little research has been accomplished in relation to the affects of dance education and bodily movement on brain development and learning potential.

Neurological research that connects brain function, movement and learning processes with child development is in its earliest stages. Intriguing new work in psychology, such as in the work of Jay Seitz (1996, 2001),[40] is serving to stimulate the field. In the past few years, the Dana Foundation for *Brain Research* has taken new interest in artistic processes in relation to brain function and learning.[41]

Education Policy*: Policy, Funding, Equity, National Content Standards, Certification, Teacher Standards,* and *Uncertified Teachers*

Policy (n=170; 7.3%) involved recommended or mandated actions at federal, state, or local school district (LEA) levels. Examples included: federal ("Goals 2000: Educate America Act," the National Assessments of Education Progress-NAEP), state (dance teacher certification, high school student graduation requirements in the arts, state standards in dance and arts education, entrance requirements in the arts for college freshmen students in the arts); and LEAs (standards, curricular frameworks, assessments).

Research interest in *Policy* grew progressively from 1.0% (1926-1950) to 9.0% (1980-2002 with the beginnings of the Works Progress Administration (WPA) during the late 1930s through the mid-1960s when the National Endowment for the Arts (NEA), National Endowment for the Humanities (NEH), and the Elementary and Secondary Education Act (ESEA) were established to associated legislation, projects, and grants which all continue to impact the arts and arts education today. This is a fascinating area of research that remains largely untouched.

Funding (n=58; 2.5%) addressed financial issues and concern with public or private monies at federal, state, or local levels.

Zero research interest occurred in the first era (1926-1950) which is not surprising given limited federal, state, or local funding sources available throughout the depression, war years, and post-war building efforts. Research interest grew slightly over the decades to approximately 3.0%; however, minimal research still exists on the issue.

> At both federal and state levels, policy often determines where funding is allocated; and, the impact of funding can determine future policy.

From the literature, it is apparent that important projects and research undertaken in the field on other *Issues*, *Populations* and *Areas* served could not be completed or continued due to inadequate funding. Even during the prosperity following the 1980s, dance rarely received external funding to assist field research on any number of topics.[42]

Policy and funding are frequently tied to one another. This interrelationship is addressed in an article that looks at the evolution of dance as an art form and the evolution of federal interest in, and support of, arts education from 1965 forward written by Bonbright (2001).[43] At both federal and state levels, policy often determines where funding is allocated; and, the impact of funding can determine future policy. Improved research in dance education in all aspects described in this report surely would

help dance educators articulate our discipline to decision makers, funders, and policy makers in arts and education.

Equity (n=68; 2.9%) included equal access and opportunity for students to study dance regardless of gender, age, size, shape, interest, ability, race, ethnic origin, or religious belief.

Contemporary notions of *Equity* are challenging previous concepts about gender, sexual roles, personal biases and equal opportunity. Early research concerning *Equity* in dance education included the role of boys and men in dance.[44] Concepts have broadened to include work on racial stereotyping,[45] and dance for individuals with personal challenges.[46] The language used and the questions asked in these investigations have become broader and more inclusive.[47] Increasingly, research on *Equity* issues builds in importance as populations shift balance and education becomes focused on individual needs, strengths, and differences.

National Content Standards (n=66; 2.8%) included written standards for a discipline. In dance, this specifically referred to the voluntary national standards for dance that involve the processes of creating, performing, and critically analyzing the works of self and others found in content standards.

Research interest in national content standards was minimal throughout the 76 years of literature reviewed in the RDE study with only three documents written prior to 1980 and 63 documents written after 1980. As pointed out earlier in the chapter, discussion on standards and curriculum occurred surprisingly early in 1936 through the American Physical Education Association's Committee on Curricular Research;[48] however, it wasn't until the document *National Standards for Dance Education: What Every Young American Should Know and Be Able to Do* (1994)[49] was published that standards became part of a national dialogue and an emerging research agenda.

Of the 66 documents in the RDE that addressed *National Content Standards*, most of the work focused on standards for a specific problem or aspect of teaching dance.[50] Ten documents addressed the 1994 publication of the voluntary *National Standards for Dance Education,* and zero documents addressed *Student Achievement, Student Performance* or program evaluation using *National Content Standards*. Future revisions of the standards should preferably be research based; and, much research needs to be done to establish that information base.

Certification (n=40; 1.7%) referred to teacher certification. It included (1) state certification and licensure in dance teacher education; (2) the determination of certification standards for teachers; and, (3) private and public sectors teaching in K-12 education, higher education, private studios, and artists.

Data from the RDE project show that research has been quite minimal in *Certification*. A total of 40 documents were produced over 76 years and *Certification* maintained field attention generally 1-2% throughout the years.

Unquestionably, research in *Certification* provides vast opportunities for investigation. Partially due to the impact of "No Child Left Behind" (2001) legislation, many states are in process of revising state *Certification* requirements in dance. States have to define and implement criteria for what constitutes "highly qualified" and "certified" teachers in content-specific disciplines.[51] It would be beneficial for the discipline of dance to research the criteria in which these policies should be grounded, the professional conditions that support certification, and standards associated with teacher competencies, and others. In essence, research should provide the knowledge base upon which policies are built.

> It would be beneficial for the discipline of dance to research the criteria in which these policies should be grounded, the professional conditions that support certification, and standards associated with teacher competencies, and others

Teacher Standards (n=38; 1.6%) included professional guidelines often developed by the discipline for educators teaching in public and private institutions (K-12 and higher education) and private academies (professional training schools and schools of dance). The standards could be national, state, or discipline-specific.

Data from the RDE project show that research has been quite minimal in *Teacher Standards.* Only 38 documents were located in 76 years of literature. The first era (1926-1950) demonstrated the greatest attention to *Teacher Standards* (n=8; 2.7%) and, thereafter, research interest hovered around 1%.

> Data from the RDE project show that research has been quite minimal in Teacher Standards with only 38 documents located in 76 years of literature.

With publication of the National Dance Education Organization's *Professional Teaching Standards for Dance in Arts Education*, projected for 2005, the standards should help facilitate research in this area.

Uncertified Teachers (n=26; 1.1%) included all who teach subjects outside their major areas of expertise or certification in public and private education, as mandated by the state or discipline. This could include: volunteers, parents, artists-in-residence, coaches, and teachers not credentialed in the specialty area.

Research interest in *Uncertified Teachers* hovered between 1-3% throughout the 76 years of literature reviewed in the RDE project.

The current emphasis on *Uncertified Teachers* from state and federal departments of education might prompt more research in this *Issue.* Federal databanks are available for researchers to pursue investigations into many U.S. education issues.[52] If nothing else, researchers should inquire about using these national databanks and access to grants that support their use for national projects.

In summary, the 15 *Issues* described above as *gaps* provide fertile areas in research for professionals seeking answers to intriguing questions in the discipline of dance, arts, and education. A substantial base of information in these areas would promote informed decisions and a strong advocacy to move the field of dance education forward.

Section 5: Research Methods and Research Techniques

It was observed that different universities promoted distinct styles of research as well as trends in research topics. The first to develop a major in dance at the university level was Margaret H'Doubler who started her career as a biology major at the University of Wisconsin, a training that provided dance with a scientific and kinesthetic approach to dance education. H'Doubler articulated the processes of creating dances, applied scientific inquiry to learning movement techniques, and her students observed and tested biomechanics in their study of human motion. Graduates of the Wisconsin program were required to study and have practice in rigorous research methods. These students migrated to other universities and, in turn, brought high standards in scientific research to their new programs.

Other programs, like that at the University of North Carolina at Greensboro, encouraged rigorous research in aesthetic exploration and inquiry. Many such designs were created in concert with the student's thesis performance. The RDE study included documents describing personal creative journeys in which theories and analyses of teaching and learning in and through dance have been applied. These research designs provided inquiry which expanded understanding of the human artistic experience heretofore little understood.

Much of the work from Teachers College at College at Columbia University focused on curricular research in K-12 education. While Teachers College was the stronghold of John Dewey and the first inclusion of a dance program in higher education dating back to 1911,[53] the first *Unpublished Documents* collected from Teachers College is dated 1944.[54]

The California State University at Long Beach, and the University of California in Los Angeles, Riverside, Long Beach, and Berkeley, demonstrated a wide use of research methodologies. Of 73 documents, some referenced more than once, the following research methods were used: Philosophical (n=35), Correlational and Comparative (n=28); Quasi Experimental (n=27), Curricular (10), Historical (n=8), and Ethnographic and Anthropological (n=9).

Research Methods

Table 27 (below) lists actual numbers of documents for research methods employed in each content area. The total number of methods represents sums far greater than the number of actual documents due to the fact that a research study frequently employed two or more research methods.

Table 27. All Content Areas 1926-2002: Research Methods *

Research Methods	Unpublished Documents n=843	Published Dance Ed n=1,131	Published Other Disc n=365	Total N=2,339
Descriptive	636	630	199	1,465
Evaluative	230	173	59	462
Curriculum	157	132	50	339
Correlational/Comparative	144	53	128	325
Philosophical	119	126	56	301
Historic/Biographical	119	77	18	214
Ethnographic/Anthropological	59	48	20	127
Quasi Experimental	77	26	21	124
Experimental	0	0	0	0

*   Data reflect actual numbers of documents.

These data clearly indicate that while the majority of articles were not research based, *Descriptive* research was the predominate methodology used throughout 76 years of research reviewed in the RDE study, and the field lacked *Experimental* research.

No documents supporting truly experimental design were identified in the RDE study for the same reasons *Experimental* research is difficult to implement in most education settings:

1. Individual or local dance projects do not have the wide sample bases needed for random selection.
2. Students bring many uncontrollable variables to the research project.
3. The environments in which dance research is accomplished contain many uncontrollable situational variables.
4. Dance researchers have not been adequately trained in the stringent necessities required by strict experimental research.

In addition, there was evidence of quasi-experimental research (n=124); however, none of the studies identified and reviewed were longitudinal in design.

Research Techniques

Table 28 (below) lists actual numbers of documents for the research techniques used in each of the content areas. The total numbers of techniques represent sums far greater than the numbers of actual documents due to the fact that a research study frequently employed two or more research techniques.

Articles found in *Literature in Dance Education* were, overwhelmingly, descriptive and anecdotal due to the great number of short articles written. Deeper research analyses were more often found in *Unpublished Documents*. Still*,* 75.4% of *Unpublished Documents* used descriptive research designs. The list of research techniques used in the RDE study reflects this predominance**.**

Table 28. All Content Areas 1926-2002: Research Techniques *

Research Technique	Unpublished Documents n=843	Published Dance Ed n=1,131	Published Other Disc n=356	Composite Totals N=2,339
Anecdotal	188	550	33	771
Observation	209	92	46	347
Survey/Questionnaire	160	55	59	274
Case Study	192	115	32	339
Content Analysis	218	52	41	311
Focus Groups/Interview	160	39	14	213
Action Research	86	44	27	157
Think Aloud	19	11	29	59
Computer Simulation	0	3	1	4
Meta Analysis	0	1	0	1

* Data reflect actual numbers of documents

Essential Research Characteristics

For the purposes of RDE, six essential research characteristics were considered in the review of all documents: (1) a clear and unambiguous posing of question(s), problem(s), or effect(s); (2) an appropriate research methodology; (3) an organized and comprehensive review of related literature; (4) a clear and reasoned discussion of techniques and methods for collecting, recording, and storing data; (5) a clear and concise analysis of data and conclusions; and (6) an organized and relevant set of references and bibliographic citations.

Research designs that did not clearly address essential research characteristics were not forwarded to B Form analysis in the RDE project.

Table 29 illustrates the relationships between field attention to essential research characteristics and content areas for all time periods. Data for the three content areas of the RDE study reveal distinct preferences and differences over time in the degree to which essential research characteristics were applied.

Table 29. All Content Areas 1926-2002: Essential Research Characteristics *

Time Period	Unpublished Documents n=374	Published Literature in Dance Education n=159	Published Literature in Other Disciplines n=167	Totals N=700
1926-1950	28	4	8	40
1951-1964	43	1	9	53
1965-1979	88	5	18	111
1980-2002	215	149	132	496
Total	374	159	167	700

* Data reflect actual numbers of documents

Less than one-half of the *Unpublished Documents* (n=374; 44.4%) written between 1926 and 2002 met essential research characteristics, as defined by the RDE study; and, thus, required more in-depth analysis. It is clear from reviewing the literature accessed in *Unpublished Documents* (N=843) over the course of 76

years, there are great discrepancies in the degree to which graduate programs require the above research components in theses and dissertations.

In contrast, of all the published documents in *Literature in Dance Education* (N=1,131), only a small percentage of documents met essential research characteristics that required B Form analysis (n=159; 14.1%). Relatively few designs used research methodologies other than descriptive and anecdotal when investigating educational phenomena.

The greatest percentage of published research requiring further examination was found in *Other Disciplines* (N=365) where almost half required B form analysis (n=167; 45.7%). This higher percentage rate may be a result of more

> The greatest percentage of published research requiring further examination was found in *Other Disciplines* (N=365) where almost half required B form analysis (n=167; 45.7%).

rigorous dance education related research submitted to journals in *Other Disciplines*, or the journals required designs of more formal research methodologies. In either case, formal research designs may effectively communicate ideas and results to other disciplines.

Section 6: RDE in Context of National Discussions

The results and recommendations from the RDE study are contextualized by two major discussions currently facing the dance education research community:

- The value of quantitative and qualitative research.
- Teaching dance for its intrinsic value as an art, and teaching dance as an instrument to promote other educational, personal or social benefits.

The first discussion focuses on research methodologies serving to illuminate the educational values of dance. The second focuses on the content and goals of dance education and its broader impact on the educational community. Both discussions affect understanding dance education in relation to artistic and educational goals, and the relationship of dance education to the greater educational community and the funding establishment.

To Quantify and Qualify

For 76 years dancers have spent many hours and dollars creating studies to demonstrate that dance is worthy of inclusion in educational institutions and worthy of funding. In general, research methodologies used in the field of dance have been, or have been viewed as, subjective, anecdotal and, in general, unreliable. Much of the product of decades of inquiry in our field has been dismissed by an education community seeking more objective, scientific, and statistical evidence in support of claims to the educational benefits of dance.

Most dance educators are not trained in experimental or quantitative research and educational researchers are seldom trained in movement education and it is extremely difficult for professionals working in the field to find the human and financial resources needed to pursue research. In addition, few dance programs that have been the focus of research have the resources, student numbers, staffing, or interest to support research executed by others (dance graduate students and faculty and researchers in education); and little research is longitudinal.

Most dance educators are able to provide anecdotal evidence that dance enriched the lives of students, provided them with great personal benefit, and even enhanced their academic achievement. However, the educational and funding communities clamor for scientific causality and fault the field for lacking a body of conclusive research to support claims. Administrators and funders remain both unaware of the nature of the artistic dance experience and unconvinced of its educational value.

Some proponents of arts education espouse the notion that the benefits of experience in the arts eludes quantification and that the rich and multi-faceted nature of practices in the arts cannot be reduced to experimental methodologies or statistical evidence. The microscopic lens of scientific inquiry filters out much of the artistic experience.

> The National Dance Education Organization supports models of research that embrace a continuum of qualitative to quantitative research methods and techniques; and, there are aspects of the intrinsic dance experience that may be revealed through quantitative inquiry.

The National Dance Education Organization supports models of research that embrace a continuum of qualitative to quantitative research methods and techniques; and, there are aspects of the intrinsic dance experience that may be revealed through quantitative inquiry. Recommendations for both evaluation and research suggest a multi-perspective assessment involving student, teacher, parent, and administrator as well as the observer. There are also research designs that provide a triangulation of research methodologies in order to substantiate a variety of aspects of the dance experience. Quantification becomes part of the total spectrum.

Dance for its Intrinsic Artistic Value, and Dance as an Instrument for Personal Development and Other Academic Learning

There is a spirited dialogue between proponents of teaching the arts for their own sake, and those who advocate arts education as an instrument for developing personal, social, or academic attributes. Dance, in particular, has historically been introduced into schools for its transference-based physiological and healthful benefits. Current research, centered on a variety of learning styles and a new understanding of "kinesthetic intelligence,"[55] has opened awareness in the academic community about the effectiveness of creative movement as a tool for learning other academic subjects. Teaching and learning in and through dance can offer opportunity to students that might otherwise falter in classrooms using traditional verbal teaching techniques. Further research about the effectiveness of teaching academic subjects through movement experiences[56] may serve this population of kinesthetic learners.

Here, too, the two issues of teaching arts for both their intrinsic and instrumental value are inclusive. The instrumental healthful and intellectual benefits of dance education are inherent in the art form. In addition, when a dance is created, it is often "about something," which easily lends itself to content in academic curriculum. The intellectual content is in service of the artistic intent. They function symbiotically.

Should dance be taught only for its intrinsic, artistic validity rather than for the other purposes of well-being, personal growth and academic advancement of current claims? Does research support claims of personal development and academic improvement from learning movement? In the climate of "No Child Left Behind" and the clamor for higher test scores, will "art for 'arts' sake" be ignored? Where does this debate leave dance research, the dance education community, and the funding establishment?

These are questions raised by examining the results of the Research in Dance Education project. No single research design can articulate the full scope of the dance experience. Multiple research methodologies and techniques are required to examine the complex phenomena involved. The field welcomes a balance in both content and methodology.

The Balanced Quadrangle:

Recommendation for a balanced model of research exploration emerged from the RDE study. Such a model does not oppose one aspect of research against another. Rather, this model identifies characteristics of a spectrum of possibilities and opportunities. An expansive model for research encourages a rich and inclusive concept of inquiry that embodies the full scope of endeavors. A multiplicity of approaches will address the scope of the dance education experience.

Qualitative

Intrinsic ←—————→ **Instrumental**
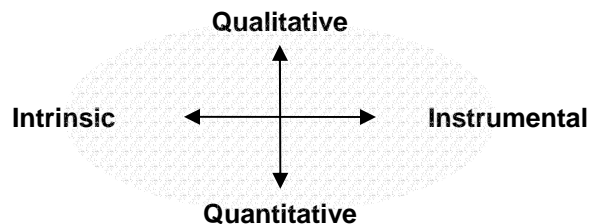
Quantitative

To this end, the RDE project advocates the image chosen to represent two continua placed within a universe. This symbol repeated above, represents the range of qualitative to quantitative methodologies, in harmony with the continuum of intrinsic to instrumental values for dance. Most of the existing research in dance education falls somewhere on one or both of these continua. Future research should serve to complete a full range of experiences and meet the needs of diverse constituencies.

Research Priorities for Dance Education: A Report to the Nation is a call to action for dance, arts, research, and education communities. It is hoped that the nation heeds the call for the good of future generations involved in all aspects of teaching and learning and, further, that public and private funders support research in these domains for the good of U.S. education and the nation.

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[8] Note: In the RDE database, documents are attributed to each one or more of the grade groupings (K-4, 5-8 or 9-12) to which they pertain. Documents applying collectively to K-12 are counted in all three groups: K-4, 5-8 and 9-12.

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[14] Note: In the RDE database, documents are attributed to each one or more of the grade groupings (K-4, 5-8 or 9-12) to which they pertain. Documents applying collectively to K-12 are counted in all three groups: K-4, 5-8 and 9-12.

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[52] Government databanks exist from Fast Response Survey Systems (FRSS) I and FRSS II, and from the National Assessments in Education Progress 1995 probes and 1997 national assessments in the arts. In the early 2000s, the government offered grants to support research accessing these databanks. Researchers should check with the U.S. Department of Education to inquire of present status.

[53] Note: Mary Beegle and Jack Crawford instituted the first dance course at Teachers College at Columbia University in 1911. Gertrude Colby joined the faculty in 1913.

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Chapter 6. Recommendations to Further Research in Dance Education

The recommendations presented herein are drawn from the full report, *Research Priorities for Dance Education (RPDE)*, which identified, reviewed, and indexed vast amounts of literature and research in dance education written between 1926 and 2002. The items and suggestions below are offered as summary conclusions and recommendations in the hope that *Research Priorities for Dance Education* will act to stimulate interest for research in dance education.

An overarching conclusion of this study is that the wide landscape of research in dance education is ripe for further and ever more focused inquiry. To conclude that the future agenda for research in dance education is fully and well illustrated by the *gaps* that are identified in Chapters Two through Five, does not recognize the potential to refine and rededicate inquiry in areas identified as research *trends* or *patters*. Thus, the RDE project recognizes that while it is true some questions have not been asked, some questions may need to be asked again, or asked in a different way.

It is our hope that the recommendations below inform and, to some extent reform, research sensibilities toward the act and benefits of research. For too long ownership of the practice of inquiry has been the province of the university dance educator. Empowering educators and researchers can only expand the discourse and field opportunities for significant findings. As a discipline we must find our voice, to articulate the phenomenon of dance as art and education, and understand better its impact on teaching and learning in diverse environments among culturally rich populations.

To situate the following recommendations, it is helpful to review the goals of the RDE project:
The Research in Dance Education project set out to answer the following questions:

- What research exists in dance education? When was it done? Where is it?
- What patterns, trends, and gaps may be identified by analysis of these data?
- What are the implications for understanding the scope of this information for dance, arts education, and U.S. education?

Filling the Needs of the Nation

1. **There is a need to understand patterns, trends, and gaps found in the RDE study 1926-2002; and the need to pursue research in areas found most lacking.[1,2]**

   - *U.S. Education Issues*: Of 20 *Issues* researched in the RDE project, 15 *Issues* were identified as *gaps,* and are therefore identified as *Issues* in need of future research. Two additional *Issues* received less than 10% of research attention in one or more of the eras between 1926 and 2002.

     The 15 severely under-researched *Issues* over decades impact policy and pedagogy at state and national levels, specifically: *Multicultural Education*, *Integrated Arts*, *Policy, Affective Domain*, *Interdisciplinary Education*, *Student Achievement*, *Equity*, *National Content Standards, Funding*, *Student Performance*, *Children at Risk*, *Certification*, *Teacher Standards*, *Uncertified Teachers*, and *Brain Research*.

     The two *Issues* additionally highlighted are *Learning Styles and Theories and Kinesthetic Learning*. Both of these *Issues* averaged 10% or more of field attention over 76

years; however, each received significantly less than 10% of field attention in one or more of the eras between 1926 and 2002. (See Table 25, Chapter 5, page 77 of full report). Thus, it is important to identify *Learning Styles and Theories* and *Kinesthetic Learning* as *gaps* in our research knowledge base to be seriously considered in future research inquiry.

- *Populations Served*: Of the 14 *Populations* researched in the RDE project, eight *Populations* received less than 10% of research attention. *Gaps* were evident in the following *Populations*: *Community and Family*, *Administrators and Policy Makers*, *World Cultures*, *Different Abilities*, *Early Childhood*, *After School*, *Senior Citizens and Elderly,* and *Outreach.*

    Two additional *Populations* are identified in the full report as needing more research focus: *Private Studios* and *Artists*. *Private Studios was* a *gap* during three time frames 1926-1979; and *Artists*, though never identified as a *gap* in the four eras between 1926 and 2002, remains quite underserved. Both populations, *Private Studios* and *Artists,* are fundamental to our profession; yet, the research information knowledge base remains scant.

- *Areas of Service*: Of the 27 *Areas of Service* studied in the RDE project, 19 received 10% or less of research attention between 1926 and 2002. The *Areas of Service* identified as *gaps* included: *Teacher Preparation and Training*, *Performing*, *Child Development*, *Critical Analysis*, *Interdisciplinary Education*, *Opportunities To Learn*, *Somatic Body Therapies*, *Resources*, *Research*, *Artists in Schools*, *Assessments of Teachers* and *Students*, *Technology*, *Cognitive Development*, *Higher Order Thinking* and *Problem Solving*, *Assessments for Program Effectiveness*, *Certification*, *Assessments* at *National, State, and LEA* levels*, State and LEA Standards*, and *Licensure*.

    Three additional *Areas of Servi*ce received less than 10% of the research focus in one or more of the eras and are, thus, considered gaps in our research information knowledge base: *Dance Science and Medicine*, *Creating and Choreographing Dance*, and *Creative Process*.

2. **There is need to strengthen teacher preparation and professional development programs in research environments of PreK-12 education, higher education, private schools of dance, outreach programs in performing arts organizations, and community and cultural centers.**

    The Research in Dance Education project recommends that:

- Colleges and universities provide opportunities for undergraduate and graduate students to study and be engaged in basic research and its designs. Graduate students in particular are well served if their educational experience includes practical and theoretical understanding of research. By so doing, institutions in higher education will train future professionals to understand and respect a variety of research methods, techniques, and essential research characteristics that embrace quantitative to qualitative investigations. Providing fundamental information in research as it is referenced toward the scope of objectives in dance (theory, art, education) may allow young professionals to better understand the cross disciplinary importance and potential of research, stimulate their desire to learn more about research designs, and empower their ability to engage in research (by self and others) in unique and innovative ways.

- Dance professionals who teach in diverse environments (PreK-12 education, private schools of dance, performing arts organizations, and cultural centers) promote professional development for their staff in partnership with local colleges and universities. Similarly, colleges and universities should regularly plan, and offer, professional development service opportunities to local and regional dance specialists working in diverse environments. Professional development provides wonderful vehicles for the creation of new partnerships, a better appreciation of local or regional resources and needs, and a more supportive professional network for colleagues in dance.

- Colleges and universities that support dance teacher certification programs incorporate studies in education research into the training of PreK-12 dance specialist educators. It is important these young professionals understand the need for research in the PreK-12 environment, appreciate the nature and scope of the different research designs that are available to them (especially action research), learn how to engage their classroom as a laboratory, and take ownership in expanding the research knowledge base in teaching and learning *in* and *through* dance.

- Graduate students be exposed to course work in basic statistics so they can intelligently read and critique reports and other professional papers. Understanding the language of statistical information, and how such information may serve a multitude of educational purposes, is essential to the professional dance educator.

- Artists, educators, and administrators attend national conferences and regional seminars, as sponsored by the National Dance Education Organization, to enhance professional development in research inclusive of all environments -- PreK-12 education, higher education, private schools of dance, outreach programs in performing arts organization, and community and cultural centers.

3. **There is a need to understand and implement a range of research designs supporting quantitative and qualitative research methods and techniques.**
   The Research in Dance Education project recommends that:

- Dance education researchers work cooperatively to establish clearer definitions concerning research methodologies, techniques, and essential research characteristics. "Think tank" sessions should be conducted in which research terms and methodologies are discussed and clarified. Such sessions should be held periodically so terminology and concepts are contemporary and give direction to future research impacting dance in relation to the other arts, research, and education communities. Terminologies need to be defined for use within the dance discipline (PreK-12, higher education, private schools of dance, outreach programs of performing arts organizations, community and cultural organizations) as well as for connecting with other disciplines and constituents in the arts, research, and education communities.

- Dance researchers be trained in tighter research methodologies so their research efforts have greater impact on the field of teaching and learning *in* and *through* dance, on education administrators, and on funding agents

- Diverse research methodologies be used to explore and communicate the full range of the artistic and educational experience in dance. Descriptive and anecdotal accounts that communicate the arts experience are not seriously considered by some other research disciplines. In grant applications, the U.S. Department of Education requires experimental methodologies with a preference toward random sampling. The National Endowment for the Arts and the U.S. Department of Education now require that outcomes-based evaluation be included in the grant application and final reporting process. Young professionals need to learn to use different research tools so they and the discipline are informed and competitive.

- Researchers contact the U.S. Department of Education and the National Endowment for the Arts to inquire what government arts education databanks are accessible to the public for research, at that point in time. In prior years, access and grants have been awarded to researchers to use the National Assessments in Educational Progress (NAEP) databanks. The goal is to encourage researchers to glean more information from the vast amounts of data collected but, by no means, worked to their fullest potential.

4. **There is a need to research intrinsic and instrumental values of dance education and their impact, or potential impact, on teaching and learning *in* and *through* dance.**
   The Research in Dance Education project recommends that:

   - Dance specialists research the processes of creating, choreographing, performing, and analyzing dance so educators, artists, and administrators in dance, arts, research, and education communities better understand different components of these processes.

   - Researchers investigate the artistic processes in dance (creating, performing and analyzing) in light of higher order thinking skills and processes of knowing and understanding. Such information will help educators better understand transfer of learning.

   - The focus of dance education is a quality arts experience. Research about the intrinsic artistic processes and products of dance education includes inquiry about the instrumental benefits to affective and academic domains.

5. **There is a need to engage the dance community in research.**
   The Research in Dance Education project recommends that:

   - Dance professionals teaching in diverse education environments (PreK-12 education, higher education, private schools of dance, and performing arts organizations) understand and value the importance of research, how it contributes to the knowledge base of teaching and learning, and how their studios and classrooms can serve as laboratories for gathering important data.

- Dance educators receive training in reflective inquiry and research in concert with their training in artistic processes. Assessment and action research could ultimately be an integral aspect of teaching dance. Collaboration with researchers on design and implementation will connect the dance educator to colleagues in their larger educational community and help validate the dance educator's full and productive participation in the educational environment.

- Research information and documents be made accessible to dance constituents (especially in PreK-12 education, private schools of dance, and performing arts organizations). There is significant need to access research data by these constituencies who are not connected to interlibrary loan systems. The RDEdb will certainly assist in this endeavor.

- Existing studies and paradigms that have the potential to inform further research be carried to the next step or replicated so new and advanced studies build on prior research.

- Research be conduced that addresses program outcomes and student achievement in after school and outreach programming. Significant arts related funding is dedicated to after school or outreach enrichment programs; yet, there is little research to support program objectives and effectiveness of these programs.

- Research be conducted on what constitutes 'model programs" and "best practices" so that criteria are developed to support federal and state funding already directed to "model programs" and "best practices."

6. **There is a need to expand community collaborations in research.**
   The Research in Dance Education project recommends that:

- Dance educators from diverse environments at the community level (PreK-12, higher education, private schools of dance, and performing arts organizations) consider combining resources to pursue research endeavors. Collaborations of this nature would tend to reach the lesser served populations including: *Artists, Private Studios, Community and Family, Administrators and Policy Makers, World Cultures, Different Abilities, Early Childhood, After School, Seniors and Elderly,* and *Outreach*.

- Partnerships be established with the higher education community to expand professional development, teacher training, and research endeavors available at the college or university level. Community networks help mentor professionals, stimulate research questions, discover and procure resources, and better connect individuals with their community, as well as with policy and funding.

7. **There is a need to build collaborations with the research community in arts education.**
   The Research in Dance Education project recommends that:

   - Like other domains of knowledge in dance education, research is a specialty area that encompasses discrete content, skills, and knowledge. Until more dance educators are trained in research, dance specialists should work with research professionals from dance, arts, research, and education communities to learn more about research design and execution.

   - Dance educators in diverse environments (PreK-12 education, private schools of dance, performing arts organizations) engage research specialists to help design and implement research projects appropriate to their environments using their classrooms and studios as laboratories.

   - The dance community and neurological/medical research communities partner to pursue research in early childhood and motor development and its effects on thought processes and learning.

   - Research be conducted in movement education and its potential impact on brain structure and learning processes in early stages of child development.

   - Dance educators publish their research in a variety of research journals (in dance as well as other disciplines) to encourage collaboration and dissemination of research, and to further the inclusion of dance in educational discourse.

8. **There is a need to address *Policy* and *Funding* issues concerning dance education in U.S. education.**
   The Research in Dance Education project recommends that:

   - Research be conducted on policy and funding in *U.S. Education Issues,* categorized more broadly as pedagogy (*Multicultural Education, Integrated Arts, Interdisciplinary Education, Student Achievement, Student Performance,* and *Children at Risk*); and education policy (*Policy, Funding, Equity, National Content Standards, Certification, Teacher Standards,* and *Uncertified Teachers*).

   - Research be conducted on policy and funding in *Areas of Service,* categorized more broadly as pedagogy (*Interdisciplinary Education, Opportunities-to-Learn, Resources, Research, Artists-in-School* programs, *and Performing*); and education policy (*Teacher Preparation and Training, Assessments for Students and Teachers, Assessments for Program Effectiveness, Certification, Assessments at National, State, and LEA levels, State and LEA Standards,* and *Licensure*).

   - Research be conducted on policy and funding in *Populations* involving *Private Studios, Different Abilities, Early Childhood, After School, Outreach, and Seniors and Elderly, and Outreach.*

9. **There is a need for research on the learning preferences of diverse cultures.**
    The Research in Dance Education project recommends that:

    - Research is needed that examines learning patterns and preferences of the diverse populations of children in American schools.

    - Since many minority populations have been identified as kinesthetic learners, research is needed that examines the effects of dance education on student achievement in minority populations.

10. **There is a need to establish one or more Center(s) for Research in Dance Education (CRDE) to move support research and the placement of dance in arts, research, and education communities.**
    The Research in Dance Education project recommends that a Center for Research in Dance Education:

    - PROVIDE professional development opportunities for dance educators to inquire, learn and practice research in dance education.

    - FACILITATE the understanding of past research to better direct and replicate (to advance, not duplicate) future research.

    - CONTINUE the document review and collection process so the database is maintained as a growing and contemporary body of knowledge for the discipline.

    - EVALUATE the RDE database to develop new topics and research questions, better methodologies, and to further the research that is accomplished.

    - CONDUCT workshops and seminars that address the needs of the field in research, and sponsor "think tank" sessions that help the field define and clarify research terminology through field dialogue and consensus.

    - EXPAND the base of research to populations not currently served: *Private Studios* of dance, *Artists, Early Childhood, Differently-abled, After School and Outreach* programs, *Seniors and the Elderly, Administrators and Policy Makers, Community and Families, and World Cultures.*

    - DISSEMINATE the use of research to inform diverse dance communities.

    - PRESERVE the work that is the heritage of research in dance education in full text form so that future generations of researchers will have the legacy available. Investigate digitalization to preserve historical documents and make them electronically available to the Research Center, the discipline, and the nation.

- SERVE as an advocate for advancing research in dance education using the scope and knowledge revealed in the Research in Dance Education project, the RDEdb, and *Research Priorities for Dance Education*.

- EXAMINE the recommendations in *Research Priorities for Dance Education* and stimulate new research informed by the Research in Dance Education project.

- STRENGTHEN partnerships and networks for research in dance education to support the work of the research center(s) and the field.

A Call to Action

Research Priorities for Dance Education: A Report to the Nation is a call to action for dance, arts, research, and education communities. The National Dance Education Organization urges the nation to heed this call for the good of future generations involved in all aspects of teaching and learning. Further, it is urged that both public and private funds support research in these domains for the good of the nation, and our children.

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[1] Data referenced are available in the full report, *Report Priorities for Dance Education: A Report to the Nation* (Chapter 5) and online: www.ndeo.org/research.

[2] Descriptors for *U.S. Education Issues, Populations Served,* and *Areas of Service* are provided in the full report (Appendix A2) and online at: www.ndeo.org/research. Descriptors for research methods, research techniques, and essential research characteristics are available in the full report (Appendix C1, C2) and online.

APPENDIX A

A. 1 Grid Matrix

A. 2 Descriptors

GRID MATRIX

EDUCATION ISSUES ---->		Health A	Creat Proc B	Lrng Styl & Theo Kinesthetic Lrng C	Student Achvmt Affective Domain Student Perf D	Policy Funding E	Certification Uncertif Tchrs Teach Stds F	Equity G	Multicult Ed H	Child Risk I	Integrat Arts Interdisc Ed Arts Ed J	Natl Cont Stds K	Brain Rsch L
POPULATIONS													
Early Childhood & PreK	1												
K-12: K-4 5-8 9-12	2												
Higher Education	3												
Different Abilities	4												
Seniors & Elderly	5												
After School Outreach	6												
Private Studios	7												
Artists	8												
Admin & Policy Makers	9												
Community & Family	10												
World Cultures	11												
AREAS OF SERVICE													
Advocacy	12												
Artists-in-Schools	13												
Technique	14												
Curric & Sequent Learn	15												
Creating & Choreog Dance	16												
Performing	17												
Critical Analysis	18												
Creative Process	19												
Child Development Cognitive Development	20												
Somatics & Body Therapies	21												
Dance Science & Medicine	22												
Hi Order Think & Prblm Solv	23												
Historic & Cultural Contexts	24												
State & LEA Standards	25												
Interdisciplinary Educ	26												
Assessmts: Stud & Teach Program Effectiveness National, State, LEAs	27												
Opportunities-to-Learn	28												
Pedagogy	29												
Teacher Prep & Train	30												
Certification Licensure	31												
Resources	32												
Research	33												
Technology	34												

I.   Important Issues in U.S. Education (row #1)

A. Health – physical, emotional, and mental wellness of the student.

B. Creative Process – the process of teaching and learning using experience, information, stimuli, data, and ideas in new and different combinations to invent new and different, ideas, products or combinations. Some examples include: teaching and learning to find solutions to problems or questions; intuitive sensing-feeling-thinking; and scientific process, etc.

C. Different Learning Styles & Theories – discreet modes of processing information, forming concepts and learning that focus on unique preferences, strengths, and abilities. For example: visual-auditory-tactile/kinesthetic; interpersonal; intuitive; linguistic (written or oral language); MI or other theories.

    Kinesthetic Learning – learning that occurs through bodily movement or the use of bodily movement to teach information or skills; learning that occurs due to bodily movement in time and space; and includes Psychomotor Taxonomy (Anita Harow).

D. Student Achievement – measures student progress using samples of student work (portfolio, performance, journal entries, self-review, documentation of process, etc.); quantitative analyses (GPAs, grades, any test score, state testing, developed rubrics, checklists); and/or observation, peer review, anecdotal, etc. Important to look at multiple ways of assessing any type of student achievement.

    Affective Domain – measures changes in preferences, attitudes, and values.

    Student Performance – broader concept of measuring student progress through indicators beyond student achievement – i.e., socio-economic indicators such as drop out rate, college entrance rate, vocational choices, employment rate, sick days, etc.

E. Policy – involves recommended or mandated actions at federal, state, or local school district (LEA) levels. Examples: federal (Goals 2000: Educate America Act, NAEP); state (dance teacher certification, high school student graduation requirements in the arts, state standards in dance/arts education, entrance requirements for college freshmen students in the arts); and LEAs (standards, curricular frameworks, assessments).

    Funding – involves financial issues/concerns with public or privates monies at federal, state, or local levels.

F. Teacher Certification – (1) state certification and licensure in dance teacher education, or in determining certification standards for teachers where they don't exist; and (2) includes private and public sectors teaching in K-12, higher education, private studios, and artists.

    Uncertified Teachers – (1) all who teach subjects outside their major areas of expertise in teaching/learning in education; may include volunteers, parents, artists-in residence, coaches, and teachers for whom the specialty area in which they are teaching is not their content area of expertise, etc.; and (2) includes private and public sectors teaching in K-12, higher education, private studios, and artists.

    Standards for Teachers – (1) Areas included in teacher certification and licensure criteria (i.e., NBPTS standards) often involve: content, skills, and knowledge in national, state, and local Standards, curriculum, curricular frameworks, and assessments; understanding different goals and purposes of dance education; knowledge of students; knowledge and use of diverse instructional resources, methods, and processes; understanding different learning environments; ability to collaborate with colleagues; rich use of community resources in arts education; using reflection, assessment and evaluation in teaching and learning for students and teacher. (2) Includes private and public sectors teaching in K-12, higher education, private studios & artists.

G. Equity – equal access and opportunity for students to study dance regardless of gender, age, size, shape, interest, ability, race, ethnic origin, or religious belief.

H. Multicultural Education – teaching and learning that embraces more than one cultural perspective or view; understanding same or different viewpoints or perspectives from two or more cultures; learning from a variety of cultures.

I. Children-at-Risk – students who are identified as children most likely not to complete K-12 education. Shared characteristics among at-risk students: single parent homes, homeless, drug use, high pregnancy rate, qualify for free lunch programs, and students for whom English is a second language (ESL).

J. Integrated Arts – teaching and learning that involves cross teaching in the art forms: dance, music, theatre, visual arts, media, and creative writing.

8/20/01

Interdisciplinary Education – teaching and learning more than one academic subject at a time (math, science, language arts, history, civics, government, foreign languages, etc.). Research and writing may often be important in integrated arts/interdisciplinary education, however they need not be a necessary condition. Teaching one subject does not qualify.

Arts Education – teaching and learning in the art forms: dance, music, theatre, and visual arts.

K. National Standards in dance and other disciplines – written standards for a discipline (usually established by a professional association). In dance, this specifically refers to the National Standards for Dance Education that involves the processes of creating, performing, and critically analyzing the works of self and others found in seven content standards: (1) Identifying and demonstrating movement elements and skills in performing dance; (2) Understanding choreographic principles, processes, and structures; (3) Understanding dance as a way to create and communicate meaning; (4) Applying and demonstrating critical and creative thinking skills in dance; (5) Demonstrating and understanding dance in various cultures and historical periods; (6) Making connections between dance and healthful living; and (7) Making connections between dance and other disciplines.

L. Brain Research – studies that examine changes in structure, function or development of the brain in relation to, or stimulated by, bodily movement or dance.

Populations Served by Dance Education   (column #1)

1. **Early Childhood & PreKindergarten** – students 0-4 years of age.
2. **K-12 education --** generally students from 5-18 years of age. Subdivided into three Grade Categories: **Grades K-4; Grades 5-8;** and **Grades 9-12.**
3. **Higher Education** – training or course work beyond completion of secondary school received from a college, university, or college/university professional preparation program.
4. **Different Abilities –** student with physical, mental, health, or emotional challenges.
5. **Seniors & Elderly –** populations 55 and above.
6. **After School Programs –** programs that occur after normal school hours in a K-12, college or university facility, but not part of the academic school day.
   Outreach Programs – programs that are part of academic curricula; programs that occur off school premises in which students are transported to off-site facility to have dance ed experience.
7. **Private Studios –** covers private/class dance instruction which may range from career-track professional preparation programs to local studios/schools of dance and recreation/community centers; such programs may be sponsored by or housed in college or university facilities but the emphasis is on dance instruction and not academics.
8. **Artists** – choreographers and performers working in the art of dance; scope in RDE project examines the artist focused in dance education and the teaching and learning of dance.
9. **Administration and Policy Makers –** includes principals, superintendents, chairs, deans, legislators, governors, and administrators in positions to change/create policy.
10. **Community & Family –** human and financial resources inherent in a community or family.
11. **World Cultures –** includes ethnic groups both within and outside of the United States.

Areas of Service for Teaching and Learning Dance   (column #1)

12. **Advocacy** – information used to increase support for dance/arts education in learning and teaching (cognitive, transference learning, emotional, social, cultural, physical, etc.).
13. **Artists-in-Schools –** dancers who earn their living in the performing arts and teach in PreK-12 education and higher education environments; they may have "vocational certification" but frequently have no certification to teach dance in academic settings.
14. **Technique –** includes all dance genres; includes learning about, understanding, and using the vocabulary or "building blocks" (steps, movements, theory, etc.) of the genre being learned; and understanding the vocabulary in relation to the elements of dance using time, space, and energy.
15. **Curriculum & Sequential learning** – guidelines, frameworks, schedules, and plans that define or outline programs for teaching and learning dance. Learning that builds upon previous learning with a defined curriculum that carries students through different achievement levels of learning and doing. It is not -- unconnected lessons, one-shot learning situations, undefined curriculum, nor skills acquired through life experience.

16. **Creating & Choreographing Dance** – the act of inventing and composing dance for the purposes of teaching and learning.

17. **Performing** – the execution of movement and the manifestation of choreographic ideas for the purposes of teaching and learning.

18. **Critical Analysis** – intellectual & aesthetic observations & evaluations about composition, structure & meaning of dance; includes becoming a knowledgeable connoisseur of dance.

19. **Creative Process** – the invention or combining of movement in unique ways to develop new or different movement possibilities; improvising or composing from original movements using processes such as problem solving, critical thinking, and analysis; [student-centered problem solving; the student is actively involved in creating solutions to any set of problems; or, as it relates to the creative process in dance, the child is involved in all aspects of the dance creation, performance, and critical analysis project.] The teacher does not set movement on students, rearrange, or involve rote in teaching and learning process.

20. **Child Development** – includes teaching and learning of information at developmentally appropriate ages related to the physical and intellectural growth and maturation of the student.
    Cognitive Development – the mental process or faculty by which knowledge is acquired at age-appropriate learning plateaus.

21. **Somatics & Body Therapies –** dance/movement involving a greater understanding and efficient use of the body – i.e., Alexander Technique, Feldenkrais, Laban Movement Analysis, Pilates, etc. Delimited to not include dance therapy.

22. **Dance Science & Medicine –** includes anatomy, kinesiology, physiology, endocrinology, psychology; injury prevention and rehabilitation. Delimited to not include dance therapy.

23. **Higher Order Thinking Skills & Problem Solving Techniques** – research studies that involve upper levels of the cognitive process – i.e., Bloom's, Barzano, and Anderson Taxonomies (knowledge, comprehension, application, analysis, synthesis, evaluation).

24. **Historical & Cultural Contexts --** dance of anthropological/ethnographic, historic or international nature that relates to past or current periods and cultures.

25. **State & Local Education Agency (LEA) Standards** – written standards that are established by a state or LEA (local school district); often are derivatives of the National Standards in Dance Education; usually involve creating, performing, and critically analyzing works by self and others; can be mandatory or voluntary; how were standards established; what is the content of the standards; how have they changed since developed; and the extent of implementation?

26. **Interdisciplinary education –** using movement to teach and learn concepts from other disciplines; using other disciplines to teach and learn movement and movement concepts. It is not teaching and/or learning in one discipline.

27. **Student & Teacher Assessments** – evaluating what students know and are able to do; and evaluating teacher effectiveness. Should include a variety of evaluative processes & methodol-ogies (rubrics, portfolio, performance, self-evaluation, peer review, checklists, written, journals, observation, etc.).
    Program Effectiveness Assessment – evaluating effectiveness of curricular instruction.
    National, State, LEA Assessments – evaluations undertaken at national, state, and local levels.

28. **Opportunities to Learn** – curriculum, scheduling, staffing, equipment, facilities, and safety.

29. **Pedagogy** – the processes and methodologies of teaching and learning.

30. **Teacher Preparation & Training –** processes and methodologies and requirements for obtaining professional level in dance education; and preparation for the classroom teachers in education.

31. **Certification --** minimal standards that attest to teacher (beginner or master) competency.
    Licensure – state standards that allow a teacher to practice in that state.

32. **Resources** – books, texts, CDs & videos that impact teaching and learning in dance education.

33. **Research** – includes dance research in content areas, populations, and national issues in education (learning and teaching); includes research theory, learning, processes and methodologies.

34. **Technology** – research that includes use of computers, internet, software programs, computer simulations, computer music, videos, camcorders, lighting/ sound equipment, hardware video taping, web, CD players, digital cameras, and VCR.

Appendix B

B.1   Unpublished Documents Accessed from
       Institutions in Higher Education

B.2   Journals in Published Literature

Institutions of Higher Education

(Accessed as of 1/14/04)

American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
American Dance Therapy Association
American University
Arizona State University
Auburn University
Boston University
Bowling Green State University
Brigham Young University
California School of Professional Psychology
California State University, Dominquez Hills
California State University, Fullerton
California State University, Long Beach
Case Western Reserve University
City University of New York
College of the Pacific
Fielding Institute (The)
Florida International University
Florida State University
George Washington University (The)
Harvard University
Illinois State University
Indiana University
Louisiana State University
Mankato State University
Mills College
New York University
Northern Illinois University
Northwestern University
Ohio State University (The)
Ohio Wesleyan University
Pennsylvania State University
Perpich Center for Arts Education
Rutgers University
St. Louis University
San Jose State University
Smith College
Southern Connecticut State University
Southern Illinois University
Southern Methodist University
State University of Iowa
State University of New York, Buffalo
Syracuse University
Teachers College, Columbia University
Temple University
Texas Christian University
Texas State College for Women
Texas Woman's University
Union Graduate School of Yellow Springs, Ohio
United States International University

University of California, Berkeley
University of California, Irvine
University of California, Los Angeles
University of California, Riverside
University of California, San Francisco
University of Iowa
University of Alabama
University of Arizona
University of Arkansas
University of Cincinnati
University of Colorado
University of Florida
University of Georgia
University of Hawaii, Manoa
University of Houston, University Park
University of Idaho
University of Illinois
University of Iowa
University of Kansas
University of Maryland
University of Massachusetts
University of Mexico
University of Michigan
University of Minnesota
University of Mississippi
University of Missouri
University of New Orleans
University of North Carolina, Chapel Hill
University of North Carolina, Charlotte
University of North Carolina, Greensboro
University of North Colorado
University of North Texas
University of Oregon
University of San Francisco
University of South Dakota
University of Southern California
University of Southern Mississippi
University of Texas, Austin
University of the Pacific
University of Toledo
University of Utah
University of Virginia
University of Washington
University of Wisconsin, La Crosse
University of Wisconsin, Madison
Washington State University
Wayne State University
Western Illinois University
Western Michigan University
Winona State University

B.2

Published Literature in Dance Education and Other Disciplines
(Accessed as of 1/15/04)

AAHPERD: International Early Childhood Creative Arts Conference Proceedings
Academic Journal
Academic Therapy
Afterimages
American Annals for the Deaf
American Anthropologist
American Corrective Therapy Journal
American Educational Research Journal
American Journal of Dance Therapy
American Journal of Sports Medicine (The)
American School Board
Annual International Conference of the Association of
Annual International Convention of the Council of
Anthropology and Education Quarterly
Art Education
Arts Education Policy Review
Bulletin of the Council for Research in Music Education
Child Development
Childhood Education
Choreography and Dance
Colorado Journal of Health, Physical Education, Recreation and Dance
Congress on Research in Dance
       20th Anniversary: Conference Proceedings
       Art of the Moment (The): Conference Proceedings
       Body in Dance (The): Modes of Inquiry: Conference Proceedings
       Choreographic Politics; Conference Proceedings
       Dance, Culture & Art Making; Conference Proceedings
       Dance Research Monograph I
       Essays in Dance Research
       News
       Research Annals I
Contact Quarterly
Curriculum Inquiry
Dance and the Child International Conference Proceedings
DAEDALUS
Dance Observer
Dance Research (British)
Dance Research Annuals
Dance Research Journal (CORD)
Dance Scope
Dance Teacher Now
Dance/USA Journal
Dance/USA Update
Dance: Current Selected Research (I, II, III, IV)
Dancing in the Millennium Conference Proceedings
Day Care and Early Education
Design for Arts in Education
Dimensions of Early Childhood
Early Childhood Education Journal
Educational Leadership
Education & Training for the Mentally Retarded
Education of the Visually Handicapped
Education Theatre Journal
Educational Theory
Elementary English Review
Elementary School

Equity and Excellence in Education
ERIC documents
Ethnomusicology
Focus on Dance Education
Gifted Child Today
Haibbi
Harvard Educational Review
High Performance
Imagination Cognition and Personality
Impulse
Journal of Health and Physical Education
Journal of Health, Physical Education, Recreation and Dance
Journal of Physical Education, Recreation and Dance
Journal of Applied Psychology
Journal of Curriculum and Supervision
Journal of Aesthetic and Art Criticism
Journal of American Indian Education
Journal of Anthropological Study of Human Movement
Journal of Creative Behavior
Journal of Dance Medicine and Science
Journal of Dance Education
Journal of Early Education & Family Review
Journal of Mathematical Behavior
Journal of Mental Imagery
Journal of Negro Education
Journal of Reading, Writing, and Learning Disabilities
Journal of Special Education
Journal of Teaching in Physical Education
Journal of the International Council for HPER, Sport & Dance Skills in Children
Journal of Visual Impairment and Blindness
Journal of Research in Music Education
Language Arts
Medical Problems of Performing Artists
Medicine & Science in Sports & Exercise
Michigan Journal of Health, Physical Education, Recreation and Dance
Music Educators Journal
North American Montessori Teachers Association (The)
National Association of Secondary School Principals Bulletin
New Outlook for the Blind
Northwest Education Magazine
Performing Arts Resources
Perceptual and Motor Skills
Phi Delta Kappan
Philosophy of Music Education Review
Principal Leadership
Quest
Reading & Writing Quarterly: Overcome Learning
Reading Horizons
Research in Dance Education
Research Quarterly
Research Quarterly for Exercise and Sport

Society of Dance History Scholars
    5th Hong Kong Conf Proceed
    5th Annual Conf Proceed
    6th Annual Conf Proceed
    10th Annual Conf Proceed
    13th Annual Conf Proceed
    14th Annual Conf Proceed
    17th Annual Conf Proceed
    18th Annual Conf Proceed
    22nd Annual conf Proceed
Strategies
Teaching Exceptional Children
Theatre Journal
Theory and Research in Social Education
Theory into Practice
Think: The Magazine on critical and creative thinking
Urban Education
Women and Performance
Young Children

APPENDIX C

C.1   A Form and Descriptors

C. 2   B Form and Descriptors

'A' (Short Form) – RESEARCH REPORT   C.1

To be completed for all research that fits the Grid Matrix. Print Only.   Field Researcher:
_____

CACo/CAC (Initials) _____   Date of Field Research: _____
RD _____   To be reviewed: ☐   N/A ☐
                                                  Order #: _____ $ _____
                                                  Office: RDE #: _____

Grid Matrix:
Does the research fit into the "grid matrix"?   ☐ Yes   ☐ No
(If it does not fit, do not fill out this form unless you can make a strong case for expanding the Grid to include this document.)

From grid matrix: cite education issue(s): _____
                 cite population(s) served: _____
                 cite area(s) of service: _____

If research does not fit Grid Matrix, should the grid be expanded to include it?   ☐ Yes   ☐ No
Insert suggested field title: as an important education issue: _____
                              as a population dance serves: _____
                              as a service within dance discipline: _____

Citation:
Author(s): _____ Type of Document: _____ Year: _____
Title: _____

_____
Journal: _____ Vo/#l: _____ Month/Season: _____ Pages: _____
Institution (Diss/Thesis): _____ Book: Publisher: _____ City&St: _____
Location: _____ On-
Line Search Path/Key Words (for all documents located through databases): _____
_____

Research Method:
(Check best descriptor(s). See instructions for descriptors on back)
- ☐ Descriptive
    - ☐ Correlation/Comparison
    - ☐ Ethnographic/Anthropological
    - ☐ Evaluation
        - ☐ Individual
        - ☐ Program
    - ☐ Curriculum
- ☐ Historical/Biographical
    - ☐ Primary Sources
    - ☐ Secondary Sources
- ☐ Philosophical
- ☐ Experimental   ☐ Quasi-Experimental
    Sample Size _____
    Length of Treatment _____

Research Technique:
(If applicable. Check all that apply)
- ☐ Anecdotal
- ☐ Action Research
- ☐ Case Study
- ☐ Computer Simulation
- ☐ Content Analysis
- ☐ Focus Groups/Interview
- ☐ Meta-analysis
- ☐ Observation
- ☐ Survey/Questionnaire
- ☐ "Thinking Aloud"

Essential Research Characteristics
1. Poses question(s), problem(s), or effect(s).   ☐ Yes   ☐ No
2. Includes research methodology addressing question(s), problem(s), and effect(s).   ☐ Yes   ☐ No
3. Provides a review of related literature.   ☐ Yes   ☐ No
4. Discusses methods for collecting and storing data..   ☐ Yes   ☐ No
5. Discusses analysis of data and conclusions.   ☐ Yes   ☐ No
6. Includes references and bibliographic citations.   ☐ Yes   ☐ No

Meets research criteria: *(meets #1, #2, #5 and at least 1 other of the above criteria)*   ☐ Yes   ☐ No

Comments: _____
_____
_____

OF THIS STUDY: *To IDENTIFY and BRIEFLY analyze research in dance education (defined by the grid) from 1926 to the present. The work will be reported on forms: 'A' (Short Form), 'B' (Medium Form), and 'C' (Scholarly Analysis) depending if the work meets research criteria, quality of research, need to analyze the research more fully, and plausible contributions to future research, teaching, and learning. The 'A'Form should be a quick scan (requiring about 20 minutes) to document: (a) the citation and location path; (b) "Research Methods" and "Essential Research Characteristics" which will distinguish "research" from narrative or exposition, evaluate quality, and organize a research compendia; (c) identify work applicable to dance education (as determined by the grid); and (e) identify research recommended for further analysis ('B' Form).*

DIRECTIONS: *Use 'A' Form to quickly scan and document all research/literature identified, accessed and reviewed that fits the Grid. Also use 'A' Form to document references that you find in bibliographies that should be followed-up by you or others at a later time. PLEASE PRINT.*

1. **Grid Matrix: Before you begin,** study descriptors on the research grid matrix (education issues, populations served, and areas of service). Locate the one (or two, if necessary) best cell(s) in which the document fits. **If the document does not fit the Grid Matrix do not complete this form unless you can make a strong case for its inclusion.** On the blank line, enter the appropriate field(s) for the education issue, for the population served, and for the area of service (include at least one entry for each). If the research doesn't fit into any cell listed, do you think the grid matrix should be expanded to include another topic under educational issue, population, or area of service? If so, write in the suggested educational issue, population, or area of service needed.

2. **Upper Right Corner**: (a) name; (b) date form is completed; (c) check the box if the research is not accessible to you now but needs to be followed-up by you or someone else; (d) if you find the work is not available (e) cite the order number and cost if the research work was ordered; (f) RDE # -- for office use only.

3. **Citation**: (a) author(s); (b) document type (article, thesis, dissertation); (c) year published, written, or produced (d) title of document; (e) journal- publication information; (f) dissertation or thesis: institution or library; (g) location of hard copy; and (h) on-line search information, path (if available), and key words. Print hard copy if document is located on internet.

4. Research Method: A methodology is a system of principles, practices and procedures that are specific to branches of knowledge. For example, in quantitative research, methodologies usually involve the measurement of definable quantities, e.g. how much a muscle can contract. Quantitative research seeks predictability and exact replication will result in the same conclusion. Qualitative research uses methods that reveal underlying trends and meanings, e.g. analysis of a particular culture or ritual within a culture, a curriculum, etc.

Check the research methodologies that have been associated with the work you have been reviewing. The author of the document should articulate the means by which he/she investigates a phenomenon or problem. The following are common methodologies used in research:

Descriptive methodologies often use surveys, questionnaires, case studies, document analysis and other similar means of gathering data to make sense of a problem or phenomenon. There are several sub-categories of descriptive research:
    Correlation: Research that explores relationships among two or more variables, such as a study in which Johnny takes regular dance classes and the study seeks to discover the correlation between his dance study and ability to solve problems creatively.
    Ethnographic/Anthropological: Often referred to as field research; involves a reasoned and logically organized study of human phenomena; uses informants to study shared beliefs, practices, and behaviors of some group of people or culture. Often involves triangulation of data collection; observation, document analysis, artifact analysis, and interview.
    Evaluation: Research that seeks to analyze the competency of one or more groups. Evaluation can be focused on an individual (or individuals), or a program (or programs), e.g. may involve the evaluation of two different dance programs at two different schools.
    Curriculum: Research in curriculum is not a simple description of the course of study, but must involve analysis and be contextualized within a framework. Curricula that fits the GRID but not meet characteristics of research-based analysis should receive an "A", but not a "B" form.

Historical/Biographical: Describes, analyzes, or traces ideas, events, individuals, institutions or movements during a particular time period (including contemporary) to support theories or explain social/cultural institutions. Sources can be "Primary" (firsthand accounts and original news reports and articles, and documents contemporaneous with the period) or "Secondary" (historical accounts later reported in books, articles, media) or oral. Oral histories may be primary or secondary depending upon the storytellers personal history. Autobiographies are primary sources. Of the two, primary and secondary, primary sources are always preferred.
Philosophical: Involves a reasoned analysis to explain human behavior and its associated meanings, concepts, and theories. Philosophical methodologies may also be used to analyze quantitative or predicatable phenomena. In either case, the researcher establishes a hypothesis, examines and analyzes existing facts, contextualizes unexplained phenomena, and synthesizes evidence into a workable, theoretical model.
Experimental: Experimental methods often involve analysis to determine cause and effect. Methods are as varied as the disciplines they serve. For the purposes of research in dance education, four requirements are met: 1) two or more research groups or individuals must be randomly selected for treatment; 2) treatment must involve controlled variables; 3) groups must receive quantitative assessment; and 4) time frame must be specified. In addition, experimental research must involve appropriate tools of data collection and must seek unbiased results.
Quasi-Experimental: Quantitative research that is impacted by unplanned variables and events. The more variables that must be controlled within research, the more opportunity there is for some slippage. Because dance involves the consideration of so many variables, purely experimental research is rare.

5. **Research Technique**: are means by which the researcher manages and contextualizes data collection, review, and subsequent analysis. The following techniques are provided to give you an idea of the range of techniques used in dance education:
    Anecdotal Research : Primarily based on the unsubstantiated comments, claims, and conclusions of individuals directly involved in the activity analyzed.
    Action Research: Research in which the teacher is also the reflector of practice. In Action Research, the teacher is researcher, participant, and reporter.
    Case Study: An analysis of an event, a program, or other human phenomena that looks solely at that program, event, or phenomena. Multiple case studies would involve separately reported analyses of multiple events.
    Computer Simulation: Involves taking human behavior from real life and projecting, playing out, and analyzing the results of human activity.
    Content Analysis: In quantitative or qualitative research, content analysis techniques involve a detailed analysis of sequence and/or frequency of a procedure, process, event or activity regardless of potential results. Content analysis seeks to understand and reveal

the component parts of a procedure, process, event or activity. Interpretation of data follows data gathering. Usually, the context for analysis is clearly defined

Focus Groups/Interview: The focus group/interview technique involves the framing of specific questions that are then asked of indentified individuals or groups.

Meta-analysis: Reviewing the results of a number of related studies by seeking to connect the results of the studies via the use of a specified statistical formula.

Observation: A technique of traditional field research; observation involves the unobstructed observation of individuals or groups over a given period of time.

Survey/Questionnaire: Similar to focus groups/interviews, asks questions to a group more broadly representative of the general population

"Thinking Aloud": Involves a research subject talking through their own cognitive and behavioral processes as they seek to solve a problem or derive meaning. The researcher records the subjects' processes.

6. **Essential Research Characteristics**: These characteristics address QUALITY of descriptive, experimental, quasi-experimental, historical/biographical, or philosophical research.   Check "yes" for each of the essential research characteristics met satisfactorily; and check "no" for each of the essential research characteristics NOT met to satisfaction.

7. Meets **Research Criteria**: Check "yes" if #1, #2, #5, and at least 1 more of the boxes under Essential Research Characteristics are checked. Check "no" if either #1, #2, #5 or no other box under Essential Research Characteristics is checked.

8. **Recommendation**: Check "yes" if the research criteria support recommending the study for further analysis ('B' Form), based on the evaluation of Research Methodology, Essential Research Characteristics, and Research Criteria. Check "no" if the research criteria do NOT support recommending the study for further analysis ('B' Form). Exception: There may be instances where you either recommend the study for further analysis despite research criteria not having been met; or, NOT recommend the study for further analysis despite research criteria having been met. Explain the discrepancy below in comments.

9. **Comments**: Please describe a one-sentence, succinct description of the study. Then give reasons for acceptance or rejection of Form 'B' if the criteria indicate differently; and, offer comments you think might be valuable to the project on the research reviewed.   Use Comments to relate information on the study that is important to relate, cite an important study that might transfer to dance from another discipline that might inform future directions in dance research.

10. Check to ensure the 'A' Form is completed as required. Photocopy and submit Form 'A' to your Content Area Coordinator (CACo) for review, standardization, and quality control. THANK YOU!

To be completed for research recommended on Form 'A.' Print Only.

Field Researcher: _____
Date of Field Research: _____
CACo/CAC (Initials) _____   Order #: _____ $ _____
RD _____   **Office: RDE #: _____**

Citation:
Author(s): _____ Type of Document: _____Year: _____
Title: _____
_____
Journal: _____Vol/#: _____Month/Season: _____Pages: _____
Institution (Diss/Thesis): _____ Book: Publisher: _____ City/St: _____
Location: _____
On-Line Search Path/Key Words (for all documents located through databases): _____
_____
_____

Research Question(s/Problem(s)):

Methodology:

Quasi-Experimental: ☐ Correlational   **Experimental:** ☐ Correlational   ☐ Causal

Dependent Variables:

Results/Conclusions:

Importance of research/Contributions to the field:
☐ Advocacy   ☐ Pedagogy   ☐ Policy   ☐ Other _____

Comments: (Describe quality of related literature, research design, and interpretation of data; questions provoked; and omitted information or data.)

Recommendations (for the study):

Is this research a **Best Practice in Program?** ☐ Yes   or **Best Practice in Teaching?** ☐ Yes
If "yes," what practice?   _____

Is this study **Exemplary Research**?   ☐ Yes   ☐ No

Could this research impact the future direction of dance education research:
    Future research methodology: ☐ Yes   ☐ No
    Future topics to be researched: ☐ Yes   ☐ No

If the answer to any of the above 4 questions is "yes:"
Is this study recommended for scholarly analysis 'C' Form?   ☐ Yes   ☐ No
Comments:

8/21/01

DIRECTIONS: *Use 'B' Form to give more in-depth information on the research you identified in the 'A' Form because, based on your answers in the 'A' Form: (a) the work is identified as research; (b) the research methodology and techniques are identifiable; (c) the research fits the grid matrix in one or more cells (or the grid should be expanded to include this information); and (d) the work meets research criteria, and methodology and technique. In summary, the work is recommended for 'B' Form analysis because it informs the field of dance education (defined by the grid matrix for intents of this study) or it may be useful in determining future directions in dance education research, teaching and learning. Form 'B' will be provided in electronic format. It is intended to take an additional 45-90 minutes to complete. Answers should be brief; no more than 100 words per section.*

Form 'B'

Upper Right Corner: (a) name; (b) date form is completed; (c) cite the order number and cost if the research work was ordered; (d) RDE # -- for office use only.

Citation**:** Repeat citation as stated on Form 'A.'

Research Question(s)/Problems(s): Provide a statement of question(s) or problem(s) addressed by the research.

Methodology: Elaborate on methodology cited in 'A' Form. List the tools used in the study. If the study is quasi-experimental check that the study is correlational (comparing two or more populations or processes); or if experimental, check whether the study is correlational or causal (defining cause and effect). [For example: A quantitative quasi-experimental study in which a Basic Reading through Dance (BRD) program was implemented in 3 Chicago public elementary schools (n=174) to improve 1st graders reading ability through dance. 9 schools served as control schools (n=198). Over 20 sessions, each led by 3 dance specialists, taught students to physically represent phonics by making shapes of letters with their bodies. Tools: children were pre- and post-tested in reading using the Read America's Phono-Graphix Test to assess ability to recognize sounds for letters as well as phoneme segmentation ability. Study compared gain scores over 3 months in the BRD and control children.]

Dependent Variables: The effect of the treatment (the independent variable is the cause; the dependent variable is the effect)

Results/Conclusions: Provide a summary statement of the results and/or conclusions found. [For example: The design of this study was rigorous and clearly demonstrated that the dance program was the factor that caused children's phonic abilities to improve.]

Importance of Research: Check box for best application of study: advocacy, pedagogy, policy, or list other. Provide a brief statement on the importance of the research. Should the research be replicated? [For example: This study could greatly impact pedagogical methods for teaching reading skills in early elementary education.]

Comments: Describe the quality of related literature used in the study (review of literature, references and bibliography, or if historical, original or secondhand sources, etc.); comment on the research design, analysis and sophistication of the data, omissions, strengths and weaknesses of the study, etc. [For example: This well-designed study offers an innovative approach to teaching basic reading skills. Its methodology could be easily replicated for different age groups and more advanced skills. In the study, the experimental group actually scored somewhat lower in the pre-test and therefore improved further using dance movement as the modality for reading skills. With a substantial sample size of 174 in the experimental group and 198 in the control group, the evaluators have demonstrated research in dance can have direct application to the real classroom.]

Recommendation: As a reviewer, cite your recommendations for future use of this study. [For example: Future research needs to be done to tease out whether movement improvisation and/or defined choreography affects the learning process and cognitive skill development to a greater or lesser degree.]

Best Practice(s): If you consider this is an example of a Best Practice in programs or teaching, check the appropriate box. Describe the program or teaching practice.

Exemplary Research: Check "yes" if the research is exemplary in the 6 Essential Research Characteristics cited on the 'A' Form.

Scholarly Analysis: If the answer to any of the 4 previous questions is "yes" and you recommend the research for 'C' Form scholarly analysis based on the 'B' form you completed, check "yes" at the bottom of the form; if not, check "no". Refer 'C' Form recommendations to your Content Area Coordinator. Experts in specific content areas will proceed with 'C' Forms.

Comments: Provide a brief explanation for your recommendation.

After 'B' Form is completed, check for completeness, standardization in answering questions, and quality. Forward to Content Area Coordinator (CACo) for review.

8/21/01

APPENDIX D

D.1   Grid Matrix - "All-All" 1926-2002

D.2   Grid Matrix - Research Methods 1926-2002

Grouping	Health	Creat Proc	Lrng Styl Theo	Kinesthetic Learn	Stdnt Achv	Affective Domain	Student Perf	Policy	Fundng	Certificn	Uncertified Tchrs	Teacher Stds	Equity	Multicultrl Ed	Child Risk	Intgrt Arts	Interdisc Educatio	Arts Education	Natl Content Stds	Brain Rsrch
Populations																				
Early Childhood	14	19	17	35	4	15	1	5	2	1	1	0	2	3	2	7	7	37	2	9
K-4	82	123	92	118	54	48	21	98	29	22	13	13	24	55	18	77	60	349	28	13
5-8	110	121	78	87	50	46	21	96	30	21	13	15	30	58	25	65	57	363	48	3
9-12	123	109	71	62	47	40	26	96	30	22	11	16	29	52	15	61	53	373	57	2
Highr Ed	240	221	124	148	70	67	26	98	33	30	14	28	29	90	6	94	49	665	38	4
Diffrnt Ablties	20	12	22	36	16	17	4	3	1	1	0	0	15	1	3	4	3	28	1	1
Sr Citizens & Elderly	17	3	1	6	0	4	0	1	0	1	0	0	3	3	0	0	3	5	1	0
After School	5	13	6	1	1	5	1	4	2	0	1	0	6	5	5	4	6	27	1	1
Outreach	1	3	2	0	4	1	2	2	2	0	0	0	3	2	1	1	1	12	0	0
Private Studios	154	37	26	48	15	22	4	13	3	2	3	4	4	19	3	15	9	131	38	0
Artisits	143	94	29	35	15	12	6	22	9	4	3	2	5	10	3	43	8	200	30	0
Admin & Policy Makers	18	12	30	16	21	17	5	84	27	14	5	9	6	5	4	8	19	93	13	0
Community & Family	37	27	16	13	7	12	1	17	11	3	2	3	11	45	9	11	11	82	2	0
World Cultures	7	7	17	15	2	2	1	4	0	1	0	0	5	80	5	7	6	35	0	0
Population Totals	971	801	531	620	306	308	119	543	179	122	66	90	172	428	99	397	292	2400	259	33
Areas of Service																				
Advocacy	55	51	60	63	41	43	7	115	35	12	6	6	26	28	10	32	28	229	14	2
Artists in Schools	7	24	8	12	4	7	2	13	11	1	1	1	1	7	2	4	8	46	3	0
Dance Technique	87	45	30	64	24	11	23	4	1	1	3	2	7	19	3	25	12	195	8	1
Curriculum & Sequential	36	48	60	42	26	17	15	47	9	11	4	10	11	34	5	43	37	215	14	1
Creating Choreog Dance	9	164	25	13	8	11	8	6	4	2	0	1	3	6	6	38	17	153	4	0
Performing Dance	27	75	12	21	16	12	11	10	2	2	1	2	2	17	2	23	11	119	1	0
Critical Analysis	1	52	9	9	8	9	6	6	1	1	1	1	1	19	1	21	6	102	2	0
Creative Process	20	189	38	36	12	34	4	13	3	0	2	0	7	3	2	36	17	130	1	4
Child Development	40	41	39	67	13	36	3	9	2	1	1	0	9	4	6	18	12	69	3	9
Cognitive Development	6	10	28	18	11	11	1	6	1	0	0	0	0	0	3	2	7	14	2	9
Somatic Body Therapies	80	15	19	45	3	7	2	1	0	2	0	1	0	5	1	5	7	51	7	1
Dance Science Medicine	281	11	19	49	13	18	6	6	1	0	0	0	2	1	2	3	11	59	39	3
Higher Order Thinking Problem	4	13	10	5	4	2	1	1	1	1	0	0	0	3	0	2	4	15	0	1
Historical Cultural Contexts	19	32	26	16	3	11	4	35	9	3	0	1	17	148	4	27	22	196	3	0
State & LEA Standards	0	0	1	0	1	0	0	5	3	3	0	0	0	0	0	0	1	4	2	0
Interdisciplinary Education	9	29	32	33	11	11	9	16	6	1	2	1	6	12	3	54	70	35	1	2
Assessments Stud andTeach	2	3	11	4	29	11	6	15	4	4	0	6	1	1	2	1	5	24	5	0
Assessments Program	3	0	5	3	7	3	2	17	6	2	2	3	2	1	2	2	0	23	1	0
Assessments Natl State LEA	0	0	1	0	2	0	1	9	3	1	0	1	0	0	0	0	2	4	5	0
Opportunities to Learn	16	17	6	11	8	9	2	27	16	4	4	4	18	12	4	9	10	90	0	0
Pedagogy	58	110	91	96	33	35	16	10	2	7	6	14	19	27	11	25	25	233	8	4
Teacher Prep & Training	17	32	27	17	14	14	3	35	11	32	18	24	5	10	3	18	10	133	2	1
Certification	3	0	1	0	0	0	0	10	6	12	1	2	0	0	0	0	0	8	1	0
Licensure	1	0	0	0	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0
Resources	6	12	7	11	4	2	0	4	2	2	3	2	1	12	1	17	14	91	2	0
Research	18	14	25	11	13	18	1	16	5	1	1	0	5	8	1	3	4	51	2	8
Technology	5	6	4	5	1	0	0	2	0	1	0	1	0	0	0	12	2	35	1	0
Areas of Service Totals	810	993	594	651	309	332	133	441	145	109	56	83	143	377	74	420	342	2324	131	46

9/24/2002

["content area" "time period"] = [All 1926-2002]

Legend	0-24	25-49	50-149	150+

CAC Inititials	1980-2002				1965-80				1951-64				1926-50				All Years				CAC Inititials
	Total	TKH	SK	KKB	Total	TKH	SK	KKB	Total	TKH	SK	KKB	Total	TKH	SK	KKB	Total	TKH	SK	KKB	
Descriptive	902	389	161	352	287	123	20	144	144	67	5	72	127	55	7	65	1460	634	193	633	Descriptive
Correlational/Comp	211	68	99	44	70	49	12	9	22	15	6	1	19	11	6	2	322	143	123	56	Correlational/Comp
Ethno/Anthro	89	45	15	29	21	7	2	12	11	6	0	5	4	2	1	1	125	60	18	47	Ethno/Anthro
Evaluation	284	139	40	105	74	44	7	23	36	23	2	11	29	11	3	15	423	217	52	154	Evaluation
Individual	124	79	9	36	36	29	3	4	12	9	1	2	10	7	3	0	182	124	16	42	Individual
Program	184	63	37	84	33	14	4	15	19	11	0	8	18	6	0	12	254	94	41	119	Program
Curriculum	207	107	39	61	74	21	7	46	32	16	2	14	26	15	2	9	339	159	50	130	Curriculum
Historical/Biogrph	119	68	16	35	47	25	0	22	24	10	1	13	21	16	0	5	211	119	17	75	Historical/Biogrph
Primary Sources	70	40	13	17	31	18	0	13	6	4	0	2	11	8	0	3	118	70	13	35	Primary Sources
Secondary Sources	57	28	4	25	28	17	0	11	16	6	1	9	13	12	0	1	114	63	5	46	Secondary Sources
Philsophical	183	76	44	63	46	25	4	17	40	13	1	26	32	7	5	20	301	121	54	126	Philsophical
Experimental	6	2	1	3	2	2	0	0	0	0	0	0	0	0	0	0	8	4	1	3	Experimental
Quasi-Experimental	77	45	12	20	30	23	2	5	8	5	2	1	5	2	3	0	120	75	19	26	Quasi-Experimental
Anecdotal	492	143	22	327	135	23	4	108	46	10	1	35	96	14	3	79	769	190	30	549	Anecdotal
Action Research	102	67	14	21	27	14	3	10	12	4	3	5	16	2	6	8	157	87	26	44	Action Research
Case Study	250	137	27	86	46	36	2	8	25	11	3	11	16	6	0	10	337	190	32	115	Case Study
Computer Simulation	4	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	3	Computer Simulation
Content Analysis	199	130	25	44	66	56	5	5	30	21	3	6	15	13	2	0	310	220	35	55	Content Analysis
Focus Groups/Interv	161	117	11	33	21	19	1	1	17	12	1	4	11	8	1	2	210	156	14	40	Focus Groups/Interv
Meta-Analysis	10	5	1	4	0	0	0	0	0	0	0	0	0	0	0	0	10	5	1	4	Meta-Analysis
Observation	252	138	32	82	59	50	6	3	24	16	2	6	12	7	4	1	347	211	44	92	Observation
Survey/Questionnaire	171	84	49	38	39	33	3	3	27	22	0	5	34	19	4	11	271	158	56	57	Survey/Questionnaire
Thinking Aloud	48	15	24	9	5	1	3	1	3	3	0	0	2	0	2	0	58	19	29	10	Thinking Aloud
1-Clr Quest/Prob/Effects	1220	429	265	526	368	160	41	167	180	77	12	91	193	63	21	109	1961	729	339	893	1-Clr Quest/Prob/Effects
2-Clr Research Methods	573	245	145	183	165	115	19	31	73	54	9	10	70	44	11	15	881	458	184	239	2-Clr Research Methods
3-Appr Review of Lit	704	304	164	236	171	136	19	16	78	67	9	2	50	41	7	2	1003	548	199	256	3-Appr Review of Lit
4-Data Collection/Record	477	221	120	136	137	113	16	8	68	55	9	4	51	38	7	6	733	427	152	154	4-Data Collection/Record
5-Analysis of Data/Concl	625	282	162	181	178	129	21	28	86	54	11	21	71	46	10	15	960	511	204	245	5-Analysis of Data/Concl
6-Ref and Biblio Citations	941	368	208	365	221	155	30	36	100	77	11	12	77	56	11	10	1339	656	260	423	6-Ref and Biblio Citations
Meets 1, 2, & 5+	497	213	135	149	131	108	17	6	58	47	9	2	46	34	8	4	732	402	169	161	Meets 1, 2, & 5+
Further Analysis	473	202	124	147	107	86	16	5	51	41	9	1	39	28	7	4	670	357	156	157	Further Analysis

Research Methods, Techniques, and Characteristics