DOCUMENT RESUME

ED 434 557 HE 032 284

AUTHOR MacFarland, Thomas W.

TITLE Matriculation Status of Fall Term 1993 Center for

Psychological Studies Students by the Beginning of Fall Term 1998: Campus-Based Students and Distance Education Students

by Site. Report No. 99-09.

PUB DATE 1999-06-00

NOTE 20p.; For a related document, see HE 032 282.

PUB TYPE Reports - Research (143) EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Degrees (Academic); *Distance Education; Graduate Students;

Graduate Study; *Graduation; Higher Education; *Masters Degrees; *Psychology; Tables (Data); Time to Degree;

Universities

IDENTIFIERS Nova Southeastern University FL

ABSTRACT

This study examined the matriculation status of all fall term 1993 master's level students of the Center for Psychological Studies of Nova Southeastern University by fall term 1998, differentiating between campus-based students and distance education students at individual sites. Data on matriculation rates were obtained on 382 campus-based students and 318 distance education students. It was found that distance education students had a significantly greater frequency of successful matriculation than campus-based students. While there were many individual distance education sites where the matriculation rates were equivalent to the matriculation rates of campus-based students, there were no sites where distance education students had a lower frequency of successful matriculation than campus-based students. An appendix provides statistical tables. (Contains 20 references.) (MDM)

* Reproductions supplied by EDRS are the best that can be made

* from the original document.

0

MATRICULATION STATUS OF FALL TERM 1993 CENTER FOR PSYCHOLOGICAL STUDIES STUDENTS BY THE BEGINNING OF FALL TERM 1998: CAMPUS-BASED STUDENTS AND DISTANCE EDUCATION STUDENTS BY SITE

Thomas W. MacFarland

Senior Research Associate

Nova Southeastern University Research and Planning

Report 99-09

June 1999

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization

originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

MacFarland

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

EXECUTIVE SUMMARY

Nova Southeastern University was established in 1964 and all classes for the 1967 charter class were campus-based. In 1972 the University first offered courses through the use of distance education. With nearly 30 years of experience in this area, distance education now accounts for approximately 55 percent of all 16,921 Fall Term 1998 students at the University.

As an institution accredited by The Southern Association of Colleges and Schools, the University is required to demonstrate the efficacy of its distance education activities and the comparability of courses offered through distance education to campus-based courses. Among many initiatives used by the University to address this issue, Research and Planning recently completed a series of reports that addressed comparisons between distance education students and campus-based students. As a general summary to these studies, the University determined that distance education students were certainly in parity with their campus-based counterparts, and distance education students often had success that exceeded the level of success experienced by campus-based students.

These studies were limited in site-specific use since all distance education students were placed into one common collapsed grouping. The purpose of this current study was to provide a more finite examination of the matriculation status of Center for Psychological Studies students, focusing specifically on individual sites and comparing students at these distance education sites to their campus-based counterparts.

The population for this study consisted of all Fall Term 1993 Center for Psychological Studies Master's-level students at the beginning of Fall Term 1998, differentiating between campus-based students and distance education students. Because there is no distance education counterpart for the campus-based doctoral program, findings in this study are focused exclusively on Master's-level students.

Based on Fall Term 1993 enrollment statistics and operational definitions established by the Southern Association of Colleges and Schools regarding *campus-based* students and *distance education* students, this population included:

All students enrolled in courses offered in either Broward County or Miami-Dade County were considered campus-based students.



Page ii

•	Distance education students	318
	All students enrolled in courses offered at other locations were considered distance education students.	
	TOTAL	700

Based on an analysis of all 700 Fall Term 1993 Center for Psychological Studies Master's-level students, it was determined that:

Fall Term 1993 Center for Psychological Studies Master's-level students enrolled in courses offered through the use of distance education (N=318 students) had a statistically significantly greater frequency of successful matriculation than their campus-based counterparts (N=382 students) by the beginning of Fall Term 1998 ($p \le .05$).

Breakout analyses, comparing the matriculation of students at individual distance education sites to the matriculation of campus-based students, are attached to this report.

This current study provides another set of evidence that distance education students are not at a disadvantage when compared to their campus-based counterparts. By using the outcomes of this study as a starting point, it may be desirable to further investigate the inconsistencies in matriculation between these two groups of students. Further overall and by site analyses may possibly reveal areas where the University can address concerns to further increase levels of student achievement for both groups of students.

These examinations of student achievement over a long-term tracking period are also useful in that they provide additional measures of Institutional Effectiveness at the University. This level of scrutiny is especially useful as the University expands its distance education presence. Attention to these by site outcomes should help promote consistency in outcomes between individual distance education sites. This issue of consistency is critical to the University since it is central to the Institutional Effectiveness process.



Page iii

TABLE OF CONTENTS

-	Page
EXECUTIVE SUMMARY	ii
LIST OF TABLES	v
BACKGROUND	1
Distance Education at Nova Southeastern University	1
Purpose of This Study	2
METHODOLOGY	3
Definition of the Population	3
Preparation of Extract Files	4
RESULTS	4
SUMMARY	5
REFERENCES	7
APPENDIX (Table 1.A to Table 2.B)	9



LIST OF TABLES

Гable	•	Page
1	Campus-Based Students and Distance Education Students from Fall Term 1993 and Their Status at the Beginning of Fall Term 1998: Master's-Level Students in the Center for Psychological Studies	9
2	Matriculation Status of Fall Term 1993 Students and Their Status at the Beginning of Fall Term 1998: Master's-Level Students in the Center for Psychological Studies by Site	10



Page v

BACKGROUND

Distance Education at Nova Southeastern University

Nova Southeastern University was established in 1964. The 1967 charter class consisted of 17 graduate students majoring in behavioral science, physics and physical chemistry, and oceanography. Until 1971, all classes were campus-based. Initial enrollment growth was limited and the Fall Term 1971 enrollment had only reached 198 students (*Nova Southeastern University Fact Book*; 1995, p. 38).

Distance education courses were first offered at the University in 1972 (Nova Southeastern University Fact Book; 1998, p. 12), largely in an effort to increase outreach to specific markets and to also enhance the University's fiscal stability. The first distance education courses were for students in the Ed.D. Program in Educational Leadership and the Ed.D. Program for Community College Faculty and Administrators (the precursor to the University's current Programs for Higher Education). With the addition of distance education opportunities, Fall Term 1972 enrollment grew to 571 students and by Fall Term 1977 the University realized an enrollment of 8,338 students. The University has since experienced sustained growth and by Fall Term 1998 enrollment reached 16,921 students (Nova Southeastern University Fact Book; 1999, p. 44).

To place the role of distance education at the University into context, it is important to recall that distance education has been prominently mentioned in the University's many Self-Study reports to The Southern Association of Colleges and Schools (*Nova Southeastern University Institutional Self-Study Report*, 1996). Cluster-based distance education modalities were identified in the University's *Self-Study: 1974-75* (1974, p. 189). The many computer-mediated communication distance education modalities currently in use at the University are not new, but were instead identified in the University's *Self-Study: 1983 - 1985* (1985).

Currently, distance education is gaining wide attention from the public and other post-secondary institutions. In contrast to this current level of interest, the University has nearly 30 years of experience in this area. Although the University has many campus-based programs, distance education is still central to the University's Mission Statement and it equally has a major role on overall student enrollment (memorandum from Tom MacFarland to John Losak; May 11, 1999) at the University:

Based on place of class attendance at Nova Southeastern University, 65 percent of all Calendar Year 1998 students were campus-based (as prescribed by The Southern Association of Colleges and Schools, all students enrolled in courses offered in either Broward County or Miami-Dade County are campus-based) and 35 percent of all Calendar Year 1998 students were enrolled at a distance education location.



Based instead on teaching modality instead of place of class attendance, 48 percent of all Calendar Year 1998 students were enrolled in an academic program that used a campus-based teaching modality and 52 percent of all Calendar Year 1998 students were enrolled in an academic program that used a distance education teaching modality.

Purpose of This Study

The Southern Association of Colleges and Schools (SACS) regional accrediting association requires all institutions who engage in the use of distance education to demonstrate:

the same systematic analysis of the effectiveness of distance learning programs in carrying out the purpose of the institution and in complying with the *Criteria for Accreditation* as it does with other aspects of the institution's efforts (*Guidelines for Planning Distance Learning Activities*; 1992, p. 4).

As a SACS-accredited institution, the University must also demonstrate that "[] its distance learning programs are effective and comply with all applicable *Criteria* (*Criteria for Accreditation*; 1998, p. 40)." Going beyond the broad requirements of specific criteria, the leadership of The Southern Association of Colleges and Schools has additionally charged the University to "Provide documentation that all distance learning courses are comparable to the on-campus courses and that the goals for each off-campus site are clear and explicit and are assessed regularly" (personal communication from J. T. Rogers; July 2, 1998).

With an emphasis on the measurement of learning outcomes of distance education participants, the University recently completed a series of research activities related to comparisons between distance education students and campus-based students. As summarized in A Comparison of Final Grades in Courses When Faculty Concurrently Taught the Same Course to Campus-Based Students and Distance Education Students: Winter Term 1997 (1998, p. 4), the University has demonstrated that "[] distance education students have consistently been in parity with campus-based students in terms of the relative frequency of successful grades awarded."

The University further examined comparability between campus-based students and distance education students in Matriculation Status of Nova Southeastern University's Fall Term 1993 Cohort at the Beginning of Fall Term 1998: Breakout Analyses for Campus-Based Students and Distance Education Students (1999). The population for this study consisted of 10,187 Fall Term 1993 students enrolled in the four academic centers that offered programs to both campus-based students as well as distance education students. This study was structured to follow the matriculation status of distance education students and their campus-based counterparts over a five-year period (Fall Term 1993 to the beginning of Fall Term 1998).



This study of student progress over a five-year period provided finite evidence that Fall Term 1993 students enrolled in courses offered through the use of distance education had a statistically significantly greater frequency of successful matriculation than their campusbased counterparts by the beginning of Fall Term 1998 ($p \le .05$).

The overall finding of this broad study was that distance education students had a greater frequency of successful matriculation than their campus-based counterparts. However, a limitation of this prior study was that all distance education students were placed into one common collapsed grouping. Although the Center for Psychological Studies provides graduate instruction at sites throughout Florida, findings have not yet been presented on a by site basis.

The purpose of this current study was to expand on these broad studies and to instead provide a more finite examination of the matriculation status of Center for Psychological Studies students, focusing specifically on individual sites and comparing the matriculation status of distance education students at these many individual sites to the matriculation status of campus-based students. Because there is no distance education counterpart for the Center for Psychological Studies' campus-based doctoral program, findings in this study are focused exclusively on Master's-level students.

METHODOLOGY

Definition of the Population

This study addressed the matriculation status of all Fall Term 1993 Center for Psychological Studies Master's-level students by the beginning of Fall Term 1998, differentiating between campus-based students and distance education students at individual sites. Using Fall Term 1993 enrollment statistics and operational definitions established by The Southern Association of Colleges and Schools regarding campus-based students and distance education students, this population included:

•	Campus-based students	38:
	All students enrolled in courses offered in either Broward	
	County or Miami-Dade County were considered campus-	

based students.

382



10	Distance education students	318
	All students enrolled in courses offered at other locations were considered distance education students.	
	ΤΟΤΑΙ	700

Off-Campus Directory (1993) was a useful resource for identifying specific distance education sites used in 1993 by the Center for Psychological Studies. Information in this resource was also supplemented by an audit of all five-column cluster codes maintained in 1993 by the University's Student Information System (memorandum from Tom MacFarland to Richard Ronay, December 3, 1998).

Preparation of Extract Files

The University's Computing Center was asked to prepare for this study during Summer 1998 (memorandum from Tom MacFarland to Mary Harward; July 20, 1998). The final extract files were prepared by January 28, 1999, with the matriculation status of the population segmented into Successful Matriculation and Other:

- Successful Matriculation refers to Fall Term 1993 students who were either Graduated, Still Enrolled, or Graduated and Still Enrolled by the beginning of Fall Term 1998.
- The term *Other* (largely synonymous with the term *Leaver*, which is often used in other cohort analysis studies) is used to reflect students who left the University before graduating.

Data were coded by Academic Center, Degree Level, and Cluster Code. Using these three codes for selection and organization purposes, SPSS-X™ was used to conduct the many separate breakout analyses associated with this study.

RESULTS

Based on an analysis of all 700 Fall Term 1993 Center for Psychological Studies Master's-level students, it was determined that:

Fall Term 1993 Center for Psychological Studies Master's-level students enrolled in courses offered through the use of distance education (N=318 students) had a statistically significantly greater frequency of successful matriculation than their

ERIC Full Box I Provided by ERIC

campus-based counterparts (N = 382 students) by the beginning of Fall Term 1998 (p \leq .05).

Although this overall finding (Table 1) provided evidence that distance education Master's-level students in the Center for Psychological Studies had a greater frequency of successful matriculation than campus-based students, this finding is limited in that it collapsed students at all distance education sites into a common grouping. Analyses that support by site differentiation throughout Florida are presented in Table 2.

SUMMARY

This study was organized to offer specific by site matriculation analyses for Master's-level students in the Center for Psychological Studies. The outcomes of this study should be viewed in comparison to the outcomes of other distance education and persistence studies at Nova Southeastern University: Research and Planning Reports 96-17, 97-14, 98-10, 98-11, 98-12, 98-13, 98-14, 98-15, 99-03, 99-06, and 99-07. In these other studies, a common finding was that distance education students either equaled or exceeded their campus-based counterparts in terms of grades in courses and/or successful academic matriculation over a multi-year reporting period.

The results of this current study are generally in parallel with the results of these prior studies: Master's-level distance education students in the Center for Psychological Studies, as a group, exceeded their campus-based counterparts in terms of successful matriculation (p \leq .05):

- As presented in Table 2, there were many sites where a *by site* analysis indicated no difference between distance education students and campus-based students.
- However, there were no sites where distance education students had a lower frequency of successful matriculation than campus-based students.

It is currently beyond the scope of this study to offer any sense as to why Master's-level Center for Psychological Studies distance education students exceeded their campus-based peers in terms of successful matriculation. By using the outcomes of this study as a starting point, it may be desirable to further investigate the inconsistencies in matriculation between these two groups of students. Further analyses may possibly reveal areas where the University can address concerns to further increase levels of student achievement for both groups of students.

Accordingly, a follow-up study from this office will be instituted in August 1999, using both a 1995 and 1996 cohort, to examine the question of whether the 1993 cohort may be an



anomalous event. If this future study provides evidence that differences between campusbased students and distance education students is consistent, then more detailed analyses may be warranted.

Separate from the observed outcomes, this examination of student achievement over a long-term tracking period provides an additional measure of Institutional Effectiveness at the University (*Criteria for Accreditation*; 1998, p. 21). This level of scrutiny is especially useful as the University expands its distance education presence. The University should make every reasonable effort to promote consistency in all outcomes between individual distance education sites. This issue of consistency is critical to the University since it is central to the Institutional Effectiveness process.



REFERENCES

- An Analysis of Final Grades for Selected Courses in the Center for Psychological Studies:

 Differences Between On-Campus Students and Off-Campus Students. (1998). Fort
 Lauderdale, Florida: Nova Southeastern University. Research and Planning Report
 98-12.
- An Analysis of Final Grades for Selected Courses in the Farquhar Center for Undergraduate Studies: Differences Between On-Campus Students and Off-Campus Students. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-11.
- An Analysis of Final Grades for Selected Courses in the Fischler Graduate School of Education and Human Services: Differences Between On-Campus Students and Off-Campus Students. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-13.
- An Analysis of Final Grades for Selected Courses in the School of Business and Entrepreneurship: Differences Between On-Campus Students and Off-Campus Students. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-14.
- A Comparison Between On-Campus Students and Off-Campus Students to a Common Final Examination. (1996). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-17.
- A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-10.
- A Comparison of Final Grades in Courses When Faculty Concurrently Taught the Same Course to Campus-Based Students and Distance Education Students: Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-15.
- Criteria for Accreditation. (1998). Decatur, Georgia: Commission on Colleges of The Southern Association of Colleges and Schools.
- Guidelines for Planning Distance Learning Activities. (1992). Decatur, Georgia: Commission on Colleges, Southern Association of Colleges and Schools.
- Matriculation Status of Fall Term 1993 Farquhar Center for Undergraduate Studies Students by the Beginning of Fall Term 1998: Campus-Based Students and Distance Education



- Students by Site. (1999). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 99-06.
- Matriculation Status of Fall Term 1993 Fischler Graduate School of Education and Human Services Students by the Beginning of Fall Term 1998: Campus-Based Students and Distance Education Students by Site. (1999). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 99-07.
- Matriculation Status of Nova Southeastern University's Fall Term 1993 Cohort at the Beginning of Fall Term 1998: Breakout Analyses for Campus-Based Students and Distance Education Students. (1999). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 99-03.
- Nova Southeastern University Fact Book. (1995). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 95-02.
- Nova Southeastern University Fact Book. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-01.
- Nova Southeastern University Fact Book. (1999). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 99-01.
- Nova Southeastern University Institutional Self-Study. (1996). Fort Lauderdale, Florida: Nova Southeastern University.
- Off-Campus Directory. (1993). Fort Lauderdale, Florida: Nova Southeastern University.

 Office of Licensure and State Relations.
- Persistence and Rates of Graduation of Students Pursuing Graduate Degrees: Students
 Entering the Fischler Center for the Advancement of Education and the School of
 Business and Entrepreneurship in Fall 1990. (1997). Fort Lauderdale, Florida: Nova
 Southeastern University. Research and Planning Report 97-14.
- Self-Study: 1974-75. (1974). Fort Lauderdale, Florida: Nova University.
- Self-Study: 1983 1985. (1985). Fort Lauderdale, Florida: Nova University.



Campus-Based Students and Distance Education Students from Fall Term 1993 and Their Status at the Beginning of Fall Term 1998: Master's-Level Students in the Center for Psychological Studies¹

				Succ	essful M	Successful Matriculation	ion				
		Graduated	ated	Still Enrolled	rolled	Graduated and Still Enrolled	ed and rolled	Subtotal	ıtal	Other ²	215
Course Location	Total	Z	%	Z	%	Z	%	Z	%	Z	%
Campus-Based	382	310	81	3	<1	∞	2	321	84	61	16
Distance Education	318	283	68	0	0	-	\ \	284	89	34	11
Total	700	593	82	3	\ \ -	6		909	98	95	14
Null Hypothesis	There is n Fall Term (Graduate ≤ .05).	o statistic 1993 dist 1, Still Er	ally sign ance ed rolled,	ificant dis ucation st Graduated	fference udents re I and Sti	There is no statistically significant difference between Fall Term 1993 campus-based students and Fall Term 1993 distance education students regarding their frequency of successful matriculation (Graduated, Still Enrolled, Graduated and Still Enrolled) by the beginning of Fall Term 1998 (p ≤ .05).	all Term neir freque () by the b	1993 cam ncy of su eginning	pus-base iccessful of Fall T	d studeni matricul: [erm 199	s and ation 8 (p
Finding	Chi-square enrolled ir greater fre beginning	tourses offered the N courses offered the equency of successful of Fall Term 1998.	and the offered success erm 199	Null Hyp through th sful matrio 8.	othesis i ne use of culation	Chi-square = 4.12 and the Null Hypothesis is rejected (p = $.042$). Fall Term 1993 students enrolled in courses offered through the use of distance education had a statistically significantly greater frequency of successful matriculation than their campus-based counterparts by the beginning of Fall Term 1998.	(p = .042 education campus-b	.). Fall T had a stat ased coun	Cerm 199 istically a	3 studen significa by the	ts atly

5

<u>~</u> ₩

There is no distance education counterpart to the doctoral program in the Center for Psychological Studies.

The term Other (largely synonymous with the term Leaver, which is often used in other cohort analysis studies) is used to reflect students who left the University before graduating.

Matriculation Status of Fall Term 1993 Students and Their Status at the Beginning of Fall Term 1998: Master's-Level Students in Center for Psychological Studies by Site

			Successfu	Successful Matriculation				'	Comparison to Campus-Based ³	to ed³
	Enrolled 1993	Graduated	Still Enrolled	Graduated and Still Enrolled	Subtotal	tal 	Other	er		
State and Site	z	Z	Z	Z	Z	%	Z	%	d	
Florida										
Campus-Based	382	310	3	8	321	84	61	16	n/a	
Fort Myers	24	23	0	0	23	96	, 	4.4	.119	
Gainesville-Ocala	33	25	0	0	25	9/	∞	24	.221	
Jacksonville	21	19	0	0	19	91	2	6	.428	
Melbourne	26	26	0	0	26	100	0	0	n/a ⁵	*
Orlando	43	41	0	0	41	95	2	2	.048	*

A * indicates that Fall Term 1993 students at this site had a statistically significantly greater frequency of successful matriculation than their campus-based counterparts by the beginning of Fall Term 1998 (p

ERIC "
Full Taxt Provided by ERIC

₩

Low enrollment sites (10 or fewer students) are excluded from this summary.

Chi-square can not be computed since there were zero observations for "Other" students at this site. Accordingly, an inferential test is unnecessary for this analysis. In contrast to their campus-based counterparts, all students at this site graduated and in turn experienced "Successful Matriculation."

0	
$\mathcal{C}_{\mathcal{S}}$	

Tampa	95	81	0	_	83	98	13	14	.582	
West Palm Beach	33	29	0	0	29	88	4	12	.560	
All Site-Based Students .	318	283	0	1	284	68	34	11	.042 *	*

Page 11

€





U.S. Department of Education

Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



Reproduction Release

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Matriculation Status of Fall Term 1993 Center for Psych the Beginning of Fall Term 1998: Campus-Based Students Students by Site	hological Studies Students by s and Distance Education
Author(s): Thomas W. MacFarland, Ed.D.	
Corporate Source:	Publication Date: June 1999

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANGED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROPICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANGED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
Level 1	Level 2A	Level 2B
X	<u> </u>	
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
	uments will be processed as indicated provided reproduction qual- to reproduce is granted, but no box is checked, documents will be	



document as indicated above. Reproduc	rces Information Center (ERIC) nonexclusive per tion from the ERIC microfiche, or electronic mea on from the copyright holder. Exception is made ation needs of educators in response to discrete in	lia by persons other than ERIC employees and for non-profit reproduction by libraries and
Signature: Thomas w. Muchal	Printed Name/Position/Title: Thomas W. MacFarland, Ed.D., S	enior Research Associate
Organization/Address: Nova Southeastern Universit Research and Planning	Telephone: y (954) 262-5390	Fax: (954) 262-3970
3301 College Avenue Fort Lauderdale, FL 33314	E-mail Address: tommac@nsu.nova.edu	Date: August 11, 1999
If permission to reproduce is not granted please provide the following information publicly available, and a dependable sour	to ERIC, or, if you wish ERIC to cite the available regarding the availability of the document. (ERIC co can be specified. Contributors should also be a ts that cannot be made available through EDRS.)	lity of the document from another source, C will not announce a document unless it is
Publisher/Distributor:		
Address:		
Price:		
	COPYRIGHT/REPRODUCTION RIG	
Name:		
Address:		

V. WHERE TO SEND THIS FORM:



.