Doctoral Programs in Industrial Arts Education: Their Ranking and Distinguishing Characteristics

monograph 8

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PREFACE

The American Council on Industrial Arts Teacher Education has been in existence for three decades. During these thirty years the field of industrial arts has been under continuous pressure to keep its curriculum up to date and relevant.

This monograph is a key publication in our professional literature and Dr. Ronald L. Koble is commended for conducting the study which is reported in this publication. If a field of study is to meet the challenges of improvement, it must look to the "doctoral institutions" for people who will be its future leaders.

This monograph can serve as a valuable tool for industrial arts teacher education in that the distinguishing characteristics of the most outstanding programs are identified and these in turn can be utilized for designing strong programs.

The monograph is being published under the direction of the ACIATE Publications Committee, Thomas J. Barber, Chairperson. This committee searches and screens manuscripts, works with the authors, and arranges for publication and distribution for the Council. Our "thanks" are extended for a job well done.

Inquiries regarding the monograph series should be directed to the chairperson of the ACIATE Publications Committee or to any current officer. Specific questions or suggestions relative to the content of this monograph should be forwarded to the author.

M. James Bensen,
President

I. Introduction

Since the first graduate program was initiated, and the first degree awarded in 1861 in the United States, educators have continued to improve the process and product of graduate education. This long-established tradition continues today because, in fact, one of the fundamental premises of education is to continually search for new knowledge and to uncover improved ways to do things.

The Problem

Since 1934 numerous studies have focused on the quality of graduate degree programs (Hughes, 1934), Keniston (1959), Cartter (1966), and Roose and Anderson (1970). However, these studies have omitted consistently graduate programs in education. Cartter's study for the American Council on Education, considered a classic, surveyed 29 disciplines but not education.

More recently, Hardiman, Shipley, and Zernich (1975) studied the quality of graduate as well as undergraduate programs in art education. Chaplin's *National Status Study of Industrial Arts Teacher Education* (1974) focused only on undergraduate programs in the field. A study pertaining to the assessment of graduate study in education, completed by Walberg in 1972, sought to determine ". . . the three universities or colleges whose graduates had contributed the best education research . . . during the past few years (p. 15)."

Results from these studies have been carefully scrutinized by students, faculty, administrators, legislators, and others for the purpose of selecting graduate schools, reallocating financial support and resources, upgrading graduate programs, and establishing priorities for graduate programs. A study of graduate programs at the doctoral level in industrial arts education is timely.

Purpose of the Study

The purpose of this study was to gather the opinions of a group of randomly selected members of the American Council on Industrial Arts Teacher Education (ACIATE) regarding the quality of doctoral programs listed in the 1978-79 *Industrial Teacher Education Directory, Institutions, Degree Data, and Personnel* as offering the degrees of Doctor of Education or Doctor of Philosophy with an emphasis in industrial arts education or one of its current nuances.

The ranking of doctoral programs was used to identify the three highest-ranking and three lowest-ranking programs which then were studied in-depth in terms of their faculty, students and graduates, curriculum, and facilities.

Significance of the Study

The results of this study are of significance for the following reasons:

1. In an era of declining resources available in higher education, this study has identified programs that need additional resources to improve the process and product of their efforts.

2. Prospective graduate students can use the findings of this study as *one* of the criteria for selecting graduate programs in industrial arts education.
3. The differences that distinguish between high-ranked and low-ranked doctoral programs are useful to all colleges and universities as they seek to improve their programs.
4. This study generated information that focuses on industrial arts teacher education with implications for the following areas of practice: curriculum development, program evaluation, student selection, teaching and faculty responsibilities, and facilities development.
5. This study added a qualitative dimension to three prior ACIATE publications. Monograph 1, *An Analysis of Graduate Work in Institutions with Programs for Industrial Arts Education Personnel,* Monograph 4, *Graduate Programs in Industrial Education,* and Yearbook 10, *Graduate Study in Industrial Arts* dealt with important dimensions of graduate study in industrial arts education, but were quantitative and descriptive in nature; they did not deal with program quality.

Commenting on the value of qualitative studies of graudate education, Cartter stated:

"Just as consumer knowledge and honest advertising are required, if a competitive economy is to work satisfactorily, so an improved knowledge of opportunities and quality is desirable if a diverse education system is to work effectively (1966, p. 3)."

Research Procedures

A. Review Literature
B. Identifying Outstanding Doctoral Programs — Phase I
   1. Develop Questionnaire
      1.1 Examine existing instruments
      1.2 Develop questionnaire
      1.3 Reliability/validity
      1.4 Print questionnaire
   2. Select Sample
      2.1 Use 1978-79 *ACIATE Membership List* and supplemental membership listing obtained from the ACIATE secretary.
      2.2 Select ten percent of ACIATE membership randomly for participation
   3. Mail Questionnaire
      3.1 Address envelopes using 1978-79 *Industrial Teacher Education Directory* as source of addresses
      3.2 Prepare return envelopes with address and postage
      3.3 Draft and print cover letter
      3.4 Prepare envelopes for mailing and post (no follow-up mailings)
   4. Analyze and Interpret Data
      4.1 Codify data on questionnaire
      4.2 Keypunch data on computer cards
      4.3 Analyze data
C. Distinguishing Doctoral Program Characteristics — Phase II
   5. Develop Inventory-Distinguishing Characteristics
      5.1 Examine existing instruments
      5.2 Develop inventory
      5.3 Duplicate inventory
   6. Gather Data
      6.1 Gather data from graduate catalogs, directories, and references
      6.2 Verify data, where necessary, through contact with highest and lowest-ranked programs identified in Phase I
      6.3 Obtain program feedback from graduates
   7. Summarize and Interpret Information
D. Write Final Report

Defnition

Industrial arts education. Includes programs having these titles:
Industrial Arts Education
Industrial Education
Technology Education
Industrial Technology Education

II. Review of Literature

In ACIATE Monograph 4, *Graduate Programs in Industrial Education,* (Bjorkquist, 1974), Wentling reported a "Review of Research on Graduate Education" that is an excellent source of information pertaining to (1) program development and status studies, (2) program assessment studies, and (3) origin and follow-up studies in industrial education. No studies that attempted to rank graduate, and more specifically doctoral programs in industrial arts education, were reported by Wentling and none were found as a result of this review of the literature.

Excluded from this review are follow-up studies of doctoral degree recipients from universities in any field because of their marginal relevance to this problem.

Rating Studies in Education

Numerous studies have been completed that attempted to assess the academic rating of graduate programs on a nationwide basis in the United States, although it is important to note that education was excluded in all of these studies. Hughes (1934) asked graduate school deans of institutions offering degrees in 20 "fields of knowledge" to identify the top 100 scholars in their fields. The scholars then were asked to identify the best programs in their respective fields. Hughes referred to a potential rating "lag" when discussing the findings which he felt could cause both under and overratings to occur. In contrast, Keniston (1959) asked department chairmen to rate the quality of graduate programs in universities rather than scholars in each field.

A comprehensive nationwide study of graduate programs was directed by Cartter (1966) for the American Council on Education. In this study, over 4,000 department chairmen, and senior and junior scholars rated 29 disciplines in 106 institutions in terms of their (1) faculty, (2) program, and (3) projected program changes. In the study's final report, Cartter discussed the elusiveness of a completely unbiased measure of quality because he felt it seemed to be, at some point, a subjective assessment. He stated, "There is no way of objectively measuring what is in essence an attribute of value (p. 4)." Cartter's study did demonstrate that the subjective judgments of raters when compared to other more objective indices were equally good predictors of quality; the two kinds of data corroborated each other.

Roose and Anderson essentially replicated Cartter's study and reported their findings in 1970. Thirty-six fields representing 2,626 individual programs were rated by graduate faculty members that had been recommended by their graduate school deans. When compared to the findings of Cartter's study, Roose and Anderson showed that graduate programs generally were improving in quality.

Walberg (1972) addressed the broader issue of university distinction in educational research by asking 250 randomly selected members of the American Educational Research Association to identify the three colleges or universities contributing the best educational research. The sample was stratified on the basis of the organization's divisions and focused on one activity common to graduate faculty members — writing for publication.

In 1979, Ladd and Lipsett asked more than 4,000 faculty members to name the five departments nationally in 19 disciplines that had the most distinguished faculties. A tendency of the faculty members to vote for their own institutions was found, but when the data were recalculated eliminating the responses of those who did their graduate work at the top-ranked institutions, significant changes were not found. One of the differences with this study was including education as a field to be rated because it had been omitted from earlier studies. Guba and Clark (1978) analyzed the research and development productivity of faculty in education in a similar study.

The increasing frequency of studies dealing with the ranking of graduate programs in specific fields is shown in two other studies by Hardiman, Shipley, and Zernich (1975) in art education, and Cox and Catt (1977) in psychology. Hardiman, Shipley, and Zernich asked 493 randomly selected members of the American Art Education Association to select the five best graduate programs in art education in the United States. Their short-form questionnaire was similar in format to the one used by Walberg. A second questionnaire, similar to the questionnaire used by Roose and Anderson, asked respondents also to rate each of the 222 graduate programs in art education using a four-point rating scale.

In contrast, Cox and Catt developed productivity ratings of graduate programs in psychology based on the number of articles an institution's psychology faculty had published in the journals of the American Psychological Association. Articles in 13 journals from 1970 to 1975 were counted and a productivity rating index was computed for each journal for each psychology department, and for the composite. These ratings then were compared to those found by Roose and Anderson, and considerable disparities were found which led Cox and Catt to question the validity of ratings based on "subjective" indexes of quality. They felt that subjective program rating tended to obscure strengths and weaknesses of individual faculty, a weakness their approach to program evaluation tended to overcome. They also felt productivity, as indicated by published journal articles was a more sensitive index of quality than reputation and opinion, as indicated by subjective rankings.

Summary. These studies indicate the following trends: (1) the number of ranking studies is increasing, (2) the criterion or criteria used to assess graduate programs varies, (3) the results of qualitative studies are subject to debate, and (4) education and its subfields have been included in rating studies only recently.

Rating Studies in Industrial Arts Education

Wolansky and Resnick (1978) added one question to the instrument they used in their study of doctoral programs and asked re-

spondents to identify the best doctoral programs in industrial education. Their results were presented in December, 1978 at the convention of the American Vocational Association, but never reported in the literature because it was felt that they were not part of the principle study, and also because the results potentially were controversial (Wolansky, 1979).

Criteria Used To Assess Doctoral Programs

Doctoral programs in industrial arts education started in the late 1920's and have increased in number steadily since that time. Since their first establishment, graduate programs at the doctoral level seem to have received continuous, although not intense attention.

Wolansky and Resnick's (1978) study, "A National Study of Graduate Programs in Industrial Education in the United States" sought to determine whether differences existed between older and more recently established Ph.D. and D.Ed. programs in industrial education on several dimensions. Department heads, recent graduates, and advanced doctoral students responded to the questionnaire (N = 150). The bases for studying the differences between high and low-ranked programs at the graduate level were facilities, curriculum, screening characteristics, program requirements, and program options.

ACIATE has been responsible for three publications on graduate study and programs in industrial arts education. The 10th ACIATE Yearbook, *Graduate Study in Industrial Arts,* (Norman and Bohn, 1961) included data pertaining to the number of degrees granted, the nature of graduate research, examples of graduate programs, and a profile of the doctoral programs that existed at the time. ACIATE Monograph 1, *An Analysis of Graduate Work in Institutions with Programs for Industrial Arts Education Personnel* (Miller and Ginther, 1965) was an outgrowth of a previous study by Ginther (1964) that examined in detail graduate programs in industrial arts education. ACIATE Monograph 4, *Graduate Programs in Industrial Education* (Bjorkquist, 1974) updated the graduate program status reports included in ACIATE Yearbook 10 and ACIATE Monograph 1, and also included a discussion of the issues in industrial education doctoral degree programs. The most significant factor to be noted is that none of these publications included any ranking or rating of doctoral programs. Status/trend studies by Kohler (1952) and Olson (1966) also excluded any qualitative dimension.

At various times, some aspects of graduate degree programs have been included in conference programs. The desirable characteristics of advanced degree programs, their purpose, and factors essential to the development of professionals were discussed by Moss (1975), Baldwin (1972), and Miller (1972). Moreland (1972) advocated flexibility in doctoral programs to meet the varying needs to doctoral students. Lux (1975) and Wright (1976) made recommendations pertaining to the operation and direction for graduate study in industrial arts education, and Harris (1977) discussed these two concerns, but in the context of how graduate programs in industrial arts education, trade and industrial education, and technology education could enhance one another by emphasizing their commonalities.

Pershing (1971) obtained data from 207 doctoral degree recipients pertaining to the program requirements for both the Ph.D. and D.Ed. degrees. Entry and exit requirements, the scope of curriculum, and academic standards were identified. At the present time, the graduate studies committee of the ACIATE is developing "Standards and Guidelines for Graduate Degree Program Evaluation in Industrial Arts Teacher Education" (Umstattd, 1979). A draft of these standards includes these sections.

- Section I: Curricular Goals
  - A. Standards for Content
  - B. Standards for Design
  - C. Standards for Research
  - D. Standards for Graduate Courses
- Section II: Residency
- Section III: Faculty
  - A. Standards for Individuals
  - B. Standards for Teaching Load
  - C. Standards for Professional Maintenance
  - D. Standards for Support Personnel
- Section IV: Students
  - A. Standards for Admission
  - B. Standards for Retention
  - C. Standards for Supervision
- Section V: Resources and Facilities
  - A. Standards for Resource Material
  - B. Standards for Facilities
- Section VI: Evaluation and Planning
  - A. Standards for Evaluation
  - B. Standards for Planning
- Section VII: Control
  - A. Standards for Internal Control
  - B. Standards for Exterior Control

Summary. The criteria that have been used to assess graduate programs at the doctoral level include the following:

1. facilities
2. curriculum
3. screening or admission requirements
4. program requirements
5. program options
6. level of faculty publications

III. Identifying Outstanding Doctoral Programs — Phase I

Problem — Phase I

The problem of this phase of the study was to identify the five highest-ranked doctoral programs in industrial arts education.

Procedures

Sample. A ten percent randomly selected sample of members (N = 116) of ACIATE was selected from the *Industrial Teacher Education Directory, Institutions, Degree Data, and Personnel, 1978-79.* Stratification of the sample was not feasible using available information and would have required a separate mailing to all ACIATE members.

Although 93 replies (80.1 percent) were returned by the established deadline, 13 were unusable. The data are based on 80 replies which represented 68.9 percent of the sample surveyed.

Questionnaire. The questionnaire (Appendix A) used to gather data for this phase of the study was initially developed in 1975. A first draft of the instrument was written, submitted to a jury of industrial arts teacher educators, revised, and then used in a pilot study involving teacher educators. Feedback from the jury and pilot study was used to establish the validity (content) and reliability (.96) of the instrument.

The list of universities offering the doctorate included in the questionnaire was established using four descriptors (industrial arts education, industrial education, industrial technology education, and technology education) for doctoral programs found in the 1978-79 *Industrial Teacher Education Directory.* The descriptors used for some doctoral programs listed in the directory clearly did not focus on industrial arts education and were excluded, e.g., vocational education. In those instances where the descriptors used for doctoral program identification did not clearly indicate their focus, the university involved was contacted to obtain additional information.

Gathering Data. The data were gathered by mailing the questionnaire to the sample along with a stamped, addressed envelope to return the completed instrument. Three weeks were allowed to return the questionnaire. No follow-up notices were sent to respondents as indicated in the questionnaire's cover letter.

Data Analysis. As the completed questionnaires were received, the responses were codified, transferred to a tabulation form, and punched on computer cards.

Findings

The results of Phase I of the study are reported (1) in terms of the background of the respondents and (2) by ranking.

Respondents - Academic Rank. The academic rank of the respondents is shown in Table 1. Only eight of the respondents did not teach at the college/university level. Ninety percent (N = 72) of the respondents had academic rank in higher education.

Table 1
Academic Rank of Respondents

Rank	N	Percent
Professor	27	34
Associate Professor	28	35
Assistant Professor	15	19
Instructor - College/University	2	2
Teacher - Elementary/Secondary	6	7
Other	2	2

Respondents - Present Position. The respondents' present position is shown in Table 2. Seventy-five percent (N = 60) of the respondents were teacher educators, and 14 percent (N = 11) were administrators at the college/university level. In effect, 89 percent of the respondents had positions in higher education which reflects their general orientation to graduate education.

Table 2
Respondent's Present Position

Rank	N	Percent
Teacher Educator	60	75
Administrator - Higher Education	11	14
Teacher - Elementary/Secondary	4	5
Supervisor - Elementary/Secondary	2	2
Other	2	2
Graduate Student	1	1

Respondents - Teaching Experience. The teaching experience of the respondents in higher education is shown in Table 3. Fifty percent (N = 40) of the respondents had 0 to 11 years of experience, 35 percent (N = 28) had between 12 and 22 years of experience, and 15 percent (N = 12) had 23 to 33 years of experience. The tendency to have few years of collegiate teaching experience suggests a group with an up-to-date vision of doctoral programs, but one of potential limited scope.

Table 3
Respondent's Teaching Experience in Higher Education

Years	N	Percent
0-11	40	50
12-22	28	35
23-33	12	15

Respondents - Degrees. The respondents were asked to indicate the institutions from which they had been awarded their academic degrees and the year of graduation. The institutional data was requested to determine if the respondents would rank universities from which they had graduated or that were in the general geographic area of institutions from which they had received degrees, as offering the best doctoral programs in industrial arts education. Years since graduation was computed from "Year of Graduation" and was viewed as another indicator of the respondents' familiarity with current doctoral programs in industrial arts education. Table 4 shows a wide range in the number of years since graduation for the respondents but mean scores that indicate generally few years since receiving the bachelor's (2.42), master's (2.52), and doctor's degrees (2.38).

Table 5 shows the extent to which the respondents could have selected an institution from which they had earned a graduate degree or an institution located in the same state as an institution from which they received a graduate degree — a potential for bias.

Table 4
Years Since Graduation by Degree

Degree	Range	Mean
Bachelor's	3-42	2.42
Master's	1-37	2.52
Doctor's	0-29	2.38

Table 5
Potential Matches Between Respondent's Ranking of Doctoral Programs and Universities from Which They Received Degrees

	Potential Matches	Actual N	Matches Percent	Actual N	Matches-First Place Percent
Total	70	61	87	36	51
Master's	18	16	89	8	44
Doctor's	52	45	86	28	54

The data indicate that a potential for 70 matches existed and that 61 (87 percent) matches were made, including 36 matches (51 percent) on first place votes. A similar pattern, by percent existed when the data were characterized by degree, e.g., master's (89 percent) and doctor's (86 percent). Despite this potential for significant bias, when cross-tabulations between an individual's doctoral program rankings that eliminated institutions from which they received their graduate degrees were made, the order of the doctoral program rankings did not change.

Respondents - Assessment Criteria. Table 6 shows the assessment criteria that the respondents used to rank the doctoral programs. "Reputation of the Faculty" was used as the criterion by 29 (36 percent) respondents, and "Reputation of the Program" was used by 26 (32 percent) of the respondents. One finding of this study that is consistent with other ranking studies is that the reputation of an institution ("Reputation of the University") is not used in judging individual programs at the graduate level.

Table 6
Assessment Criteria

Criterion	N	Percent
Reputation of the Faculty	29	36
Reputation of the Program	26	32
Reputation of the Graduates	16	20
Other	5	6
Educational Facilities	4	5
Reputation of the University	0	0

Under "Other," several respondents felt the opportunity to structure a unique program was important. The breadth of interdisciplinary contacts and financial support and employment opportunities also were mentioned.

Doctoral Program Ranking. The ranking and mean rankings of the best graduate programs at the doctoral level in industrial arts education are shown in Table 7. The Ohio State University was ranked first with a mean ranking of 2.69. In following order with their means were: 2 - University of Maryland (2.01), 3 - Texas A & M University, (1.45), 4 - University of Missouri, (1.01), and the University of Northern Colorado and Arizona State University which both had a mean ranking of .74 and were ranked 5.5.

Table 7
Ranking of Doctoral Programs

Institution	Ranking	Mean Ranking
The Ohio State University	1	2.69
University of Maryland	2	2.01
Texas A & M University	3	1.45
University of Missouri	4	1.01
University of Northern Colorado	5.5	.74
Arizona State University	5.5	.74

It should be noted that for computation purposes, a respondent's first-place ranking was valued at 5, and a fifth-place ranking was valued at 1, thus making the highest mean ranking value, the first-ranked program. These rankings were very similar to those found by Wolansky and Resnick (1978). In their study, The Ohio State University and the University of Maryland were ranked first and second also. The other top-ranked programs in this study also were ranked among the first ten identified by Wolansky and Resnick. Further, none of the low-ranked programs in this study were among the ten highest ranked identified by Wolansky and Resnick.

IV. Identifying Distinguishing Characteristics

Problem — Phase II

The problem of this phase of the study was to study and compare the three highest-ranked doctoral programs (HRDP), and three lowest-ranked doctoral programs (LRDP) identified in Phase I in terms of their (1) faculty, (2) students and graduates, (3) curriculum, and (4) facilities to identify the distinguishing characteristics among the programs. Statements describing the similarities and differences between the two groups of doctoral programs in the four areas just enumerated are used in this section rather than a statistical analysis since the intent was to discover distinguishing characteristics between these programs.

The objective data were gathered from a variety of sources including catalogs, directories, telephone interviews, questionnaires sent to graduates, and standard graduate education references. The information reported in this section emphasizes the differences found between the three HRDP and LRDP identified in Phase I. The institutions representing the LRDP will remain anonymous but were ranked 25, 26, and 27 among all institutions.

Distinguishing Characteristics — Faculty

The following differences were found for faculty between the HRDP and LRDP.

1. HRDP faculty had published more journal articles, were awarded more research grants, and participated in the conference programs of professional associations more than LRDP faculty.
2. HRDP faculty had a better "national identity," as revealed by a questionnaire sent to randomly selected ACIATE members (N = 40), than LRDP faculty.
3. HRDP had more permanent full-time faculty with their primary assignment in industrial arts education than LRDP.

No pattern of differences between HRDP and LRDP were found in the date since appointment or area of major emphasis for doctoral study for the faculties.

Distinguishing Characteristics — Students and Graduates

The following differences were found for students and graduates between the HRDP and LRDP.

1. HRDP had more resident, full-time doctoral students than LRDP.
2. HRDP awarded more teaching and research assistantships to doctoral students than LRDP.
3. HRDP awarded more doctoral degrees than LRDP. This supports the analysis made by Wright (1977).

No pattern of differences between HRDP and LRDP was found for "reason for selecting the university from which you obtained your degree."

Distinguishing Characteristics — Curriculum

The following difference was found in the curricula between the HRDP and LRDP.

1. HRDP listed more courses in their catalogs specifically pertaining to industrial arts education than LRDP.

No pattern of differences between HRDP and LRDP was found on these dimensions: (1) residency, (2) accreditation, (3) tuition, (4) type of institution, (5) method of structuring doctoral programs, (6) entrance and exit requirements, and (7) coursework and thesis requirements.

Distinguishing Characteristics — Facilities

The following differences were found in the facilities used by graduate students between HRDP and LRDP.

1. HRDP had more and larger technical laboratories for their specific use than LRDP. This factor could be related to undergraduate program size which was not studied.
2. Two LRDP had larger research libraries than two HRDP although the highest ranked program had the largest library among both groups. No assessment was made of the collection of library materials in the institutions specifically for industrial arts.

No pattern of differences between HRDP and LRDP was found on these dimensions: (1) office space for teaching and research assistantships, (2) access to computer facilities, and (3) available non-industrial arts laboratories.

Summary

Characteristics exist that can be used to distinguish between doctoral programs for personnel in industrial arts education. The greatest distinction between programs were associated with (1) faculty, their publications, professional program participation, national identity, and size, and (2) students and graduates — more assistantships were awarded, more full-time students were in residence, and more degrees were awarded. Less distinction was associated with curriculum and facilities.

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Appendix A

Universities Offering the Doctorate in Industrial Arts Education

Following is a list of the universities that offer doctorates for persons in Industrial Arts Education, listed alphabetically, according to the 1978-79 Industrial Teacher Education Directory. *Use this list in answering question 6, then discard it.*

Arizona State University

East Texas State University

Indiana State University, Terre Haute

Iowa State University

Michigan State University

Mississippi State University

New York University, Washington Square

North Carolina State University, Raleigh

North Texas State University

The Ohio State University

Oregon State University, Corvallis

The Pennsylvania State University

Purdue University

Temple University

Texas A&M University

University of Arkansas, Fayetteville

University of Houston

University of Illinois, Urbana

University of Maryland

University of Minnesota

University of Missouri

University of Northern Colorado

University of Northern Iowa

Utah State University, Logan

Virginia Polytechnic Institute and State University

Wayne State University

West Virginia University

Doctoral Programs in Industrial Arts Education: Their Ranking and Critical Characteristics

Please answer the following questions and return the questionnaire, using the self-addressed, stamped envelope by February 1, 1979, if possible. THANK YOU.

1. YOUR PRESENT ACADEMIC RANK:

CHECK ONE

- ____Professor
- ____Associate Professor
- ____Assistant Professor
- ____Instructor-College/ University
- ____Teacher-Elementary Secondary School
- ____Other_____

2. YOUR PRESENT POSITION:

CHECK ONE

- ____Administrator-Higher Education
- ____Graduate Student
- ____Supervisor-Elementary or Secondary School
- ____Teacher Educator
- ____Teacher-Elementary or Secondary School
- ____Other_____

3. YOUR TEACHING EXPERIENCE IN HIGHER EDUCATION: _____*years*

4. YOUR EDUCATIONAL BACKGROUND: *List the college and/or universities from which you have earned degrees and the year of graduation. If you currently are enrolled in a degree program, only list the name of the college or university.*

	COLLEGE/UNIVERSITY	YEAR OF GRADUATION
Bachelor's Degree	_____	_____
Master's Degree	_____	_____
Doctor's Degree	_____	_____

5. ASSESSMENT CRITERIA: *Which one of the following criteria do you feel is most important in judging the quality of graduate programs for persons in Industrial Arts Education?*

CHECK ONE

- ____Educational Facilities
- ____Reputation of the Faculty
- ____Reputation of the Graduates
- ____Reputation of the Program
- ____Reputation of the University
- ____Other_____

6. YOUR RANKING OF GRADUATE PROGRAMS OFFERING THE DOCTORATE: *From the list on the opposite page, select the five (5) universities which* in your opinion *have the best graduate programs which offer the doctorate for people in Industrial Arts Education in the United States.*

		UNIVERSITY
RANKING	*1st*	_____
	2nd	_____
	3rd	_____
	4th	_____
	5th	_____

Supported by a Research Grant from the American Council on Industrial Arts Teacher Education

Doctoral Programs in Industrial Arts Education Study

THE PENNSYLVANIA STATE UNIVERSITY
Ronald Koble, *Investigator*
220 Rackley Building
University Park, PA 16802
814-863-0275

Dear Colleague:

A study of doctoral programs for persons in Industrial Arts Education is currently being conducted. It is supported by the 1978 Research Grant from the American Council on Industrial Arts Teacher Education.

The purpose of the study is to identify the outstanding doctoral programs for persons in Industrial Arts Education in the United States. The outstanding doctoral programs will be studied in-depth to determine what factors make them exemplary. This information will be helpful to prospective students as they select the universities they attend, and teacher educators and administrators as they improve doctoral programs in their institutions.

Enclosed is a brief six (6) item questionnaire that should take about five minutes to complete. Since you are one of 116 randomly selected A.C.I.A.T.E. members to whom a questionnaire has been sent, I hope you will complete it and return it by February 1, 1979. A stamped, addressed envelope is included for your reply.

Thank you for your assistance.

Sincerely,

Ronald L. Koble
Associate Professor
The Pennsylvania State University

Enclosure

☐ Check here if you want to receive a copy of the results of this study and return this sheet with the questionnaire or separately.