UNC CHARLOTTE

College of Education

Office of the Dean
9201 University City Blvd., Charlotte, NC 28223-0001
(704) 687-8722, www.uncc.edu

August 14, 2105

Dear Courtney,

Thank you again for your careful review of our proposed Ph.D. program in Educational Research, Measurement, and Evaluation. In this letter, I address each of your questions or concerns in italics below and describe if and how we revised the program in response to those questions or concerns.

1. With respect to our educational objectives, you wrote:

a. We note that the educational objectives (p. 4-4) do not mention evaluation as prominently as we might expect in reviewing the definition of the CIP code selected.

> *Thank you for that oversight. We have deep talent in the area of evaluation and are glad to add an additional objective that focuses on evaluation in our list of objectives. It reads as follows: "Develop education researchers who have deep knowledge of evaluation theory and apply a variety of research approaches to objectively evaluate educational programs."*

b. Program Evaluation Methods (RSCH 8196), where we assume evaluation theory may be covered, is shown as optional on pp. 7-8 and required on p. 17-18.

> *RSCH 8196 is required for all students for this new program. In Table 1 (p.7), RSCH 8196 is an elective for the other (existing) four doctoral programs in the College of Education at UNC Charlotte.*

c. The evaluation plans indicate that all candidates "learn teaching through co-teaching our Master's level course RSCH6101" (p. 28 and Appendix D on SLOs). Another area of the proposal seemed to indicate that the teaching internship was optional depending upon student interest and plans (p. 16). Will all students, even part-time, co-teach in RSCH6101? Or is this an option for some interested in teaching? If optional, then the final SLO would be revised accordingly.

> *We clarified this on page 20 of the revised Appendix C and revised the corresponding SLO. The teaching internship (RSCH 8411) is optional depending upon the student interest and plans. For candidates not planning on teaching, professional behaviors will be assessed in the second research internship (RSCH 8410—6 credit hours). The Student Learning Outcomes have been modified to reflect the different options (p. 30 of the Appendix C).*

2. With respect to enrollment projections, you wrote: In evaluating program proposals, we look for student demand evidence that would support the projected enrollments (in this case, 28-36 students at steady state). As

stated, the survey evidence from 126 area leaders (p. 11) and their "moderate to high interest in the program" is difficult for us to interpret without further quantification.

> *First, we have reduced the number of students we will accept into the program to a high of 22-30 in year 4(see page 14). We also revised the paragraph (p. 11) to simplify the results of the survey and emphasize the need and desire for this program through letters of support.*

The significant growth of NCSU's program (also urban) and the numerous support letters provide a context of demand for the program. Does the College have any data on current UNCC master's students who go on to similar PhD programs? Are there MS programs at UNCC or within UNC where recruitment is planned or has known potential? If so, that may be useful to include.

> *The College does not have data on the current UNC Charlotte's master's students who go into similar Ph.D. programs. We are working with our External Advisory Committee and Graduate School to develop a recruitment plan, which may include recruiting from current master's programs at UNC Charlotte, such as Public Policy or Social Work. This plan has not been developed at this time.*

3. With respect to curriculum, you wrote: It may be useful to show any preferred or required course sequencing via a curriculum plan for FT and PT students, particularly if certain courses are required to be completed leading up to the Portfolio assessments (pp. 17-18).

> *A new table shown below has been included within the revised Appendix C (p. 20) to show the course sequencing:*

	Full-Time (3 years)	Part-Time (4-5 years)
Fall 1	RSCH 8210 (Applied Research Methods)* EDCI 8180 (Critical Issues and Perspectives in Education) RSCH 8110 (Descriptive and Inferential Statistics)	RSCH 8210 (Applied Research Methods)* EDCI 8180 (Critical Issues and Perspectives in Education)
Spring 1	ADMN 8695 (Advanced Seminar in Teaching and Learning) RSCH 8120 (Advanced Statistics)* RSCH 8111 (Qualitative Research Methods)	ADMN 8695 (Advanced Seminar in Teaching and Learning) RSCH 8110 (Descriptive and Inferential Statistics)
Summer 1	RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*	RSCH 8111 (Qualitative Research Methods)
Fall 2	RSCH 8220 (Advanced Measurement) RSCH 8121 (Qualitative Data Collection and Analysis) RSCH 8140 (Multivariate	RSCH 8120 (Advanced Statistics)* RSCH 8121 (Qualitative Data Collection and Analysis)

		Statistics)	
	Spring 2	RSCH 8196 (Program Evaluation Methods) Select Secondary Area Course (s)*	RSCH 8140 (Multivariate Statistics) RSCH 8220 (Advanced Measurement)
	Summer 2	RSCH 8410 or RSCH 8411 (Internship -Applied Research Project or teaching)*	RSCH 8410 or RSCH 8411 (Internship - Applied Research Project or teaching)*
	Fall 3	RSCH 8150 (Structural Equation Modeling Methods) Select Secondary Area Course RSCH 8699 (Proposal Design)	RSCH 8196 (Program Evaluation Methods) Select Secondary Area Course
	Spring 3	Select Secondary Area Course RSCH 8999 (Dissertation Research)	RSCH 8112 (Survey Research Methods) Select Secondary Area Course
	Summer3		RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*
	Fall 4		RSCH 8150 (Structural Equation Modeling Methods) Select Secondary Area Course
	Spring 4		RSCH 8699 (Proposal Design)
	Summer 4		RSCH 8999 (Dissertation Research)

Note. *Courses with Student Learning Outcome products.

4. With respect to the budget, you wrote: The budget templates are intended to show "incremental continuing and one-time costs required each year of the first four years of the program." This budget appears to be cumulative. For example, the Year 4 budget would show only $3000 in the Program Director Salary (and not the cumulative total of Years 1-4 at $12,000). We hope this is easy to revise and believe it will reduce the potential for confusion with future reviewers.

> *The budget template has been revised to show the costs required per year, not cumulative as originally submitted.*

As we examined the cumulative budget as presented, it raised several questions around graduate assistantships and the budget narrative for this category.

a. The proposal estimates four full-time students in Year 1 (p. 13) but only shows two with assistantships in the first and second year budgets. The budget narrative appears to indicate a total of five students in Year 4 would have assistantships. Is the intent to offer all full-time doctoral students assistantships (12 at steady state) or only to select full-time students? Is this practice competitive with other similar programs?

b. Based on our interpretation of your proposal (full-time student completes in 3 years; $13.5K per year + $1604 medical), we believe the graduate student totals may tally in this way:

> *We have changed the number of students we will enroll each year, and are currently planning on only two full-time students in Year 1. We now have budgeted two students for Year 1. The budget reflects only two new graduate assistantships because we expect the other (up to 6) full-time students (in Years 2-4) to be supported by grant funds.*

c. The budget shows all student support from enrollment growth funds. What is the role of external funding (grants) in supporting assistantships for this program? If existing support (noted at $2.7M, p. 8) will be redirected towards students in this program and is anticipated to at least continue at this level (based on past awards to Dept.), we recommend reflecting this contribution in the "Other New Allocations" column.

> *As stated above, we do expect some of the full-time students to be supported through grant funds. Students in the Department of Educational Leadership have been supported by external grants in the past, and we anticipate this sort of grant support to continue. We include the amount of existing support (p.8) to show the potential for support for graduate students and the grant activity of the faculty.*

Courtney, we believed we addressed all questions and concerns and look forward to the next step in this process. Please call or write if you have further questions.

Sincerely,

Ellen McIntyre, Dean
College of Education
UNC Charlotte
919-455-6288 (cell)
Ellen.mcintyre@uncc.edu

June 2, 2015

Dr. Chris Brown
Vice President for Research and Graduate Education
General Administration
University of North Carolina
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

Dear Dr. Brown:

Enclosed is UNC Charlotte's Appendix C: Request for Authorization to Establish a Ph.D. in Educational Research, Measurement, and Evaluation. The proposed program will prepare professionals who seek advanced data analytic, research and evaluation skills for positions in schools, school districts, and other organizations concerned with solving problems in education.

Thank you for your consideration of this request. Provost Joan Lorden or I would be pleased to respond to any questions that you might have.

Cordially,

Philip L. Dubois
Chancellor

cc: Joan F. Lorden, Provost, UNC Charlotte
       Ellen McIntyre, Dean, College of Education, UNC Charlotte
       Cody Thompson, Assistant to the Vice President for Academic & University
            Programs
       Courtney Thornton, Associate Vice President for Research and Graduate
            Education

Office of Academic Affairs

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June 1, 2015

Dr. Chris Brown
Vice President for Research and Graduate Education
General Administration
University of North Carolina
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

Dear Dr. Brown:

Enclosed is UNC Charlotte's Appendix C: Request for Authorization to Establish a Ph.D. in Educational Research, Measurement, and Evaluation. The proposal provides a detailed budget which includes enrollment increase funding. UNC Charlotte is committed to funding the expenses for the degree as described by reallocating funds, if needed.

Thank you for your consideration of this request.

Sincerely,

Joan F. Lorden
Provost and Vice Chancellor for Academic Affairs

cc: Courtney Thornton, Associate Vice President for Research and
            Graduate Education
        Cody Thompson, Assistant to the Vice President for Academic and
            University Programs

APPENDIX C

UNIVERSITY OF NORTH CAROLINA

**REQUEST FOR AUTHORIZATION TO ESTABLISH
A NEW DEGREE PROGRAM**

INSTRUCTIONS: Each proposal should include a 2-3 page executive summary. The signature of the Chancellor is required. Please submit one hard copy and an electronic copy of the proposal to the Office of the Senior Vice President of Academic Affairs at UNC General Administration.

Date: __8-10-2015__

Constituent Institution: University of North Carolina at Charlotte

CIP Discipline Specialty Title: Educational Evaluation and Research

CIP Discipline Specialty Number: 13.0601   Level: B _____ M _____ Res. Doc. _✓ Prof. Doc. ___

Exact Title of the Proposed Degree: Educational Research, Measurement, and Evaluation

Exact Degree Abbreviation (e.g., B.S., B.A., M.A., M.S., Ed.D., Ph.D.): Ph.D.

Does the proposed program constitute a substantive change as defined by SACS?   Yes _✓_ No _____

> The current SACS Substantive Change Policy Statement may be viewed at:
> *http://www.sacscoc.org/pdf/081705/Substantive%20Change%20policy.pdf*

If yes, please briefly explain.

> As required by the Policy Statement on Substantive Change for Accredited Institutions of the Commission on Colleges, the University of North Carolina at Charlotte (UNC Charlotte) is required to submit a letter of notification for new degree programs prior to implementation. Notification of this new degree program will be provided to SACS after approval by the University of North Carolina Board of Governors and prior to implementation.

Proposed date to enroll first students in degree program: Month: August Year: 2016

Are there plans to offer 50% or more of program credit hours

to students off-campus or online?   Yes ___ No _✓_

If yes, complete the form to be used to request establishment of a distance education program and submit it along with this request.

Note: If a degree program has not been approved by the Board of Governors, its approval for alternative, online, or distance delivery must wait until BOG program approval is received. (400.1.1[R], page 3)

The program will be offered on the UNC Charlotte Main Campus. Students will have an option to take some courses 100% online, but most classes will be offered using face-to-face or blended instructional modes. There are no plans to offer the program in any other location.

Provide a summary of the status of this proposal in your campus review processes.

a.   List the campus bodies that reviewed and commented on this Appendix C proposal before submission to UNC General Administration.   What were there determinations? Include any votes, if applicable.

Campus Body	Action	Votes, If Applicable
Department of Educational Leadership	Approved	22 for, 0 Against
College of Education Graduate Council	Approved	5 for, 0 Against
College of Education Dean's Office	Approved	N/A
UNC Charlotte Graduate Council	Approved	12 for, 0 Against
Provost's Office	Approved	N/A
Chancellor's Office	Approved	N/A

b.   Summarize any issues, concerns or opposition raised throughout the campus process and comment periods. Describe revisions made to address areas of concern.

There were no major issues, concerns, or opposition voiced in the campus review process.

EXECUTIVE SUMMARY

Overview:

The proposed Ph.D. in Educational Research, Measurement, and Evaluation will prepare professionals who seek advanced research, data analytic, and evaluation skills for positions in a wide variety of educational institutions including higher education (community colleges and universities), K-12 school districts, for-profit companies, non-profit agencies, think tanks, government organizations, and other institutions concerned with solving problems in education. The proposed Ph.D. program will target experienced educators who hold a master's degree in a related educational field. Individuals attracted to the new program will seek to deepen their research skills for improving education outcomes. Some of those students may pursue the Ph.D. as a means of transitioning into a career in higher education.

The program consists of 20 three-credit hour courses or research experiences (60 credit-hour total). Full-time students will complete the program in three years, while part-time students will complete the program in five to six years. All courses will be available in the evening and through a hybrid mode to accommodate working adults. The proposed Ph.D. program will use existing research structures in the College of Education, with few additional resources required for implementing the program.

Need for the Program:

In December 2014, Charlotte was named the 2nd fastest growing large city in the nation. It is currently the 17th largest city and has recently hit the one million mark for population, with the greater metropolitan area reporting more than 2 million. This recent, rapid growth is related to the city's role as a major U.S. financial center and the second largest banking city in the U.S. after New York City. With the city's growth comes the region's growth, as new communities crop up outside the city's center.

As the population of the western region of North Carolina continues to grow, so too does the need for a Ph.D. program in education research, measurement, and evaluation. The educational needs in the area have grown, and with it, the demand for such a program. School districts have expanded and the number of for-profit and non-profit agencies interested in raising academic achievement and skills has increased. Each of these institutions needs educational researchers and evaluators to monitor efforts and results; indeed, many see the analysis of their data as an unfulfilled need. As North Carolina's urban research university, UNC Charlotte is poised to fulfill this need.

In December 2013, UNC Charlotte commissioned Hanover Research to conduct an assessment of the market for the proposed Ph.D. program in Educational Research, Measurement, and Evaluation (ERME). Hanover Research reviewed the student demand and distinctiveness of the proposed program by comparing it to similar programs in the state and region. Using data obtained from the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data Systems (IPEDS), Hanover found an overall positive growth of students completing ERME-like programs. When examining the labor market, data indicated that employment in ERME-related occupations will continue to grow across the region and ERME-related occupations will grow in the state of North Carolina. The report concluded that growth in

the labor market combined with growth in graduates of similar programs indicate a need for a new program in a region of the state with a large, growing city that has no program of its kind.

UNC Charlotte's College of Education is in a position to offer a program for which there is need and demand at little additional cost. Because we have built a cadre of faculty in research methods and evaluation to support the doctoral training that we offer in Special Education, Counseling, Curriculum and Instruction, and Educational Leadership, we have the faculty and courses needed for the Ph.D. in Educational Research Measurement and Evaluation program. The education research faculty members are prepared and eager to meet the mentoring demand for this new program. We have eight full-time research faculty members, all with graduate faculty status, who will serve as dissertation chairs for the students in the proposed program. We also have many extraordinary faculty members with graduate faculty status, including nine new faculty members hired in 2014 and four more hired in 2015, with the credentials to serve students in this program.

Objectives:

The educational objectives of the proposed doctoral program are:

1. Develop education researchers who pose significant questions, align research to relevant theory, use research methodologies that answer these questions, provide a coherent and explicit chain of reasoning, replicate and generalize across studies, and disclose findings to encourage professional scrutiny and critique;

2. Develop education researchers who have deep knowledge of evaluation theory and apply a variety of research approaches to objectively evaluate educational programs.

3. Provide a variety of research experiences for a diverse group of students to develop deep substantive and methodological knowledge and skills that promote research relevant to a range of educational issues and diverse learner groups; and

4. Prepare future education researchers who become leaders in K-12 education, higher education (universities and community colleges), policy, and community settings.

I.   Description of the Program

    A.   Describe the proposed degree program (i.e., its nature, scope, and intended audience).

The proposed Ph.D. in Educational Research, Measurement, and Evaluation will prepare education professionals who seek advanced research, statistical, and evaluation skills for positions in a wide variety of educational institutions including higher education (universities and community colleges), K-12 school districts, for-profit companies, non-profit agencies, think tanks, government organizations, and other institutions concerned with solving problems in education.

The program consists of 20 three-credit hour courses or research experiences (60 credit-hours total). Full-time students will complete the program in three years, while part-time students will complete the program in five to six years. All courses will be offered in the evening and in a hybrid format to accommodate working adults.

The courses are sequenced to develop a common language, to convey and discuss a shared set of issues, skills and arguments in the field and instill common norms and standards for conducting research. Students will have opportunities to develop expertise in a substantive area. Internships will provide field experiences in research and teaching where students can practice skills and abilities in authentic settings under the supervision of research faculty. Students in the ERME Ph.D. program will be enrolled with other doctoral students from across the College of Education and UNC Charlotte, which will allow for learning in an interdisciplinary environment.

The proposed Ph.D. program will target experienced educators who hold a master's degree in a related educational field. Individuals attracted to the new program may seek to deepen their research skills with the goal of improving educational outcomes. Some of those students may pursue the Ph.D. as a means of transitioning into a career in higher education. For those students aspiring to enter faculty position in higher education, the internship in teaching educational research is required.

    B.   List the educational objectives of the program.

The educational objectives of the proposed doctoral program are:

1. Develop education researchers who pose significant questions, align research to relevant theory, use research methodologies that answer these questions, provide a coherent and explicit chain of reasoning, replicate and generalize across studies, and disclose findings to encourage professional scrutiny and critique;

2. Develop education researchers who have deep knowledge of evaluation theory and apply a variety of research approaches to objectively evaluate educational programs.

3. Provide a variety of research experiences for a diverse group of students to develop deep substantive and methodological knowledge and skills that promote research relevant to a range of educational issues and diverse learner groups; and

4. Prepare future education researchers who become leaders in K-12 education, higher education, policy, and community settings.

C.   Describe the relationship of the program to other programs currently offered at the proposing institution, including the common use of 1) courses, 2) faculty, 3) facilities, and 4) other resources:

There is no existing doctoral program on the UNC Charlotte campus that focuses on methodological issues and skills of education research, measurement, and evaluation. The new program will have direct links with other programs within the College of Education and the University's institutes and centers focused on social science research. The new program will nurture and reinforce a culture in the College of Education that leads to more and better educational research.

The relationship of the proposed program to existing programs at UNC Charlotte will occur within courses required or offered in all programs and through the University's social science institutes and centers. These centers and institutes will serve as practicum sites for students. Specifically, the Center for Educational Measurement and Evaluation (CEME) (http://ceme.uncc.edu/) is an organization where practitioners, policy makers, and UNC Charlotte faculty and students engage in projects that lead to evidence-based practice and improved educational outcomes for children and families in the region. The Center for Science, Technology, Engineering, and Mathematics (STEM) Education provides resources to improve K-12 education in the surrounding schools in North Carolina (http://cstem.uncc.edu/). The new Project Mosaic (https://projectmosaic.uncc.edu/) provides a forum for social science researchers from three colleges on campus (College of Education, College of Health and Human Services, College of Liberal Arts and Sciences) to increase the interaction among faculty and students on research tied to UNC Charlotte's urban mission. The UNC Charlotte Urban Institute (http://ui.uncc.edu/) brings together leading experts in government, academia and the community to provide the highest quality research, policy recommendations and analysis on a range of public policy issues.   (See letters of support from Dr. Richard Lambert of CEME, Dr. Pugalee of STEM, Dr. Jean-Claude Thill of Project Mosaic, and UNC Charlotte Vice Chancellor for Research and Economic Development Dr. Robert Wilhelm.)

Perhaps most importantly for the proposed program, the Institute for Social Capital at UNC Charlotte (http://ui.uncc.edu/programs/isc) has one of the most extensive integrated data systems in the nation and the only one in North Carolina that cuts across institutional silos. Directed by a former teacher with a Ph.D. in education, the organization houses all data on students from Charlotte Mecklenburg Schools as well as many government and nonprofit community agencies in the greater Charlotte region, including the Mecklenburg County Health Department, the Charlotte Housing Authority, Area Mental Health, Early Childhood SMART Start, Communities in Schools, and A Child's Place, among others. This fully integrated data system allows for interdisciplinary studies linking education to other social variables so essential today for answering the most pressing education-related questions with which all urban communities in the nation are struggling. For example, one current interdisciplinary study brings together researchers in criminal justice and education to examine the educational trajectory (school success) of all incarcerated citizens in the area. This research seeks to gain knowledge about the role of education in the lives of the incarcerated that requires knowledge of advanced statistics and educational programs, as well as advanced knowledge of criminal justice. Students in this proposed Ph.D. program would have opportunities to work on interdisciplinary teams like this one, providing them with hands-on research experience using sophisticated data systems. The research questions asked by students in this Ph.D. program will be relevant and generalizable to national and international audiences. (See letter of support from Dr. Amy Hawn Nelson, Director of the Institute for Social Capital.) The Dean of the College of Education sits on the Scholars Advisory

Council of the Institute and two research faculty members from the Department of Educational Leadership at UNC Charlotte serve on the Data and Research Oversight Committee (DAROC) of the Institute.

Through hands-on work with actual studies, all students in the program will apprentice in ways described by the scholarly literature on doctoral education as best practices. Students will have multiple options and opportunities to work collaboratively with faculty members in designing studies, analyzing data, and writing papers. Options and opportunities will be provided to all students regardless of enrollment status (full- or part-time).

      1.   Courses/Experiences

The proposed new program will have a strong link to the existing Ph.D. programs and Ed.D. in Educational Leadership in the College of Education at UNC Charlotte. As shown in Table 1, the research methodology courses that largely make up the new proposed program are already offered as required or elective courses for the other four doctoral programs in the College: (a) Educational Leadership, (b) Special Education, (c) Counseling, and (d) Curriculum and Instruction. All doctoral programs require core research courses, but allow a number of elective courses to meet students' needs for content and to help them successfully complete the dissertation. The proposed Ph.D. program will use these existing research courses. In the table, we have indicated which courses are required and which serve as electives for each of the four existing programs. The new program will add students to existing classes, making all five programs more efficient.

Table 1: Required (R) and Elective (E) Courses for Current Doctoral Programs at UNC Charlotte

Current Course Offerings/Research Methodology Courses for Proposed Ph.D. in ERME	Ed.D. in Educational Leadership	Ph.D. in Special Education	Ph.D. in Counseling	Ph.D. in Curriculum and Instruction
Core Courses (15 Credit Hours-Required)				
RSCH 8210 (Applied Research Methods)	R	E	R	R
RSCH 8110 (Descriptive and Inferential Statistics)	R	R	R	R
RSCH 8111 (Qualitative Research Methods)	E	E	R	R
EDCI 8180 (Critical Issues and Perspectives in Education)	E	E	E	R
PPOL 8687 (Educational Policy Studies, K-12 Schools)	E	E	E	E
Advanced Content (12 Credit Hours-Required)				
RSCH 8220 (Advanced Measurement)	E	E	E	E

RSCH 8120 (Advanced Statistics)	R	R	R	R
RSCH 8140 (Multivariate Statistics)	E	E	R	E
RSCH 8121 (Qualitative Data Collection and Analysis)	E	E	E	R
Research Methods (Select 9 Credit Hours for Electives)				
RSCH 8196 (Program Evaluation Methods)	E	E	E	E
RSCH 8112 (Survey Research Methods)	E	E	E	E
RSCH 8130 (Presentation and Computer Analysis of Data)	E	E	E	E
RSCH 8113 (Single-Case Research)	E	R	E	E
RSCH 8150 (Structural Equation Modeling Methods)	E	E	E	E
RSCH 8230 (Classical and Modern Test Theory)	E	E	E	E

2.   Faculty

Over the last decade, the College of Education at UNC Charlotte has recruited its education research faculty and other faculty with research expertise to support graduate-level programs. UNC Charlotte has a quality faculty with capacity to offer this program and to produce more of the high-level researchers who have the skills necessary to address the rapid changes related to education in the nation. Because we have built a cadre of faculty in research methods and evaluation to support the Ph.D. training offered in Special Education, Counseling, and Curriculum and Instruction and the Ed.D. in Educational Leadership, we have the faculty and courses needed for the Educational Research, Measurement and Evaluation program. The education research faculty members are prepared and eager to meet the mentoring demand for this new program. We have nine full-time research faculty members, all with graduate faculty status, who will serve as dissertation chairs for the students in the proposed program. We also have many other faculty members in the College of Education with the credentials to mentor students in this program. The College has a highly productive scholarly faculty, many of whom bring in external research dollars. Faculty in the College of Education are responsible for over $8 million in sponsored awards, including over $2.7 million in the Department of Educational Leadership, the home department for the proposed program.

3.   Facilities

The proposed Ph.D. program will primarily use existing facilities of the College of Education at the main campus. The College is housed in a 25,872-square-foot building opened in 2005 complete with offices, classrooms, seminar rooms, and computer labs.

> 4. Other resources

N/A

II. Justification for the Program – Narrative Statement

> A. Describe the proposed program as it relates to:

> > 1. Institutional mission

UNC Charlotte is North Carolina's urban research university. It leverages its location in the state's largest city to offer internationally competitive programs of research and creative activity; exemplary undergraduate, graduate, and professional programs; and focused community engagement initiatives. UNC Charlotte maintains a particular commitment to addressing the cultural, economic, educational, environmental, health, and social needs of the greater Charlotte region, which includes Mecklenburg County and the surrounding counties of Cabarrus, Cleveland, Gaston, Lincoln, Stanly, and Union. One of UNC Charlotte's goals is to stimulate increased research, creative activities, and community engagement with a focus on programs and partnerships that address the major needs of the Charlotte region. This program will fill an unmet need by creating education researchers who conduct high quality interdisciplinary research that examine important educational issues.

> > 2. Strategic plan

The proposed Ph.D. program is an exemplar of the mission and values of the institution. The University's current institutional plan emphasizes the development and maintenance of high quality graduate programs and the recruitment of excellent graduate students. The University has a commitment to advance programs of research and scholarship that expand the frontiers of knowledge, including those that solve problems at the interface of disciplines and leverage discovery for the public benefit. The proposed program will contribute the University's goal as it prepares new researchers who can conduct interdisciplinary studies that have educational causes or outcomes. There is much support for this program across the University as it aligns with the goals of the institution.

The program is also closely aligned with the College of Education's new 2015-2020 strategic plan. The primary goal related to graduate programs in the College's five-year plan is to expand the frontiers of knowledge and leverage discovery for the public benefit through innovative programs of graduate education that span the disciplines. To do this, the College of Education will develop and maintain nationally recognized, competitive, and innovative graduate programs; increase enrollment of quality graduate candidates through effective and comprehensive efforts in the recruitment, marketing, and branding of graduate programs; and enhance the graduate experience for students through financial support when possible, mentorship opportunities, teaching experiences, and research. To ensure that the work is high quality, the College of Education will provide the appropriate professional development for faculty to enhance all graduate programs. The strategic plan also focused on an increase in the quantity and quality of scholarly productivity, the amount of external funding, and the amount of student engagement in its research-related activities. All these goals are strongly aligned with the new proposed Ph.D. program.

3.   Student demand. Provide any update to the documented evidence of student demand presented in Appendix A.

In December 2013, UNC Charlotte commissioned Hanover Research to conduct an assessment of the market for the proposed Ph.D. program in Educational Research, Measurement, and Evaluation. Hanover Research reviewed the student demand and distinctiveness of the proposed program by comparing it to similar programs in the state and region. The full report is included in Appendix B.

Using data obtained from the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data Systems (IPEDS), Hanover Research was able to estimate the potential student demand for Ph.D. programs in ERME based on growth in current programs. Hanover found that completion data from ERME-related Ph.D. programs show strong growth of 11% and 17%, respectively for 2008 and 2012. Among institutions within the UNC system, enrollment trends tended to be dependent on the institution, with some institutions experiencing strong overall growth, while others have seen a decline in enrollment. When examining the labor market, they also found that "data indicate that employment in ERME-related occupations will grow across the region" (p. 10) and "ERME-related occupations will grow in the state of North Carolina" (p. 18). Growth in the labor market combined with growth in graduates of similar programs indicate a need for a new program in a region of the state with a large growing city that still has no program of its kind.

According to UNC-GA Institutional Research, enrollments for the UNC Greensboro and NC State programs are healthy and growing (see Table 2). UNC Chapel Hill's program is a concentration embedded in a larger Ph.D. program, and we do not have data available by concentration. NC State's enrollment has tripled in the last five years.

Table 2: Enrollment Data for Similar Programs at NC State and UNC Greensboro

	Fall 07	Spr 08	Fall 08	Spr 09	Fall 09	Spr 10	Fall 10	Spr 11	Fall 11	Spr 12	Fall 12	Spr 13	Fall 13	Spr 14	Fall 14
130601 NC State Educational Evaluation and Research	30	29	32	32	33	31	47	46	69	68	87	82	105	97	107
130604 UNCG Educational Assessment, Testing, and Measurement	19	17	16	15	19	20	19	18	29	26	32	30	28	26	27

As recommended by the January 4, 2014, memo to the Committee on Educational Planning, Policies, and Programs, we conducted an assessment of the positions for which future graduates of the Ph.D. in Educational Research, Measurement, and Evaluation will be eligible. There are at least 150 of these positions in North Carolina, with an estimated 10% yearly turnover rate. The need for such skilled researchers in the western region of North Carolina is great. For example, the Charlotte-Mecklenburg Schools Office of Accountability employs just such persons as it provides schools, administrative leaders and key stakeholders with research to facilitate data-driven decisions for improving student performance through its Center for Research and Evaluation and

Center for Information Visualization and Innovation, as well as its Data Tools, State Testing, Accountability Data Processing, and Grant Development teams.

In May of 2015, a survey was conducted in the Charlotte area to evaluate the need and interest in the proposed program. A total of 126 leaders in the area of K-12 schools, community colleges, for-profit companies, non-profit companies, higher education, and medical education were sent a link to an online survey. These leaders were identified by the External Advisory Committee (see page 15) as professionals in the Charlotte area who would have the greatest knowledge of regional needs and interest in the proposed program. Of the 126 leaders invited to participate, 46 individuals completed the survey resulting in a 37% return rate. Respondents were asked about (a) the need in the Charlotte region for a Ph.D. in Educational Research, Measurement, and Evaluation and (b) their knowledge of potential student interest in the new program. It was determined that there would be high or moderately high interest in the program; 87% of respondents reported there was a need in the Charlotte region for a Ph.D. in Educational Research, Measurement, and Evaluation.

Furthermore, numerous letters of support for this proposed Ph.D. from community agencies also indicate the need for the program. Natalie English of the Charlotte Chamber wrote: "I found the program to be highly worthy and needed….[It] will prepare researchers who can analyze education data for all sorts of educational institutions, including school districts, companies, and government and other non-profit agencies. I appreciate that the College of Education is well aware that educational programs and products often work outside of schools, and recognizes that these agencies will need to have experts ready to evaluate program innovations. In today's work of 'big data,' it is essential that we have professionals prepared to conduct rigorous studies with multiple variables that can inform practice."

> 4.   Societal demand and employability of graduates. Provide any update to the documented evidence of societal demand and employment opportunities presented in Appendix A.

While institutions of higher education face scrutiny, colleges and schools of education are a particular focus. If K-12 schools appear to "fail" students, critics look to those who prepared the teachers and school administrators as culprits, and they should, as one part of the problem of low student achievement. Yet, how that criticism is conducted and communicated is of utmost importance. The national field of teacher preparation has responded to this criticism by developing a higher set of standards, which includes sophisticated evaluation of programs that link teachers and school administrators to K-12 student outcomes. Specifically, Standard Four of the new national accrediting body, the Council for Accreditation of Educator Preparation (CAEP) reads:

> The provider demonstrates the impact of its completers on P-12 student learning and development, classroom instruction, and schools, and the satisfaction of its completers with the relevance and effectiveness of their preparation.

Four indicators specify how impact can be measured. These include satisfaction of completers, satisfaction of employers, indicators of teaching effectiveness through validated observation instruments, and "Impact on P-12 Student Learning and Development." The latter indicator will be the most challenging for all programs and will be required for the "gold standard" accreditation. It reads:

The provider documents, using multiple measures that program completers contribute to an expected level of student-learning growth. Multiple measures shall include all available growth measures (including value-added measures, student-growth percentiles, and student learning and development objectives) required by the state for its teachers and available to educator preparation providers, other state-supported P-12 impact measures, and any other measures employed by the provider.

To meet these new standards, teacher preparation programs will need highly qualified researchers in education who have the knowledge and skills to evaluate their own programs in ways that will establish valid grounds for actions to improve the educational experiences of all students. We believe that this future need, not recognized yet by Hanover Research or many others, will create an additional demand on programs such as the Ph.D. in Educational Research, Measurement, and Evaluation as institutions that prepare teachers seek national accreditation. (See letters of support from local educator preparation institutions beyond UNC Charlotte's College of Education, including a letter from Dr. Kristie L. Foley from Davidson College, a letter from Dr. Jeremiah B. Wills from Queens University, and a letter from Scott Gartlan, Director of the Charlotte Teachers Institute.)

The following list provides other examples of positions in the state that require similar degrees that were hiring in spring 2014.

- NC Department of Public Instruction
  - Accountability Services Division (*N*=2)
  - Test Development (*N*=1)
  - Regional Accountability Coordinators (*N*=2)
- Institutions of Higher Education (non-faculty positions, from websites)
  - Institutional Effectiveness (or Research) in North Carolina Community Colleges (*N*=2) from http://www.nccommunitycolleges.edu/jobs
  - Institutional Research in North Carolina University Systems (*N*=27, directors and researchers) from https://uncjobs.northcarolina.edu/applicants/jsp/shared/search/SearchResults_css.jsp)
  - Independent Colleges and Universities (*N*=14; http://www.ncicu.org/member.html)
  - Private Research Groups in North Carolina (*N*=50; e.g., Center for Research on Education, Praxis, Metametrix, and others)
- Local and Regional Public and Private School Systems
  - Testing coordinators for North Carolina Public School Local Educational Agencies (*N*=156)
  - Educational researchers and program evaluators for North Carolina Public School Local Educational Agencies (*N*=10, in larger districts)
  - Charlotte-Mecklenburg Schools Office of Accountability (*N*=3)

B.   Provide any update to the discussion of similar degree programs and opportunities for collaboration presented in Appendix A. Discuss here the feasibility of a joint or collaborative degree program with one or more UNC institutions.

The UNC system deans of the Colleges of Education have collaborated in multiple ways, including sharing data and practices on programs, interpreting and conducting research on programs, and presenting and publishing on program differences. For example, nine UNC Colleges of Education (including Appalachian State University, UNC Chapel Hill, UNC Charlotte, UNC Greensboro, UNC Asheville, UNC Wilmington, NC State University, East Carolina University, and Western Carolina University) are conducting a comparative evaluation study of the elementary teacher preparation programs in the UNC system by examining features of the programs to explain the UNC GA teacher performance and students' achievement outcome data. Also, the deans of UNC Charlotte, NC State, East Carolina University, and UNC Greensboro recently collaborated on a presentation at the American Association of Colleges of Teacher Education (AACTE) to share a descriptive study comparing our teacher preparation programs. The deans at UNC Charlotte, NC State, and East Carolina University also recently collaborated with UNC GA on an article, to be published in the prestigious *Teachers College Press*, on the possibilities of data sharing at the individual teacher candidate level. Dr. Alisa Chapman has fostered a culture of collaboration that is expected to continue as new deans fill recently vacated slots. We hope and expect that this collaboration will include our new Ph.D. program in Education Research, Measurement, and Evaluation.

Many opportunities are available for just such collaboration across institutions. First, we anticipate that some of our students will want to take courses from the talented professors in other system institutions, and we will encourage it to the extent that courses are available to students online or in the Charlotte area. Indeed, NC State has offered its doctoral program in Adult and Community College Education in part through the UNC Charlotte Graduate Center. We held meetings (March, May, and August 2014) to discuss how professors at the two universities can work together to better serve all our doctoral students. Examples of collaboration opportunities resulting from these meetings include:

1. Course Sharing – We could allow our students to take selected courses from each other's programs and have those courses count towards degree completion.
2. Course Substitution – We could identify courses in our respective programs that may be interchangeable in order to give our students more options regarding times and locations to take the courses.
3. Research Collaborations – We could seek ways to allow our respective doctoral students to engage in research independently and/or in support of their dissertations.
4. Journal Collaborations – We could encourage our students' collaboration on pieces of research that may lead to publishable journal articles or book chapters.
5. Conference Presentations – We could foster our students' attendance and presentations of jointly prepared papers at local, regional, and national/international professional conferences.
6. Dissertation Committee Memberships – We could allow faculty to serve on the dissertation committees of students from each other's programs in areas of mutual research interest with the students.
7. Instructor Sharing – We could allow faculty to teach courses in each other's programs, as appropriate.
8. Professional Development Events – We could invite and encourage our students to attend professional development events (e.g., UNC Charlotte's Distinguished Speaker Series, NCSU's Professional Lecture Series, etc.) sponsored by our respective programs.

9. Social Events – We could consider sponsoring at least one social event each year to allow students in our respective programs to get to know each other better.
10. Social Networking – We could expand the use the INSITE* social network system already being used by some academic programs at UNC Charlotte to include the students in our respective doctoral programs.

The collaboration between UNC Charlotte and NC State can be a model for how institutions can support one another's programs.

C.   Enrollment (baccalaureate programs should include only upper division majors, that is, juniors and seniors).

Please indicate the anticipated first year and fourth year steady-state enrollment (head count) for the proposed program.

Year 1:   Full Time __2____   Part-time _4-6_____   Total ___6-8_____

Year 4:   Full-time __6_____   Part-time __16-24____   Total ___22-30____

III.   Program Requirements and Curriculum

A.   Program Planning

1.   List the names of institutions with similar offerings regarded as high quality programs by the developers of the proposed program.

The Hanover Research report indicates there are three institutions in North Carolina that operate similar Ph.D. programs:
• University of North Carolina at Chapel Hill (UNC Chapel Hill)– Educational Psychology, Measurement, and Evaluation (EPME) Quantitative Research Methods Emphasis Area (170 miles)
• University of North Carolina at Greensboro (UNCG)– Educational Research Methodology (95 miles)
• North Carolina State University (NCSU)– Education Research and Policy Analysis (180 miles)

These three existing programs at UNCG, NCSU, and UNC have excellent reputations with nationally known scholars, and they have a history of producing professionals that have made an impact in North Carolina, nationally, and internationally.

2.   List institutions visited or consulted in developing this proposal. Also discuss or append any consultants' reports or committee findings generated in planning the proposed program.

We solicited the following individuals and groups to review Appendix A: faculty and administrators in the Department of Educational Leadership at UNC Charlotte; faculty and administrators in other departments in the College of Education at UNC Charlotte; UNC Charlotte university administrators, including Chancellor Dubois, Provost Lorden, Vice Chancellor for Research and Economic Development Robert Wilhelm; Directors of Centers and Institutes at UNC Charlotte; seven area superintendents; eight Charlotte-area community partners/agencies; Hanover Research (a market research company); and Academic Analytics (business intelligence

data company). Deans from seven nationally recognized colleges of education, including University of Louisville, University of Maryland College Park, Kent State University, Auburn University, the University of Alabama Birmingham, George Mason University, and the University of South Carolina also provided reviews. Finally, the Chair of the Board of Directors of the Carnegie Project for the Education Doctorate (CPED), Dr. David Imig of the University of Maryland, also reviewed the proposal. All above individuals and groups recommend moving forward with the Ph.D. proposal.

An External Advisory Committee was formed in February 2015 to further review the program. Committee members included Drs. Lindsay Messinger (Charlotte Mecklenburg School Office of Accountability), Terri Manning (Central Piedmont Community College, Associate Vice President for Institutional Research), Amy Hawn Nelson (Director of Social Research for UNC Charlotte Urban Institute), Lisa Howley (Assistant VP of Medical Education, Carolinas HealthCare System), Jason Schoeneberger (Schoeneberger Research Services, LLC), Jennifer McGee (Assistant Professor at Appalachian State University and former UNC Charlotte graduate student), and Audrey Rorrer (Evaluator, Center for Education Innovation and Coordinator of Non-Profit Leaders Evaluation Forum). Overall, the committee agreed that the program was well constructed and similar to Ph.D. programs they were familiar with or had attended. There were several topics the committee believed were important and should be included in the curriculum: (a) program evaluation theory, (b) database management, (c) working with large datasets, and (d) educational policy. These recommendations were reviewed by the research faculty for inclusion in the existing course offerings.

In May 2015, two additional external reviewers examined the Appendix C, proposed curriculum and internships, and the Hanover Report. The experts included are both researchers directing or working in such Ph.D. programs and who are also familiar with Ed.D. programs. These reviewers included: 1) Dr. Se-Kang Kim, Director of the Ph.D. program in Psychometrics and Quantitative Psychology at Fordham University and 2) Dr. Lancelot Brown, Associate Professor and Department Chair of Educational Leadership, at Duquesne University. Both reviewers believe the program reflects the content, rigor, and quality expected of a Ph.D. in Education Research, Measurement, and Evaluation; that the program would prepare researchers to work in a variety of fields, including higher education; that graduates would produce original research that will answer important educational questions; that graduates would develop specific advanced skills necessary for high quality research; that the faculty teaching in the UNC Charlotte program have the credentials necessary for leading the program; and that the program should be a Ph.D., and not an Ed.D. Recommendations for improving the program include: 1) splitting the course on classical and modern measurement theory into two courses: one for classical test theory including generalizability theory and the other mainly for Item Response Theory (IRT), the two theories being the two major pillars in measurement fields; 2) teach standard setting, equating and scaling by creating a new course or include these issues in measurement or research methods courses; and 3) ensure that in the ERME manual to include syllabi for the courses being offered, along with a brief summary of each ERME faculty member's expertise.

B.   Admission. List the following:

        1.   Admissions requirements for proposed program (indicate minimum requirements and general requirements).

Applications for admission will be accepted twice a year to begin doctoral studies in the fall or spring semester.

The following documents/activities must be submitted in support of the application:

1. Official transcript(s) of all academic work attempted since high school indicating a GPA of 3.5 (on a scale of 4.0) in a graduate degree program.*
2. Official report of score on the GRE or MAT that is no more than 5 years old.*
3. At least three references* of someone who knows the applicant's current work and/or academic achievements in previous degree work.
4. A two page essay describing prior educational and research experiences and objectives for pursuing doctoral studies.*
5. A current resume or vita.
6. A professional writing sample (e.g., published article, manuscript submitted for publication, term paper submitted in prior coursework, abstract of thesis, teaching manual).
7. A minimum TOEFL score of 220 (computer-based), 557 (paper-based), or 83 (internet based) or a minimum IELTS band score of 6.5 is required for any applicant whose native language is not English. All tests must have been taken within the past two years.

These items are required of applicants to any of UNC Charlotte's doctoral programs.

2.   Documents to be submitted for admission (listing or attach sample).

        See list above.

C.   Degree requirements. List the following:

        1.   Total hours required. State requirements for Major, Minor, General Education, etc.

Sixty credit hours post-master's degree will be required. A list of the courses and credit hours is shown in the following sections. A full description of the courses and curriculum can be found in Appendix D.

        2.   Other requirements (e.g. residence, comprehensive exams, thesis, dissertation, clinical or field experience, "second major," etc.).

In addition to coursework, students must complete a portfolio of achievements related to the three focus areas of research, collaboration, and teaching. This portfolio must receive satisfactory ratings from the Faculty Review Committee at two critical junctures known as Benchmark One and Benchmark Two. Benchmark One serves as a Qualifying Examination and includes demonstration of writing, collaboration, and research skills. Benchmark Two

is comparable to the comprehensive exams required by some Ph.D. programs. Students receive opportunities to build this portfolio through the Research and Practice coursework. The following are some examples of possible products in the portfolio: research based paper, journal article review, conference presentation, evaluation project, team study, and research report. A detailed description of the requirements can be found in the Student Learning Outcomes Plan located in Appendix D.

All students are required to take six credit-hours of internship where the student is placed in a field setting, such as a school system, school building, related agency setting, or a research center within UNC Charlotte. Students will receive supervision from both sponsoring personnel at the field placement site and from the instructor of the course at UNC Charlotte. Students will attend seminar sessions as a group and will work on site for their sponsoring agency. For those students who plan to teach in a higher education setting (community college or university), three of the six credit-hours must be in the teaching internship. Syllabi provide the objectives and requirements for the internships in research and teaching.

All students must complete a dissertation. The purpose of the dissertation is for doctoral students to demonstrate their ability to synthesize the professional literature and generate new knowledge for the profession through the use of well-established research tools. For the Ph.D. in Education Research, Measurement, and Evaluation, the dissertation may employ quantitative, qualitative, or mixed methods. Regardless of design, it must adhere to current standards for quality as reflected in the current professional literature on the chosen methodology. Students must be continuously enrolled for dissertation research credits through and including the semester of graduation. Defense of the dissertation is conducted in a final oral examination that is open to the University community.

For graduate programs only, please also list the following:

3.   Proportion of courses open only to graduate students to be required in program

All courses are open only to graduate students. Three courses (15% of all proposed courses) will be open only to graduate students in the Ph.D. in Education Research, Measurement, and Evaluation including RSCH 8699 (Dissertation Proposal Design), RSCH 8410 (Internship in Educational Research), and RSCH 8411 (Internship in Teaching Educational Research).

4.   Grades required

Grades of A or B are acceptable, but students may be allowed to earn up to two C's.

5.   Amount of transfer credit accepted

The program will accept up to two courses as transfer from a regionally accredited doctoral granting institution, providing the Education Research Doctoral Committee determines that the course or courses are equivalent to similar courses required in the UNC Charlotte Ph.D. program or fit the specialty area. The grade in these transfer courses must be an A or

B. All of the dissertation work must be completed at UNC Charlotte. As stated in Section IIB, the faculty are open to collaborations within the UNC system for additional transfer agreements.

6.   Language and/or research requirements

There are no language requirements. All students will be required to take 24 credit-hour common research courses, nine credit-hours in research specialization, and six credit-hours in a research internship.

7.   Any time limits for completion

Students must complete their degree, including the dissertation, within eight years. The minimum time for completion for a full-time student is three years.

D.   For all programs, list existing courses by title and number and indicate (*) those that are required. Include an explanation of numbering system. List (under a heading marked "new") and describe new courses proposed.

List of Required Existing Courses (30 credit hours)

- EDCI 8180 (Critical Issues and Perspectives in Urban Education)*
- ADMN 8695 (Advanced Seminar in Teaching and Learning) *
- RSCH 8210 (Applied Research Methods) *
- RSCH 8110 (Descriptive and Inferential Statistics) *
- RSCH 8120 (Advanced Statistics) *
- RSCH 8140 (Multivariate Statistics) *
- RSCH 8111 (Qualitative Research Methods) *
- RSCH 8121 (Qualitative Data Collection and Analysis) *
- RSCH 8196 (Program Evaluation Methods) *
- RSCH 8220 (Advanced Measurement) *

List of Existing Research Specialization Courses (select 9 credits)

- RSCH 8112 (Survey Research Methods)*
- RSCH 8130 (Presentation and Computer Analysis of Data)*
- RSCH 8113 (Single-Case Research)*
- RSCH 8150 (Structural Equation Modeling Methods)*
- RSCH 8230 (Classical and Modern Test Theory)*
- RSCH 8890 (Hierarchical Linear Modeling)*
- *8000 level research courses from other doctoral program across the university may be considered*

New Courses (15 credit hours)

- RSCH 8410 (Internship in Educational Research)*
- RSCH 8411 (Internship in Teaching Educational Research)
- RSCH 8699 (Dissertation Proposal Design)*
- RSCH 8999 (Dissertation Research)*

Elective Courses (6 credit hours)
- Additional 8000 courses selected by student and approved by advisor

TOTAL CREDIT HOURS: 60

A curriculum plan for full- and part-time students is provided below. The courses are sequenced to meet the prerequisite requirements for all courses as well as the knowledge and skills needed to complete portfolio and dissertation requirements.

Table 3: Curriculum Plan for Full- and Part-Time Students

Semester	Full-Time (3 years)	Part-Time (4-5 years)
Fall 1	RSCH 8210 (Applied Research Methods)* EDCI 8180 (Critical Issues and Perspectives in Education) RSCH 8110 (Descriptive and Inferential Statistics)	RSCH 8210 (Applied Research Methods)* EDCI 8180 (Critical Issues and Perspectives in Education)
Spring 1	ADMN 8695 (Advanced Seminar in Teaching and Learning) RSCH 8120 (Advanced Statistics)* RSCH 8111 (Qualitative Research Methods)	ADMN 8695 (Advanced Seminar in Teaching and Learning) RSCH 8110 (Descriptive and Inferential Statistics)
Summer1	RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*	RSCH 8111 (Qualitative Research Methods)
Fall 2	RSCH 8220 (Advanced Measurement) RSCH 8121 (Qualitative Data Collection and Analysis) RSCH 8140 (Multivariate Statistics)	RSCH 8120 (Advanced Statistics)* RSCH 8121 (Qualitative Data Collection and Analysis)
Spring 2	RSCH 8196 (Program Evaluation Methods) Select Secondary Area Course (s)*	RSCH 8140 (Multivariate Statistics) RSCH 8220 (Advanced Measurement)
Summer2	RSCH 8410 or RSCH 8411 (Internship -Applied Research Project or teaching)*	RSCH 8410 or RSCH 8411 (Internship -Applied Research Project or teaching)*
Fall 3	RSCH 8150 (Structural Equation Modeling Methods) Select Secondary Area Course RSCH 8699 (Proposal Design)	RSCH 8196 (Program Evaluation Methods) Select Secondary Area Course
Spring 3	Select Secondary Area Course RSCH 8999 (Dissertation Research)	RSCH 8112 (Survey Research Methods) Select Secondary Area Course
Summer3		RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*
Fall 4		RSCH 8150 (Structural Equation Modeling Methods) Select Secondary Area Course
Spring 4		RSCH 8699 (Proposal Design)
Summer 4		RSCH 8999 (Dissertation Research)

Note. *Courses with Student Learning Outcome products.

IV.   Faculty

A.   (For undergraduate and master's programs) List the names, ranks and home department of faculty members who will be directly involved in the proposed program. The official roster forms approved by SACS may be submitted. For master's programs, state or attach the criteria that faculty must meet in order to be eligible to teach graduate level courses at your institution.

B.   (For doctoral programs) List the names, ranks, and home department of each faculty member who will be directly involved in the proposed program. The official roster forms approved by SACS may be submitted. Provide complete information on each faculty member's education, teaching and research experience, research funding, publications, and experience directing student research including the number of theses and dissertations directed.

The following table lists all the research faculty members who will be implementing the program. All faculty members are housed in the Department of Educational Leadership.

Table 4: Research Faculty in the Department of Educational Leadership (and one other)

Name and Rank	Academic Degree and Coursework	Other Qualifications
Lynn Ahlgrim-Delzell, Associate Professor	PhD (Educational Research, Measurement & Evaluation) University of North Carolina at Greensboro	20+ years of experience in educational research and evaluation Author or co-author of 24 peer-reviewed journal articles Served as Lead Co-PI on one federally funded research grant totaling $450,000. Served on 9 dissertation committees (chaired 1)
Bob Algozzine, Professor	PhD (Special Education Research) Pennsylvania State University	40+ years of experience in educational research and evaluation Author or co-author of over 300 peer-reviewed journal articles Served as PI, Co-PI, or external evaluator for federal- and state-funded projects totaling more than 50 million dollars

		Served on over 100 dissertation committees
Sandra Dika, Assistant Professor	PhD (Educational Research & Evaluation) Virginia Tech	15+ years of experience in educational research and evaluation Author or co-author of 16 peer-reviewed journal articles Served on 9 dissertation committees (chaired 1)
Claudia Flowers, Professor	PhD (Research, Measurement, & Evaluation) Georgia State University	25+ years of educational research experience Has taught all research courses Author or co-author of 95 peer-reviewed journal articles Has been PI, co-PI, or project researcher on seven federally funded research grants totaling over 9 million dollars Served on 87 dissertation committees (chaired 12)
Dawson Hancock	PhD (Language and Literacy Education – Research Cognate), Fordham University	21 years of educational research and evaluation experience Author or co-author of 58 peer-reviewed journal articles Has been PI or co-PI six federally funded research grants totaling over 1.8 million dollars Served on 28 dissertation committees (chaired 10)
Do-Hong Kim, Associate Professor	PhD (Educational Psychology & Research) University of South	10+ years of experience in educational research and

	Carolina	evaluation Author or co-author of 26 peer-reviewed journal articles Has been PI, co-PI, or measurement expert on externally funded research projects totaling 1.4 million dollars Served on 11 dissertation committees (chaired 1)
Rich Lambert, Professor	PhD (Research, Measurement, & Evaluation) Georgia State University	27 years of educational research experience Author or co-author of 2 books 71 peer-reviewed journal articles Has served as PI, Co-PI, or project statistician for 36 externally funded projects, 10 of which were federally funded projects, totaling over 19 million dollars in funding Served on 55 dissertation committees (chaired 7)
Jae Hoon Lim, Associate Professor	PhD (Elementary Education w/ Qualitative Research Certificate) University of Georgia	13 years of qualitative research/evaluation experience Author or co-author of 17 peer-reviewed journal articles Served on 44 (chaired 1) dissertation committees Qualitative evaluator for Federal grants (NSF, ONR)
Chuang Wang, Professor	PhD (Educational Research), The Ohio State University	25+ years of educational teaching and research experience

		Author or co-author of 62 peer-reviewed journal articles Has been PI or co-PI on two federally and four regionally funded research grants totaling over one million dollars Served on 55 dissertation committees (Chaired 8)
Anne Cash, Assistant Professor in Department of Elementary Education and Reading	PhD (Education Research), The University of Virginia	Third-year professor (first two at Johns Hopkins University), hired at UNC Charlotte to conduct teacher education and teacher quality research Significant publications on teacher quality

C.   Estimate the need for new faculty for the proposed program over the first four years. If the teaching responsibilities for the proposed program will be absorbed in part or in whole by the present faculty, explain how this will be done without weakening existing programs.

A new faculty member will be hired in the third year of the program when we anticipate having approximately 24 new students. The budget reflects this position; yet, we will likely move a line from a program with reduced enrollment. During the first three years, we do not expect to need additional faculty because few new courses are needed, and the courses currently taught are not at capacity. While the advising load may appear to increase for faculty because of the increase in students, this will not be the case. First, the current education researchers who will teach in this new program currently mentor students in other doctoral programs (e.g., the Ed.D. in Educational Leadership, the Ph.D. in Curriculum and Instruction). Second, there are many highly qualified faculty members in the College who do not yet mentor doctoral students.   These faculty members will gradually assume mentor/advisor roles in the other three College doctoral programs, while the education researchers will mentor students in the new proposed Ph.D. program. Faculty members in the other doctoral programs were asked about the impact of the new Ph.D., and all stated the new program would strengthen all doctoral programs in the College of Education (see letters from Drs. Browder and Lewis).

D.   Explain how the program will affect faculty activity, including course load, public service activity, and scholarly research.

There will not be an increase in faculty course load and while the public service activities and scholarly research will increase for those faculty members, all of the work will be more closely aligned with research faculty expertise.

V.   Library

A.   Provide a statement as to the adequacy of present library holdings for the proposed program to support the instructional and research needs of this program.

The College of Education already has four doctoral programs and the library has worked diligently to acquire materials to support these programs. Additionally, almost all of the course requirements for the Educational Evaluation and Research program area already offered by the College of Education, therefore, the library has taken strides to add materials to its collection that support these specific classes.

B.   State how the library will be improved to meet new program requirements for the next four years. The explanation should discuss the need for books, periodicals, reference material, primary source material, etc. What additional library support must be added to areas supporting the proposed program?

The library has an extensive collection development plan found here: http://library.uncc.edu/collectiondevelopment. Below are the main points of our collection development plan as it applies to the development of this PhD program:

- Collection development is the provision of access to information in all formats through acquisition, borrowing, electronic connections, document delivery, and consortial arrangements. Collection development planning/policy is the identification of institutional needs, obligations, and limitations for collection development and the establishment of priorities and practices relative to these factors.
  The Library encourages faculty participation in collection development. At present, each academic department assigns a member of its faculty to serve as library representative. This individual authorizes and maintains records of departmental library materials requests, encourages faculty review and participation in selection of approval titles, and coordinates the distribution of information to and from the Library.

The Education Librarian will work diligently with the professors in the new PhD program in Education Evaluation and Research to assure doctoral students have access to new, innovative and seminal works in the topics of educational research and assessment. Since many of the classes are required for the other doctoral program, the library already has an excellent core collection to support the program.

C.   Discuss the use of other institutional libraries.

Other than interlibrary loans, there are no plans to use other institutional libraries.

VI.   Facilities and Equipment

A.   Describe facilities available for the proposed program.

Facilities at the UNC Charlotte main campus will be used for the proposed program. There are ample classrooms and state-of-the art computer facilities, with significant investment in research software (e.g., SPSS, SAS, NVIVO, HLM, LISREL, Mplus, WINSTEPS, Atlas IT, and Hyper-research). In addition, graduate student meeting rooms are available. The budget includes additional software that will be needed for this program.

B.   Describe the effect of this new program on existing facilities and indicate whether they will be adequate, both at the commencement of the program and during the next decade.

The existing facilities and computer labs in the College of Education will be adequate to support the new program. The new program will not negatively affect existing program space as most classes meet in the evening.

C.   Describe information technology and services available for the proposed program.

Information and Technology Services (ITS) at UNC Charlotte is responsible for providing campus wide technology support and services for all colleges. ITS provides the following services: (a) promotes the use of information systems for enhancing teaching, learning, and research; (b) provides access to secure, quality, and timely information and online services; (c) provides support for campus-wide systems and technologies; (d) evaluates and recommends new technologies as to their capability to promote the University's mission and goals; and (e) uses all campus information technology resources effectively to provide agreed on services and solutions. The Center for Teaching and Learning provides support for all instructional technology.

D.   Describe the effect of this new program on existing information technology and services and indicate whether they will be adequate, both at the commencement of the program and during the next decade.
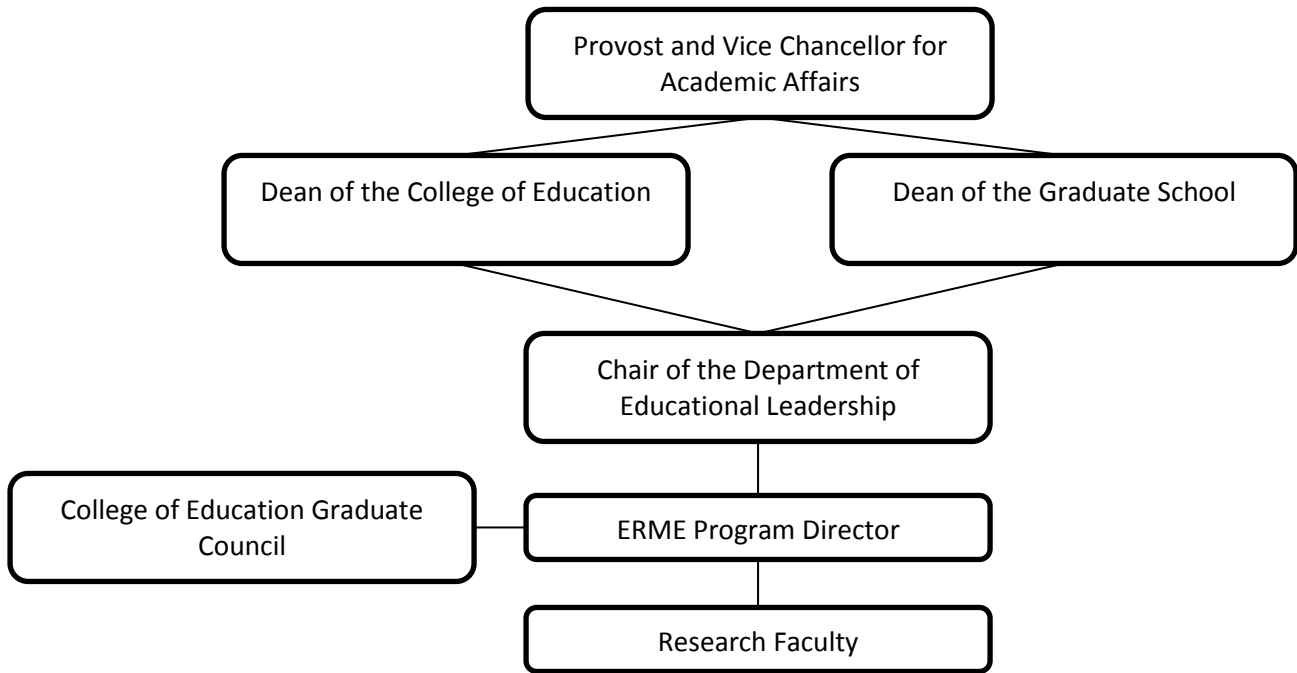
The services described above provide adequate support for the anticipated information technology needs for the new program for at least four years. The College of Education is committed to providing all students with state-of-the-art technology that advances learning. It is anticipated that funds will be needed to update all software and equipment, but this is part of the recurring cost built into the student technology fees. Software licenses were updated in 2015 and computer replacements are scheduled for all teaching labs in summer of 2015.

VII.   Administration

Describe how the proposed program will be administered, giving the responsibilities of each department, division, school, or college. Explain any inter-departmental or inter-unit administrative plans. Include an organizational chart showing the "location" of the proposed new program.

The administrative structure of the new program is illustrated in Figure 1. The program will be operated and centrally administered in the Educational Leadership Department in the College of Education, and lead by a program director. Each student will have a research faculty program advisor who will liaise with the program director.

Figure 1. Organizational Chart for the ERME Ph.D. Program

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        │  Provost and Vice Chancellor │
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VIII.   Accreditation and Licensure

A.   Where appropriate, describe how all licensure or professional accreditation standards will be met, including required practica, internships, and supervised clinical experiences.

The College of Education is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and the National Council for Accreditation of Teacher Education (NCATE), which has recently changed its name to the Council for Accreditation of Educator Preparation (CAEP). CAEP accreditation must be maintained on a seven-year cycle in which the College undergoes a rigorous internal and external review. The College must demonstrate its continued commitment to the four quality standards related to advanced educational programs. The new program will be included in future CAEP continuous improvement review.

No licensure or professional accreditation is required for this program. The educational research community has discussed professional accreditation, and as soon as these processes are implemented, the program will adhere to the accreditation procedures.

B.   Indicate the names of all accrediting agencies normally concerned with programs similar to the one proposed. Describe plans to request professional accreditation.

UNC Charlotte is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award baccalaureate, master's, and doctoral degrees. The College of Education is accredited by the CACREP and NCATE. There are no plans to request specialized accreditation for this program.

C.   If the new degree program meets the SACS definition for a substantive change, what campus actions need to be completed by what date in order to ensure that the substantive change is reported to SACS on time?

As required by the Policy Statement on Substantive Change for Accredited Institutions of the Commission on Colleges, the University of North Carolina at Charlotte (UNC Charlotte) is required to submit a letter of notification for new degree programs prior to implementation. Notification of this new degree program will be provided to SACS after approval by the University of North Carolina Board of Governors and prior to implementation. The College of Education has drafted the Student Learning Outcomes Plan that is required of all programs at UNC Charlotte. The draft will be submitted to the Office of Assessment and Accreditation, which will work with the Provost's Office to evaluate the quality of the plan. A detailed description of the Student Learning Outcomes Plan is included in Appendix D.

D.   If recipients of the proposed degree will require licensure to practice, explain how program curricula and title are aligned with requirements to "sit" for the licensure exam.

No licensure to practice is required.

IX.   Supporting Fields

Discuss the number and quality of lower-level and cognate programs for supporting the proposed degree program. Are other subject-matter fields at the proposing institution necessary or valuable in support of the proposed program? Is there needed improvement or expansion of these fields? To what extent will such improvement or expansion be necessary for the proposed program?

We do not anticipate any additional subject-matter fields or cognate programs to support the proposed program. We will capitalize on our existing doctoral programs and graduate school support to implement the program. After four years, an evaluation will be conducted to examine the efficacy of the curriculum. Potential changes in the curriculum may be identified at that time, but no significant changes are anticipated.

X.   Additional Information

Include any additional information deemed pertinent to the review of this new degree program proposal.

No additional information is deemed pertinent to the review.

XI.   Budget

A.   Complete and insert the Excel budget template provided showing incremental continuing and one-time costs required each year of the first four years of the program. Supplement the template with a budget narrative for each year.

The four year operating budget and narrative are presented in Appendix E.

B.   Based on the campus' estimate of available existing resources or expected non-state financial resources that will support the proposed program (e.g., federal support, private sources, tuition revenue, etc.), will the campus:

1.   Seek enrollment increase funds or other additional state appropriations (both one-time and recurring) to implement and sustain the proposed program? If so, please elaborate.

We are seeking recurring funds to sustain the program through enrollment increase funding. Recurring funds include (a) program director stipend, (b) graduate research assistants, (c) student supplies and materials, (d) student educational travel awards, (e) equipment for graduate research assistants, and (f) communication. In year 3, an additional research faculty member will be hired to accommodate the dissertation needs (which may replace a current line in another program).

2.   Require differential tuition supplements or program-specific fees? If so, please elaborate.

a.   State the amount of tuition differential or program-specific fees that will be requested.

There will no tuition differential or program-specific fees requested.

b.   Describe specifically how the campus will spend the revenues generated.

No tuition differential or program-specific revenues will be generated.

c.   Does the campus request the tuition differential or program-specific fees be approved by the Board of Governors prior to the next Tuition and Fee cycle?

N/A

C.   If enrollment increase funding, differential tuition, or other state appropriations noted in the budget templates are not forthcoming, can the program still be implemented and sustained and, if so, how will that be accomplished? Please elaborate and provide documentation of campus commitments where appropriate.

The College of Education's profile has evolved and the leadership is working towards a shift in degree programs and related priorities to address the changes in demand/opportunities. Specifically, having identified funding of the Ph.D. in Educational Research, Measurement, and Evaluation as a strategic priority, if enrollment increase funds are not available, the College of Education plans to reallocate present institutional resources as follows: Year 1 $97,572, Year 2 $99,048, Year 3 $212,043 (adding Associate Professor Position), Year 4 $215,387. Please also see additional letter of support from Provost Lorden.

XII.   Evaluation Plans

All new degree program proposals must include an evaluation plan which includes:

A.   Criteria to be used to evaluate the quality and effectiveness of the program, including academic program student learning outcomes.

B.   Measures (metrics) to be used to evaluate the program (include enrollments, number of graduates, and student success).

C.   The plan and schedule to evaluate the proposed new degree program prior to the completion of its fourth year of operation.

The UNC Charlotte Ph.D. in Education Research, Measurement, and Evaluation will be a state-of-the-art program based on the extensive recent scholarship on doctoral education, including the scholarship on the evaluation of doctoral programs. The work of educating doctoral students took a turn a decade ago when the Carnegie Foundation for the Advancement of Teaching published two books that set about change in many institutions of higher education, *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline* (Golde & Walker, Eds., 2006) and *The Formation of Scholars: Rethinking Doctoral* Education *in the Twenty-First Century* (Walker, Golde, Jones, Bueschel, & Hutchings, 2008). These were followed by numerous articles, critiques, and other books, including the many works specifically about doctoral education in the field of education (Golde, 2007; Neumann & Rodwell, 2009; Pallas, 2012), with examples from Ph.D. programs in educational research (Eisenhart & DeHaan, 2005; Leech, 2012; Page, 2001; Young, 2001). The program described in this document attended to the criticisms and recommendations raised in this work.

The evaluation of doctoral education forms a significant part of the recent literature on doctoral education (e.g., Borkowski, 2006). Evaluation and continuous improvement should go hand-in-hand and should include both regular internal and external reviews. Our Evaluation Plan for the proposed Ph.D. includes attention to the Criteria for Quality/Effectiveness, Metrics (Measures), and Plan/Schedule, as stated above. We will focus the evaluation on the *stated objectives* of the program as well as additional *process goals*. The evaluation will include *internal* assessments as well as *external* reviews.

The objectives of this Ph.D. program include:

1. Develop education researchers who pose significant questions, align research to relevant theory, use research methodologies that answer these questions, provide a coherent and explicit chain of reasoning, replicate and generalize across studies, and disclose findings to encourage professional scrutiny and critique;

2. Develop education researchers who have deep knowledge of evaluation theory and apply a variety of research approaches to objectively evaluate educational programs.

3. Provide a variety of research experiences for a diverse group of students to develop deep substantive and methodological knowledge and skills that promote research relevant to a range of educational issues and diverse learner groups; and

4. Prepare future education researchers who become leaders in K-12 education, higher education (universities and community colleges), policy, and community settings.

A table delineating the plan to meet the objectives as well as the process goals of the program follows:

Table 5: Program Objectives, Criteria for Quality and Effectiveness, Metrics, and Evaluation Plan

Program Objective Or Process Goals	Criteria for Quality and Effectiveness	Metrics (Measures)	Plan/Schedule: When, Where	Internal Or External
Objective #1: Develop education researchers to *design and conduct quality studies*	100% of students have good or outstanding *Research Proposals*, *Advanced Statistical Analysis Papers*, and *Research Papers* (See Appendix D for Student Learning Outcomes (SLO) document details)	-Portfolio/Rubrics -Student Grades -Acceptance of research paper on national programs or in journal publications	Annually: Details for schedule of assignments, portfolio submissions are in Appendix D (Student Learning Outcomes document)	Internal assessment for program quality and continuous improvement by professors and advisors
Objective #2: Develop education researchers who have *expertise in evaluation*	100% of students have good or outstanding *Research Proposals*, *Advanced Statistical Analysis Papers*, and *Research Papers as related to evaluation* (See Appendix D for Student Learning Outcomes (SLO) document details)	-Portfolio/Rubrics -Student Grades -Acceptance of research paper on national programs or in journal publications	Annually: Details for schedule of assignments, portfolio submissions are in Appendix D (Student Learning Outcomes document)	Internal assessment for continuous improvement by professors and advisors
Objective #3: Provide a variety of experiences for researchers to develop a *diverse set of skills and knowledge*	Two different research settings across the program which engage students in different research paradigms/contexts	Survey of students on experiences; analysis of students' internship experiences for variation and quality	Annually by Program Director and advisors	Internal assessment for program quality and immediate re-direction of experiences, as needed
Objective #4: Develop education researchers as *leaders in their organization and field who organize and direct research*	70% of students have outstanding *Research Proposals*, *Advanced Statistical Analysis Papers*, and *Research Papers* (See Appendix D for	-Portfolio/Rubrics -Student Grades -Acceptance of research paper on national programs or in journal publications	Annually: Details for schedule of assignments, portfolio submissions are in Appendix D (Student Learning	Internal assessment for program quality and continuous improvement by professors

activities and groups	Student Learning Outcomes (SLO) document details)		Outcomes document)	and advisors
Process goal: Students will be *satisfied* with their program	90% of students will rate program as very good or excellent and claim needs are being met	Course evaluations and student surveys	Annually	Internal assessment for program quality and continuous assessment by professors an Program Director
Process goal: Students will *complete* the program in 3 years (full time) or 4-5 years (part-time)	80% of students on course for timely program completion	Campus Institutional Research (IR)	For full time students: Annually beginning in spring 2019; for part-time, annually beginning in 2021	External to the College: Institutional Research data
Process goal: Graduates of the program will gain *employment* in education research field	90% of graduates who wish to will have positions in education research field	Annually surveys of students, beginning in 2019	Annually: Program Director	Internal survey for evaluation of program quality
Process goal: Employers of graduates will be satisfied with graduate's skills, leadership, and *impact* on the community	90% of the employers of the graduates will claim they are satisfied or very satisfied on all features of the program	Surveys of employers to focus on: 1) skill level of graduate, 2) impact the graduate's work has on the agency and community, and 3) gaps the graduate might have for the particular positions	Advisory board	External review for evaluation
Process goal: The program will maintain high quality	The quality of the program will remain intact (objectives, courses, research experiences, products, evaluation plan)	External advisory board review and report External national-level review report	Advisory board and external auditors	External review for evaluation

References

Borkowski, N.A. (2006). *The assessment of doctoral education: Emerging criteria and new models for improving outcomes.* Sterling, Virginia: Stylus Publishing.

Eisenhart, M. & DeHaan, R.L. (2005). Doctoral preparation of scientifically-based education researchers. *Educational Researcher,* 34, (pp. 3-13).

Golde, C. (2007). Signature pedagogies in doctoral education: Are they adaptable for the preparation of education researchers? *Educational Researcher,* 36, (pp. 344-351).

Leech, L.N. (2012). Educating knowledgeable and skilled researchers in doctoral programs in schools of education: a new model. *International Journal of Doctoral Studies,* 7, (pp. 19-37).

Neumann, R. & Rodwell, J. (2009). The 'invisible' part-time research students: a case study of satisfaction and completion. *Studies in Higher Education,* 34, (pp. 55-68).

Page, R. (2001). Reshaping graduate preparation in educational research methods: One school's experience. *Educational Researcher,* 30, (pp. 19-25).

Pallas, A.M. (2012). Preparing education doctoral students for epistemological diversity. *Educational Researcher,* 30, (pp. 6-11).

Young, L.T. (2001). Border crossings and other journeys: Re-envisioning the doctoral preparation of education researchers. *Educational Researcher,* 30, (pp. 3-5).

XIII.   Reporting Requirements

Institutions will be expected to report on new program productivity as a part of the biennial low productivity program review process.

XIV.   Attachments

Attach the final approved Appendix A as the first attachment following this document.

This proposal to establish a new degree program has been reviewed and approved by the appropriate campus committees and authorities.

Chancellor: _____**Date**:_____

APPENDIX A
UNIVERSITY OF NORTH CAROLINA

REQUEST FOR AUTHORIZATION TO PLAN
A NEW DEGREE PROGRAM

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for an institution to make the case for need and demand and for its ability to offer a quality program. The notification and planning activity to follow do not guarantee that authorization to establish will be granted.

Date: 1-15-2015

Constituent Institution: University of North Carolina at Charlotte

CIP Discipline Specialty Title: Educational Evaluation and Research

CIP Discipline Specialty Number: 13.0601   Level: D X

Exact Title of the Proposed Program: Educational Research, Measurement, and Evaluation

Exact Degree Abbreviation (e.g. B.S., B.A., M.A., M.S., Ed.D., Ph.D.): Ph.D.

Does the proposed program constitute a substantive change as defined by SACS?   Yes X No

> The current SACS Substantive Change Policy Statement may be viewed at:
> *http://www.sacscoc.org/pdf/081705/Substantive%20Change%20policy.pdf*

If yes, please briefly explain.

As required by the Policy Statement on Substantive Change for Accredited Institutions of the Commission on Colleges, the University of North Carolina at Charlotte (UNC Charlotte) is required to submit a letter of notification for new degree programs prior to implementation. Notification of this new degree program will be provided to SACS after approval by the University of North Carolina Board of Governors and prior to implementation.

Proposed date to establish degree: December 2015 (to admit students for Fall 2016)

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[1]This Appendix A supersedes the preceding Appendix A entitled, "Notification of Intent to Plan a New Baccalaureate or Master's Program," adopted May 6, 2009.

1. **Describe the proposed new degree program. The description should include:**

   a. **Brief description of the program and a statement of educational objectives**

The proposed Ph.D. in Educational Research, Measurement, and Evaluation will prepare professionals who seek advanced research, statistical, and evaluation skills for positions in a wide variety of institutions including higher education, K-12 school districts, for-profit companies, nonprofit agencies, community colleges, think tanks, government organizations, and other institutions concerned with solving problems in education. The Ph.D. program will be housed in the Department of Educational Leadership (EDLD) at UNC Charlotte.

The UNC Charlotte Ph.D. in Educational Research, Measurement, and Evaluation will be a state-of-the-art program that thoughtfully incorporates best practices emerging from the recent scholarship on doctoral education. The work of educating doctoral students took a turn a decade ago when the Carnegie Foundation for the Advancement of Teaching published two books that set about change in many institutions of higher education, *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline* (Golde & Walker, Eds., 2006) and *The Formation of Scholars: Rethinking Doctoral Education in the Twenty-First Century* (Walker, Golde, Jones, Bueschel, & Hutchings, 2008). These were followed by numerous articles, critiques, and other books, including the many works by Susan K. Gardner, such as *On Becoming a Scholar: Socialization and Development in Doctoral Education* (2010). This scholarship came about in response to criticism of Ph.D. programs in all disciplines. Critics said many graduates were ill prepared for work after the doctorate; comprehensive examinations tended to be useless exercises; dissertations did not answer important questions; and the variation in standards across professors, programs, departments, and universities was vast (Golde & Walker, 2006; Paglis, Green, & Bauer, 2006; Walker, Golde, Jones, Bueschel, & Hutchins, 2008). In many cases, students were dependent on professors for the curriculum and instruction rather than learning to be independent learners. Only some graduates had been mentored in apprenticeship environments and only a few had the opportunity to jointly (with other students and professors) grapple with texts (Deem & Brehony, 2000; Golde & Dore, 2001).

Recommendations and stories of reform addressed the critique of doctoral education. Some scholars suggested that faculty see the doctoral program *through the eyes of students* (Nyquist, 2002; Nyquist & Woodford, 2000), that everyone in the department jointly set assessment goals and measures and decide where in the program each outcome is addressed (Borkowski, 2006), that socialization of doctoral students into an intellectual community cannot be taken for granted (Austin, 2002; Austin & McDaniels, 2006; Gardner, 2008; 2009; 2010; Gardner & Mendoza, 2010), that regular discussions of epistemology among students and faculty should be the norm (Pallis, 2012), and that programs should provide opportunities to practice key aspects of what a scholar does, such as posing worthwhile research questions (Richardson, 2007). Indeed, students should be *explicitly* taught how to ask worthwhile research questions and how to make an argument. The mentoring of doctoral students through the honing of relationships is viewed as paramount for any quality doctoral program (Baker & Lattuca, 2010; Barnes & Austin, 2009; Johnson, 2002). Relationships among faculty and students must be generous and respectful (Fedynich & Bain, 2010). Doctoral programs that emerged recently as outstanding have their own "signature pedagogies" by which they are known (Golde, 2007). Excellent

programs have a strong plan in place for part-time students to have the same socialization opportunities as the full-time students (Neumann & Rodwell, 2009).

The recent scholarship on doctoral education specific to colleges and schools of education focuses in part on how to best prepare effective education researchers. In response to much criticism of educational research, scholars have called for change in how researchers are prepared (Eisenhart & DeHaan, 2005; Leech, 2010; Page, 2001; Young, 2001). Many of the changes recommended reflect the reform of doctoral education in general. Education researchers must be trained to ask important questions and to make strong arguments. They should work on data that reflect the complexity of the educational enterprise and publish studies of importance. They should be mentored and cultivated as scholars. In addition, Ph.D. students in education should be trained to conduct large experimental studies that have the potential to affect policy (Eisenhart & DeHaan, 2005).

The proposed UNC Charlotte Ph.D. program will draw from this literature on doctoral education -- with specific attention to the education of researchers – in that it will be designed and implemented as a high-quality, state-of-the-art model program. For instance, the faculty who teach in the Ph.D. in Educational Research, Measurement, and Evaluation will:
- Communicate the purpose of the program to students from Day 1 of enrollment
- Design a signature pedagogy that distinguishes the program from others in the region and state
- Communicate to students in a consistent and clear manner from recruitment through orientation and progression through the program
- Cultivate a scholarly culture among faculty and students
- Provide mentoring strategies and activities that meet the needs of all students (e.g., full- and part-time, students struggling to finish, or those excelling in all areas)
- Develop assessment standards and measures collectively; from the beginning, students will participate in designing student learning outcomes and assessments of their student progress
- Design interdisciplinary experiences through coursework and field-based apprenticeship
- Ensure all students have meaningful experiences that result in the connection of theory and practice in advancing the field
- Create culminating exams and dissertations to examine important questions in the education field

The students in the program will:
- Take responsibility for their learning in coursework, internships, and dissertation research
- Work on research studies that answer important questions in the field
- Regularly meet with multiple mentors
- Collaborate with faculty, other students, and agency/community partners on research and projects
- Become engaged with the academic community through professional publications and presentations

The College of Education at UNC Charlotte is positioned to offer an exceptional program that includes these features. The College is listed by *US News and World Report* as one of America's best graduate schools in education and has moved in their rankings from 103 in 2013 to 86 in 2014. The College has also been selected by the American Educational Research Association for its inclusion in a national study of research doctorates in education and by the Carnegie Project for the Education Doctorate for its

inclusion in the redesign of the Ed.D. The faculty in UNC Charlotte's College of Education have the credentials and expertise to implement this new program. (Details on faculty expertise follow in another section.) The need for more educational researchers prepared in programs like this one is known nationally. The deans of colleges and schools of education from peer institutions have written in support of our program and were asked to specifically address whether the proposal: 1) is well-conceived and provides a solid curricular foundation to future educational researchers, 2) provides the opportunity for intellectual and programmatic collaboration across the Charlotte region, and 3) addresses a compelling need within the field. Attached are letters from college deans at University of Louisville, University of Maryland College Park, Kent State University, Auburn University, University of Alabama Birmingham, and George Mason University, institutions that both represent urban areas and who are addressing the needs of local school systems, as well as a letter from the University of South Carolina, our closest competitor here in the south. Further, a letter from Dr. David Imig, University of Maryland, and Chair of the Board of Directors of the Carnegie Project for the Education Doctorate (CPED), is included with this submission. His letter strongly states that the proposed program should be a Ph.D., not an Ed.D.

The mission statement for the proposed program is as follows:

The Ph.D. in Educational Research, Measurement, and Evaluation prepares professionals to frame sound research questions in the field of education, to conduct rigorous systematic inquiry that addresses educational problems, and to disseminate research findings that address pressing educational issues and problems.

The educational objectives of the proposed doctoral program are to:
- Develop expert education researchers who conduct research that that influences educational practices and policies, and
- Prepare future education researchers who become leaders in higher education, policy, and community settings.

Students accepted into the program will have foundational knowledge in quantitative and qualitative methodologies. They will also have some practical experience in an educational setting, such as schools (e.g., as teachers or administrators) or non-profit agencies (e.g., as tutors, advocates, entrepreneurs, policy-makers) in order to have the deep, contextual knowledge necessary for understanding problems in education issues that need study. Admission requirements will ensure that potential students have foundational understanding of research methodology and educational settings. The sections below describe the proposed requirements in more detail.

A planning committee drawn from education researchers in the Department of Educational Leadership at UNC Charlotte, at least two current and two former students with interest and experience in educational research and evaluation, and at least two external stakeholders will be charged with the full development of the program. The following details of the program are a beginning to this plan.

Admission Requirements. Applicants must meet the following criteria for admission: (a) a master's degree in education or related field, such as statistics, with a cumulative GPA of 3.5 or higher (on a 4.0 scale); (b) a satisfactory score on the GRE or MAT that indicates strong analytical and writing skills; (c) a high level of professionalism and potential for success in the program as indicated in letters of reference; (d) strong writing skills as shown in a writing sample; (e) clear objectives related to obtaining

a Ph.D. as evidenced in an interview; (f) appropriate interpersonal skills as determined in an interview with program faculty; and (g) experience in an educational setting, which may include government or non-profit agencies with education missions.

Course Requirements.
Core Courses (15 credit hours)*
RSCH 8210 (Applied Research Methods)
RSCH 8110 (Descriptive and Inferential Statistics)
RSCH 8111 (Qualitative Research Methods)
EDCI 8180 (Critical Issues and Perspectives in Education)
PPOL 8687 (Educational Policy Studies, K-12 Schools)

Advanced Content (12 credit hours)*
RSCH 8220 (Advanced Measurement)
RSCH 8120 (Advanced Statistics)
RSCH 8140 (Multivariate Statistics)
RSCH 8121 (Qualitative Data Collection and Analysis)

Upon completion of the Core and Advanced Content courses, students will be prohibited from taking additional coursework until successfully passing meaningful qualifying examinations. Students will have only two opportunities to pass these qualifying examinations.

Research Methods (select 9 credit hours)*
RSCH 8196 (Program Evaluation Methods)
RSCH 8112 (Survey Research Methods)
RSCH 8130 (Presentation and Computer Analysis of Data)
RSCH 8113 (Single-Case Research)
RSCH 8150 (Structural Equation Modeling Methods)
RSCH 8230 (Classical and Modern Test Theory)

Secondary Area of Concentration (9 credit hours)
Students will be required to complete a secondary concentration in a cognate area of their choice, with the approval of their doctoral advisor/committee. Cognate areas may include: (a) educational leadership; (b) curriculum and instruction; (c) statistics; (d) counseling; (e) early childhood; (f) special education; and (g) instructional systems technology.

Internship (6 credit hours)*
RSCH 8410 (Applied Pre-Dissertation Research)

Proposal Design (3 credit hours)*
RSCH 8699 (Proposal Design)

Dissertation (a minimum of 6 credit hours)*
RSCH 8999 (Dissertation Research)

TOTAL HOURS FOR PROGRAM: 60

*The courses listed above are currently offered at UNC Charlotte for a variety of doctoral programs. This new proposed program will not require new courses or faculty to teach them. To ensure a coherent, rigorous program, students and external experts will be part of the planning committee when the Department develops Appendix C. Still, the primary impact of this new program is that it will increase enrollment in current courses.

The proposed new program will have a strong link to the existing Ph.D. programs in the College of Education at UNC Charlotte. As shown in Table 1 below, the research methodology courses that largely make up the new proposed program are already offered as required or elective courses for the other four doctoral programs in the College: 1) Educational Leadership, 2) Special Education, 3) Counseling, and 4) Curriculum and Instruction. All doctoral programs require core research courses, but allow a number of elective courses to meet students' needs for content and to help them successfully complete the dissertation. The proposed Ph.D. program will use this existing research structure. In the table, we have indicated which courses are required and which serve as electives for each of the four existing programs. The new program will only add students to existing classes, making all five programs more efficient.

Table 1: Required (R) and Elective (E) Courses for Current Doctoral Programs at UNC Charlotte

Current Course Offerings/Research Methodology Courses for Proposed Ph.D. in ERME	Ed.D. in Educational Leadership	Ph.D. in Special Education	Ph.D. in Counseling	Ph.D. in Curriculum and Instruction
Core Courses (15 Credit Hours-Required)				
RSCH 8210 (Applied Research Methods)	R	E	R	R
RSCH 8110 (Descriptive and Inferential Statistics)	R	R	R	R
RSCH 8111 (Qualitative Research Methods)	E	E	R	R
EDCI 8180 (Critical Issues and Perspectives in Education)	E	E	E	R
PPOL 8687 (Educational Policy Studies, K-12 Schools)	E	E	E	E
Advanced Content (12 Credit Hours-Required)				
RSCH 8220 (Advanced Measurement)	E	E	E	E
RSCH 8120 (Advanced Statistics)	R	R	R	R
RSCH 8140 (Multivariate Statistics)	E	E	R	E
RSCH 8121 (Qualitative Data Collection and Analysis)	E	E	E	R
Research Methods (Select 9 Credit Hours for Electives)				
RSCH 8196 (Program Evaluation Methods)	E	E	E	E
RSCH 8112 (Survey Research Methods)	E	E	E	E
RSCH 8130 (Presentation and	E	E	E	E

Computer Analysis of Data)				
RSCH 8113 (Single-Case Research)	E	R	E	E
RSCH 8150 (Structural Equation Modeling Methods)	E	E	E	E
RSCH 8230 (Classical and Modern Test Theory)	E	E	E	E

b. The relationship of the proposed new program to the institutional mission

UNC Charlotte is North Carolina's urban research university. It leverages its location in the state's largest city to offer internationally competitive programs of research and creative activity; exemplary undergraduate, graduate, and professional programs; and focused community engagement initiatives. UNC Charlotte maintains a particular commitment to addressing the cultural, economic, educational, environmental, health, and social needs of the greater Charlotte region, which includes Mecklenburg County and the surrounding counties of Cabarrus, Cleveland, Gaston, Lincoln, Stanly, and Union. One of UNC Charlotte's goals is to stimulate increased research, creative activities, and community engagement with a focus on programs and partnerships that address the major needs of the Charlotte region.

UNC's Strategic Directions 2013-2018, *Our Time Our Future: The UNC Compact with North Carolina*, is explicitly focused on improving educational outcomes for students in all disciplines.   As the criticism of higher education mounts, it becomes imperative for all disciplinary units within colleges and universities to prove their worth with data, using the most sophisticated research tools and skills available. Research skills and evaluation processes are useful to colleges and universities and educational agencies of all kinds. Educational evaluators with strong quantitative and qualitative skills are the individuals poised to conduct the much needed research that links programs to outcomes. UNC Charlotte is committed to the proposed Ph.D. in Educational Research, Measurement, and Evaluation in part because it perceives the need for units on campuses to have access to researchers with these particular skills, who are prepared to rigorously evaluate educational programs.

c. The relationship of the proposed new program to existing programs at the institution and to the institution's strategic plan

The relationship of the proposed new program to other existing programs at UNC Charlotte is shown in Figure 1. First, there is no existing doctoral program on the UNC Charlotte campus that focuses on the research and evaluation skills this proposed program will provide. The new program will have direct links with other programs within the College of Education and the University's institutes and centers focused on social science research.

The proposed Ph.D. program is an exemplar of the mission and values of the larger University. The University's strategic plan clearly states the goal for "accessible and affordable quality education that equips students with intellectual and professional skills" (p. 3). Because this program clearly aligns with the University's goals, there is much support for this program across the University.
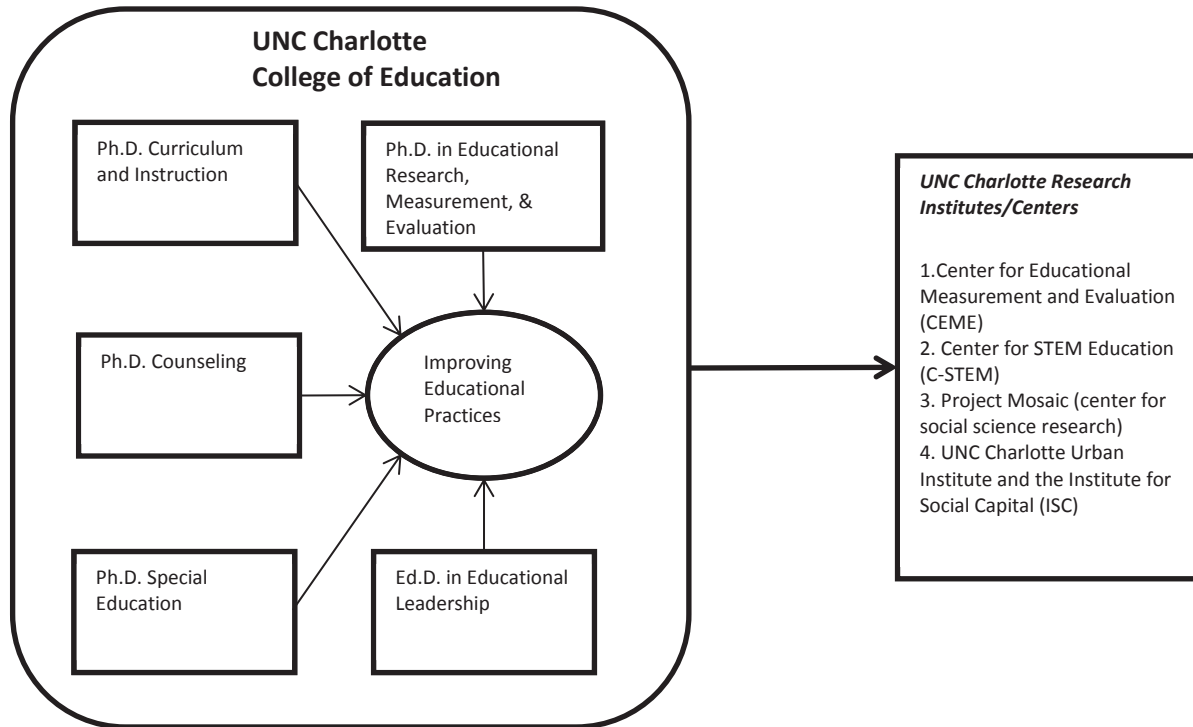
The relationship of the proposed program to existing programs at UNC Charlotte will occur within courses required or offered in all programs and through the University's institutes and centers that focus on research. These centers and institutes will serve as practicum sites for students. Specifically, The Center for Educational Measurement and Evaluation (CEME) (http://ceme.uncc.edu/) is an organization

where practitioners, policy makers, and UNC Charlotte faculty and students engage in projects that lead to evidence-based practice and improved educational outcomes for children and families in the region. The Center for Science, Technology, Engineering, and Mathematics (STEM) Education provides resources to improve K-12 education in the surrounding schools in North Carolina (http://cstem.uncc.edu/). The new Project Mosaic (https://projectmosaic.uncc.edu/) provides a forum for social science researchers from three colleges on campus (College of Education, College of Health and Human Services, College of Liberal Arts and Sciences) to increase the interaction among faculty and students on research tied to UNC Charlotte's urban mission. The UNC Charlotte Urban Institute (http://ui.uncc.edu/) brings together leading experts in government, academia and the community to provide the highest quality research, policy recommendations and analysis on a range of public policy issues.   (See letters of support from Dr. Richard Lambert of CEME, Dr. David Pugalee of STEM, Dr. Jean-Claude Thill of Project Mosaic, and UNC Charlotte Vice Chancellor for Research and Economic Development Dr. Robert Wilhelm.)

Perhaps most importantly for the proposed program, the Institute for Social Capital at UNC Charlotte (http://ui.uncc.edu/programs/isc) has one of the most extensive integrated data systems in the nation and the only one in North Carolina that cuts across institutional silos. Directed by a former teacher with a Ph.D. in education, the organization houses all data on students from Charlotte Mecklenburg Schools as well as many government and nonprofit community agencies in the greater Charlotte region, including the Mecklenburg County Health Department, the Charlotte Housing Authority, Area Mental Health, Early Childhood SMART Start, Communities in Schools, and A Child's Place, among others. This fully integrated data system allows for interdisciplinary studies linking education to other social variables so essential today for answering the most pressing education-related questions with which all urban communities in the nation are struggling. For example, one current interdisciplinary study brings together researchers in criminal justice and education to examine the educational trajectory (school success) of all incarcerated citizens in the area. This research seeks to gain knowledge about the role of education in the lives of the incarcerated that requires knowledge of advanced statistics and educational programs, as well as advanced knowledge of criminal justice. Students in this proposed Ph.D. program would have opportunity to work on interdisciplinary teams like this one, providing them with research opportunities and hands-on experience with sophisticated data systems.   The research questions asked by students in this Ph.D. program will be relevant and generalizable to national and international audiences. (See letter of support from Dr. Amy Hawn Nelson, Director of the Institute for Social Capital). The Dean of the College of Education sits on the Scholars Advisory Council of the Institute and two research faculty members from the Department of Educational Leadership at UNC Charlotte serve on the Data and Research Oversight Committee (DAROC) of the Institute.

Through hands-on work on educational problems and in educational settings, all students in the program will apprentice in ways described by the scholarly literature on doctoral education. Students will have multiple options and opportunities to work collaboratively with faculty members in designing studies, analyzing data, and writing papers. Options and opportunities will be provided to all students regardless of enrollment status (full- or part-time).

Figure 1: Relationship between the Ph.D. in Educational Research, Measurement, and Evaluation and Other Entities

UNC Charlotte College of Education

- Ph.D. Curriculum and Instruction
- Ph.D. in Educational Research, Measurement, & Evaluation
- Ph.D. Counseling
- Ph.D. Special Education
- Ed.D. in Educational Leadership
- Improving Educational Practices

UNC Charlotte Research Institutes/Centers

1. Center for Educational Measurement and Evaluation (CEME)
2. Center for STEM Education (C-STEM)
3. Project Mosaic (center for social science research)
4. UNC Charlotte Urban Institute and the Institute for Social Capital (ISC)

The program will offer exciting opportunities for research faculty to supervise students pursuing important questions that can influence the field of education. Faculty in the Department of Educational Leadership gave unanimous support to the proposal. In addition, all research faculty members, along with community and school partners, have volunteered to participate in designing the details of the program. As stated, we will include students as well.

   d. **Special features or conditions that make the institution a desirable, unique, or cost effective place to initiate such a degree program**

In December 2014, Charlotte was named the 2nd fastest growing city in the nation. It is currently the 17th largest city and has recently reached the one million mark for population, with the greater metropolitan area reporting more than 2 million. This recent, rapid growth is related to the city's designation as a major U.S. financial center and the second largest banking city in the U.S. after New York City. With the city's growth comes the region's growth, as new communities crop up outside the city's center.

As the population of the western region of North Carolina continues to grow, so too does the need for a Ph.D. program in educational research, measurement, and evaluation. The educational needs in the area have grown, and with it, the demand for such a program. School districts have expanded and the number of for-profit and non-profit agencies interested in raising academic achievement and skills has increased. Each of these institutions needs educational researchers and evaluators to monitor efforts and results; indeed, many see the analysis of their data as an unfulfilled need. (See letters of support from Dr. Susan Campbell of the Council for Children's Rights, Natalie English of the Charlotte Chamber, Dr. William Anderson of MeckEd, and Dr. Lisa Howley of the Carolina Health Care System, as examples of agencies in support of the proposal.)

UNC Charlotte's College of Education seeks to fill this void. It is a unique, desirable, and cost effective place to initiate this program because the region of western North Carolina, particularly the greater Charlotte area, has no institution producing the type of skilled researchers we propose to graduate. Further, while we accept candidates into the program as full-time students, we also seek to accommodate working graduate students by offering the program in the evenings with up to 50% of courses in a hybrid format. The decision to provide access through online tools is intended to provide the flexibility to reach a population of prospective students not easily served by our sister institutions. Hybrid courses combine online and on-campus, face-to-face time. This will ensure that students are regionally-based and that relationships among students and faculty flourish.

Further, the College of Education and the University of North Carolina at Charlotte have strong cooperative relationships with all school districts in the Southwest Educational Alliance, including the second largest school system in North Carolina, Charlotte-Mecklenburg (CMS). These diverse school districts include schools with high needs (e.g., low performing schools, students with disabilities, students with limited English proficiency, etc.) and, along with our centers and institutes such as the Institute for Social Capital mentioned above, these districts will provide opportunities to immerse doctoral students and faculty in the authentic problems that schools across the nation face today. Both UNC Charlotte and the school systems stand to gain from the interactions, with each providing something that both need: quality research that is inspired by actual problems and offers solutions to these problems and well-trained evaluators and researchers to work in the districts. (See letters of support and intended collaboration from Dr. Ric Vandett, Director of the Southwest Education Alliance, Dr. Bruce Boyles, Superintendent, Cleveland County Schools; Dr. Pam Cain, Superintendent, Kannapolis City Schools; Dr. Mark Edwards, Superintendent, Mooresville Grade School District; Dr. Mary Ellis, Superintendent, Union County Schools; Dr. Terry Griffin, Superintendent, Stanly County Schools; Heath Morrison, former Superintendent, Charlotte Mecklenburg schools; Ann Clark, Interim Superintendent, Charlotte Mecklenburg Schools; and Dr. Barry Shepherd, Superintendent, Cabarrus County Schools. Ann Clark, Interim Superintendent, Charlotte Mecklenburg Schools, was instrumental in establishing the strong partnership between the college and CMS around this program .)

Charlotte is also home to Central Piedmont Community College (CPCC), an institution with a strong, nationally known Institutional Research office, headed by a UNC Charlotte graduate. The CPCC Institutional Research office helps to create and develop new institutional research offices in community colleges staffed by researchers with degrees such as the one proposed here. (See letter of support from Dr. Terri Manning at CPCC.) These offices are in need of graduates with the education we propose to offer.

Finally, as stated earlier in this proposal, the program will be cost effective. Over the last decade, the College of Education has grown its education research faculty to an unprecedented level of quantity and quality, and we continue to hire faculty with research expertise. UNC Charlotte has an expert faculty with the capacity to offer this program and to produce more of the high-level researchers needed to address the rapid changes related to education in the nation. Details on faculty capacity follow.

2. **Provide documentation of student demand and evidence of the proposed program's responsiveness to the needs of the region, state, or nation.**

In December 2013, UNC Charlotte commissioned Hanover Research to conduct an assessment of the market for the proposed Ph.D. program in Educational Research, Measurement, and Evaluation (ERME). Hanover Research reviewed the student demand and distinctiveness of the proposed program by comparing it to similar programs in the state and region. In this section, we first describe the results of their assessment. Then, we provide additional rationale for the current and future demand of the program. The full Hanover Report is available upon request.

First, using data obtained from the National Center for Education Statistics (NCES) and the Integrated Postsecondary Education Data Systems (IPEDS), Hanover Research was able to estimate the potential student demand for Ph.D. programs in ERME based on growth in current programs. Hanover found a trend of modest growth overall of students completing ERME-like programs in the state of North Carolina. When examining the labor market, they also found that "data indicate that employment in ERME-related occupations will grow across the region" (p. 10) and "ERME-related occupations will grow in the state of North Carolina" (p. 18). Growth in the labor market combined with modest growth in graduates of similar programs indicate a need for a new program in a region of the state with a large growing city that still has no program of its kind.

We also believe there is additional evidence for the need for this Ph.D. program not captured by Hanover. While institutions of higher education face scrutiny, colleges and schools of education are a particular focus. If K-12 schools appear to "fail" students, critics look to those who prepared the teachers and school administrators as culprits, and they should, as one part of the problem of low student achievement. The national field of teacher preparation has responded to this criticism by developing a higher set of standards, which includes sophisticated evaluation of programs that link teachers and school administrators to K-12 student outcomes. Specifically, Standard Four of the new national accrediting body, the Council for Accreditation of Educator Preparation (CAEP) reads:

> The provider demonstrates the impact of its completers on P-12 student learning and development, classroom instruction, and schools, and the satisfaction of its completers with the relevance and effectiveness of their preparation.

Four indicators specify how impact can be measured. These include satisfaction of completers, satisfaction of employers, indicators of teaching effectiveness through validated observation instruments, and "Impact on P-12 Student Learning and Development." The latter indicator will be the most challenging for all programs and will be required for the "gold standard" accreditation. It reads:

> The provider documents, using multiple measures, that program completers contribute to an expected level of student-learning growth. Multiple measures shall include all available growth measures (including value-added measures, student-growth percentiles, and student learning and development objectives) required by the state for its teachers and available to educator preparation providers, other state-supported P-12 impact measures, and any other measures employed by the provider.

To meet these new standards, teacher preparation programs will need highly qualified researchers in education who have the knowledge and skills to evaluate their own programs in ways that will establish valid grounds for actions to improve the educational experiences of all students. We believe that this future need, not recognized yet by Hanover Research or many others, will create an additional demand on programs such as the Ph.D.in Educational Research, Measurement, and Evaluation as institutions that

prepare teachers seek national accreditation. (See letters of support from local educator preparation institutions beyond UNC Charlotte's College of Education, including a letter from Dr. Kristie L. Foley from Davidson College, a letter from Dr. Jeremiah B. Wills from Queens University, and a letter from Scott Gartlan, Director of the Charlotte Teachers Institute.)

We also conducted an additional assessment of the positions for which future graduates of the Ph.D. in Educational Research, Measurement, and Evaluation will be eligible. There are at least 150 of these positions in North Carolina, with an estimated 10% yearly turnover rate. The need for such skilled researchers in the western region of North Carolina and locally is great. For example, the Charlotte-Mecklenburg Schools Office of Accountability employs just such persons as it provides schools, administrative leaders and key stakeholders with research to facilitate data-driven decisions for improving student performance through its Center for Research and Evaluation and Center for Information Visualization and Innovation, as well as its Data Tools, State Testing, Accountability Data Processing, and Grant Development teams. (See letters of support from Dr. Jason Schoeneberger, Senior Research Analyst, Charlotte Mecklenburg Schools and Dr. Drew Maerz, Director of Testing and Accountability, Asheboro City Schools.) The following list provides other examples of positions in the state that require degrees such as the one we propose that were open in spring 2013. The numbers of positions has been updated since the previous version of this proposal and are estimates:

- NC Department of Public Instruction
    - Accountability Services Division (*N*=2 positions)
    - Test Development (*N*=1 positions)
    - Regional Accountability Coordinators (N=2 positions)
- Institutions of Higher Education (non-faculty positions, from websites)
    - Institutional Effectiveness (or Research) in North Carolina Community Colleges (*N*=2 positions) from http://www.nccommunitycolleges.edu/jobs
    - Institutional Research in North Carolina University Systems (*N*=27, directors and researchers) from https://uncjobs.northcarolina.edu/applicants/jsp/shared/search/SearchResults_css.jsp)
    - Independent Colleges and Universities (*N*=14; http://www.ncicu.org/member.html)
    - Private Research Groups in North Carolina (*N*=50; e.g., Center for Research on Education, Praxis, Metametrix, and others)
- Local and Regional Public and Private School Systems
    - Testing coordinators for North Carolina Public School Local Educational Agencies (*N*=156 positions)
    - Educational researchers and program evaluators for North Carolina Public School Local Educational Agencies (*N*=10, in larger districts)
    - Charlotte-Mecklenburg Schools Office of Accountability (*N*=3)

3. **List all other public and private institutions of higher education in North Carolina currently operating programs similar to the proposed new degree program. Identify opportunities for collaboration with institutions offering related degrees and discuss what steps have been or will be taken to actively pursue those opportunities where appropriate and advantageous.**

The Hanover Research report indicates there are three institutions in North Carolina that operate similar Ph.D. programs:

- University of North Carolina at Chapel Hill (UNC Chapel Hill)– Educational Psychology, Measurement, and Evaluation (EPME) Quantitative Research Methods Emphasis Area (170 miles)
- University of North Carolina at Greensboro (UNCG)– Educational Research Methodology (95 miles)
- North Carolina State University (NCSU)– Education Research and Policy Analysis (180 miles)

These three existing programs at UNCG, NCSU, and UNC have excellent reputations with nationally known scholars, and they have a history of producing professionals that have made an impact in North Carolina, nationally, and internationally.

According to UNC-GA Institutional Research, enrollments for the UNC Greensboro and NC State programs are healthy and growing. (Chapel Hill's program is a concentration embedded in a larger Ph.D. program, and we do not have data by concentration). NC State's enrollment has tripled in the last five years.

Table 2: Enrollment Data for Similar Programs at NC State and UNC Greensboro

	Fall 07	Spr 08	Fall 08	Spr 09	Fall 09	Spr 10	Fall 10	Spr 11	Fall 11	Spr 12	Fall 12	Spr 13	Fall 13
130601 NC State Educational Evaluation and Research	30	29	32	32	33	31	47	46	69	68	87	82	105
130604 UNCG Educational Assessment, Testing, and Measurement	19	17	16	15	19	20	19	18	29	26	32	30	28

The goal at UNC Charlotte is to have an excellent program that recruits primarily from the Charlotte region. Because the program will require at least 50% face-to-face courses and the other 50% in hybrid/online courses, we will be well positioned to serve this region and we know the need for the program in the region is great. (See letter from Jason Schoeneberger and Scott Gartlan as examples of students who sought alternatives to this degree program but wished for this proposed program; Jason chose to go to University of South Carolina and Scott is currently a student in the UNC Charlotte Ed.D. Educational Leadership program within the Research Track.)

Summary of Responses to the Proposed Program (as Requested by the EPPP Committee)

Three groups have reviewed this proposal at three different times.

First, we solicited the following individuals and groups to review the first version of the proposal: faculty and administrators in the Department of Educational Leadership at UNC Charlotte; faculty and administrators in other departments in the College of Education at UNC Charlotte; UNC Charlotte university administrators, including Chancellor Dubois, Provost Lorden, Vice Chancellor for Research and Economic Development Robert Wilhelm; Directors of Centers and Institutes at UNC Charlotte; seven area superintendents; eight other Charlotte-area community partners/agencies; Hanover Research (a

market research company); and Academic Analytics (business intelligence data company). Deans from seven nationally recognized colleges of education, including University of Louisville, University of Maryland College Park, Kent State University, Auburn University, the University of Alabama Birmingham, George Mason University, and the University of South Carolina also provided reviews. Finally, the Chair of the Board of Directors of the Carnegie Project for the Education Doctorate (CPED), Dr. David Imig of the University of Maryland, also reviewed the proposal. All above individuals and groups recommend moving forward with the Ph.D. proposal.

Second, in spring 2014, the deans from NC State, UNC Chapel Hill, and UNC Greensboro reviewed the proposal. They recommended that UNC Charlotte's program be an Ed.D. rather than a Ph.D. The version of the proposal they read had claimed the program would develop practitioners into researchers. Indeed, we had over-emphasized the need for candidates' educational practitioner knowledge, the local need for educational researchers, and a practitioner-to-researcher focus. This aspect of the narrative may have been one of the factors leading to the deans' recommendation that this program be an Ed.D. instead of a Ph.D.

We disagree that this program should be an Ed.D. This program is not characteristic of what the Carnegie Foundation defines as an Ed.D., but better reflects the goals and outcomes of a Ph.D. The Carnegie Project on the Education Doctorate (CPED) (www.cped.org), a national effort aimed at strengthening the Education Doctorate, defines the Ed.D. as focused on strengthening teacher and school administrative leadership. Indeed, the research questions posed by Ed.D. students are different from those seeking a Ph.D. In the UNC Charlotte College of Education, Ed.D. students have asked the following questions for their dissertation:
- Are their differences between principals in urban and rural high schools with respect to their attitudes toward the North Carolina teacher performance evaluation system?
- Are principal ratings of teacher performance across Standards I through V on the North Carolina teacher performance evaluation system associated with the ratings teacher receive for Standard VI from the EVASS value added models?

In contrast, education researchers with a Ph.D. in Educational, Research, Measurement, and Evaluation might ask questions more like those posed by the Institute for Social Capital mentioned earlier. Other questions asked of education researchers might instead look like this:
- How do children served by the Council for Children's rights fare in school compared to a matched sample of children not served by the Council? What is the impact of these achievement differences, if anything?
- Is the homogeneity of effect size test robust to violations of normality of primary data from educational evaluation studies?
- Will violations of homogeneity of variance influence the type I error rate of a special case of the homogeneity of effect size test when applied as a post hoc comparison test following ANOVA?
- Does the North Carolina kindergarten readiness formative assessment demonstrate measurement invariance across subgroups of ELL and native English speaking children?
- Is there evidence of differential item functioning across ELL and native English speaking children on the North Carolina kindergarten readiness formative assessment?

As these questions show, those seeking an Ed.D. ask practitioner-oriented questions. The Ph.D. student asks questions of methodology or of large databases that can be generalized to national audiences while also solving complex local problems.

Further, the student characteristics of those seeking an Ed.D. and those seeking a Ph.D. in education are different. The following table was developed by faculty at University of Missouri-Columbia as they strove to differentiate their Ed.D. from their Ph.D.

Ed. D.	Ph.D.
Primary Career Intention	*Primary Career Intention*
Administrative leadership in educational institutions or related organizations (e.g., superintendent, assistant superintendent, staff developer, curriculum director).	Scholarly practice, research, and/or teaching at university, college, institute or educational agency.
Degree Objective	*Degree Objective*
Preparation of professional leaders competent in identifying and solving complex problems in education. Emphasis is on developing thoughtful and reflective practitioners.	Preparation of professional researchers, scholars, or scholar practitioners. Develops competence in conducting scholarship and research that focuses on acquiring new knowledge.
Knowledge Base	*Knowledge Base*
Develops and applies knowledge for practice. Research-based content themes and theory are integrated with practice with emphasis on application of knowledge base.	Fosters theoretical and conceptual knowledge. Content is investigative in nature with an emphasis on understanding the relationships to leadership practice and policy.
Research Methods	*Research Methods*
Develops an overview and understanding of research including data collection skills for action research, program measurement, and program evaluation. Could include work in management statistics and analysis.	Courses are comparable to doctoral courses in related disciplines. Courses develop an understanding of inquiry, and qualitative and quantitative research. Developing competencies in research design, analysis, synthesis and writing.
Internship	*Internship*
A field internship or experience appropriate for intended professional career. Students demonstrate proficiency in program evaluation as part of the experience.	Practical experiences required in both college teaching and research. Expectations that students will present at a professional conference.
Comprehensive Knowledge Assessment	*Comprehensive Knowledge Assessment*
Written and oral assessments are used (e.g., comprehensive exams). Knowledge and practice	Written and oral assessments are used to evaluate an understanding of the theoretical and conceptual

portfolios provide evidence of ability to improve practice based on theory and research as well as demonstration of competencies.	knowledge in the field, as well as its relevance to practice and to evaluate competence in conducting research to acquire new knowledge.
Dissertation	*Dissertation*
Well-designed applied research of value for informing educational practice. Reflects theory or knowledge for addressing decision-oriented problems in applied settings.	Original research illustrating a mastery of competing theories with the clear goal of informing disciplinary knowledge.
Dissertation Committee	*Dissertation Committee*
Committee includes at least one practicing professional in an area of relevance to candidate's program and possibly faculty from other institutions, evaluate candidate's applied research.	Composed primarily of active researchers in areas relevant to students' areas of interest. Should include at least one faculty member from a related discipline or from another institution.

Please see the letter for Dr. David Imig, Chair of the Board of Directors of CPED, who reviewed the program, recommending it as a Ph.D.

Finally, the third group that reviewed this proposal was the UNC Graduate Council of Deans. The graduate deans reviewed the proposal, supplied written comments, and met on November 5, 2014 for discussion. The written comments and ratings follow. For the ratings of "1" (not acceptable) and "2" (not acceptable unless sufficient deficiencies are addressed"), we have included a summary of the comments made by each institution.

Feedback from UNC Universities on the Charlotte Proposed Program

	NCCU	ECU	WCU	UNCG*	NCSU
Mission Alignment	3	4	4	4	3
Student Demand	3	4	4	3	2
Societal Demand	4	4	4	4	2
Relationship to other programs	4	4	4	1	2
Collaborative opportunities	3	4	4	2	3
Program requirements and curriculum	4	4	4	4	3
Faculty sufficiency and student support	4	3	4	4	2
Administration and instructional, library, and research facilities	4	2	4	4	4
Budget	3	2	4	3	2

Note. UNCH and UNCW provided comments only, no ratings.

Comments referencing low ratings follow:

- ECU's low rated items (research facilities and budget) were associated with comments that asked how this program could not cost the university.

- UNCG 's low rated items (relationship to other programs and collaborative opportunities) produced comments that suggested that we misrepresented their program, that the Charlotte program would be in direct competition with UNCG's, and that collaboration would be a challenge since UNCG already teaches most of the classes in the Charlotte proposal.

- NCSU's comments on low rated items (student demand, societal demand, relationship to other programs, faculty sufficiency, and budget) suggest that a program at UNC Charlotte would compete with theirs and the others in the state, that the Department of Public Instruction has just cut positions (therefore there is less a need for more educational researchers), that the program "duplicates" others in the state, and that NC State and Chapel Hill already compete for students in the Triangle. The writers also "expressed concern…that existing faculty [at Charlotte] will not have the appropriate scholarly productivity as evidenced by peer-reviewed articles, books, etc." They also questioned Charlotte's ability to fund doctoral students.

- UNCCH provided no numerical ratings. They argued that this program should be a full-time program and not part-time and that there is not a need for another similar program in the state, claiming it is "clearly duplicative" and "existing programs feel they can handle the Ph.D. market that is projected." Comments also suggest this be an Ed.D. not a Ph.D.

- UNCW commented that the program may not have enough evaluation courses.

The UNC Charlotte College of Education dean, Ellen McIntyre, presented the proposal to the Graduate Council. Eight of nine of the education researchers who would teach in the program attended the meeting as well. Afterwards, the Council discussed the proposal and entertained a motion to approve the Request for Authorization to Plan the Ph.D. in Educational Research, Measurement, and Evaluation at UNCC. The motion did not pass, with a vote of 5 in favor and 9 against. The Council made and approved a second motion (11 Yes, 2 No, 1 Abstain) to recommend the program resubmit the proposal as an Ed.D. The Council made additional recommendations, which we address below.

Response to the Graduate Deans Ratings and Reviews

While the Council's initial vote suggested lack of support for the program, it was clear from the second vote taken that the overwhelming majority (11-2) supported the establishment of a program at UNC Charlotte. Very little about the program itself was criticized.

First, the curricula issues about the program were minor and will be addressed during the program planning period. Specifically, we will consider a cohort option for full- and part-time students. We will consider requiring more than one evaluation course. And, using the scholarly literature on doctoral programs as a guide, we will design residency programs for part-time students that are both meaningful and feasible. We expect the majority of our students to be part-time students while holding full-time jobs. We know it will be a challenge for some to be a resident for a short period. We plan three

strategies: 1) to communicate the expectations of the program from Day 1 so students can plan ahead, 2) provide information about new funding for part-time graduate students, and 3) design residencies that link students' research studies and writing to work experiences that will advance the students' knowledge, skills, in work settings, where appropriate.

Concern was expressed about the mentoring capacity of the faculty who will serve the program. Without question, UNC Charlotte's College of Education *is* in a position to offer a program for which there is need and demand at little additional cost to the institution. The initial impetus behind the proposal came from a recognized need for doctoral level training in this increasingly high demand area. Because we have built a cadre of faculty in research methods and evaluation to support the Ph.D. training that we offer in Special Education, Counseling, and Curriculum and Instruction, we have the faculty and courses needed for the Educational research Measurement and Evaluation program. The education research faculty members are prepared and eager to meet the mentoring demand for this new program. We have nine full-time research faculty, all with graduate faculty status, who will serve as dissertation chairs for the students in the proposed program. We also have other new faculty members in the College, nine hired in 2014 and four more to be hired in 2015, with the credentials to serve students in this program. Currently these faculty are chairing one or two dissertations in existing programs and have the capacity to supervise additional research students.

Further, in response to NC State University's concern that Charlotte's nine faculty do not have the scholarly records necessary for the program, we have substantial counter evidence. All faculty members have research agendas that support the University's and the College of Education's mission and contribute to improving education in North Carolina. Many of these faculty members have extraordinary research publication records and most publish works with graduate students, scaffolding the students' research and scholarly output. Examples of the top tier journals in which the faculty have published include the *International Journal of Education, Research Measurement and Evaluation in Counseling and Development, Journal of Psychoeducational Assessment, Educational Research & Development, The Journal of Educational Research, Educational and Psychological Measurement, Journal of Special Education, Journal of Educational Measurement, Applied Psychological Measurement, Contemporary Educational Psychology*, and *Educational Research Quarterly,* to name some.

In order to provide an unbiased view of the nine faculty members who will teach in this program, we called upon Academic Analytics to compare the productivity of these faculty members against faculty members in similar programs. Academic Analytics compared our faculty's productivity against the productivity of *all* programs in the U.S. with Ph.D. programs in Educational Research Measurement and Evaluation. The company examined the percentage of faculty with articles, books, citations, and grants and compared the number of each by raw number and percentile*.* On every measure, UNC Charlotte education research faculty are above average. Some were in the top quintile on some measures. When each member was placed into a quintile chart, based on average number of citations, average number of articles, average number of awards, average number of books, average number of grants, and average number of grant dollars, two of UNC Charlotte's research faculty fell into the top quintile, three fell into the second quintile, 3 fell into the third quintile, and one fell into the 4th quintile. None were in the bottom quintile. (More information about the faculty is provided later in this proposal.)

Not only are the faculty prepared to support the program, the College has the research infrastructure and funding base to support students. The research assistantships that will be associated with this new Ph.D. program will be characteristic of excellent Ph.D. programs. We have a strong research tradition in the College of Education. Just since July 2014, the College has brought in $7.3M in external funding. We currently have 29 research assistants working on funded grants. Graduate students are also eligible for full tuition support and health insurance with the Graduate Assistant Support Plan (GASP). Of our 29 funded research assistants, 22 are working on grants in the College departments; three are working in the Center for Educational Measurement and Evaluation (CEME); and four are working in the Center for Science Technology, Engineering and Mathematics (C-STEM).

One additional concern was raised about full-time residency for working professionals. Chancellor Dubois' recent announcement of $2M in new needs-based graduate student support will likely alleviate much of this concern, as this tuition support will not require a full-time assistantship.

In response to the concern about students' timeline for finishing the program, we developed the following table which provides a suggested course selection for full- and part-time students. When we fully develop the program (Appendix C), the course requirements may be revised based on feedback from our community professionals and faculty from outside the College of Education, who are part of the planning committee.

	Full-time (3 years)	Part-time (4-5 years)
Fall 1	**RSCH 8210 (Applied Research Methods)** EDCI 8180 (Critical Issues and Perspectives in Education) **RSCH 8110 (Descriptive and Inferential Statistics)**	**RSCH 8210 (Applied Research Methods)** EDCI 8180 (Critical Issues and Perspectives in Education)
Spring 1	PPOL 8687 (Educational Policy Studies, K-12 Schools) **RSCH 8120 (Advanced Statistics)** **RSCH 8111 (Qualitative Research Methods)**	PPOL 8687 (Educational Policy Studies, K-12 Schools) **RSCH 8110 (Descriptive and Inferential Statistics)**
Summer1		**RSCH 8111 (Qualitative Research Methods)**
Fall 2	RSCH 8220 (Advanced Measurement) RSCH 8121 (Qualitative Data Collection and Analysis) RSCH 8140 (Multivariate Statistics)	**RSCH 8120 (Advanced Statistics)** RSCH 8121 (Qualitative Data Collection and Analysis)
	Qualifying Exams	

Spring 2	RSCH 8196 (Program Evaluation Methods)*	RSCH 8140 (Multivariate Statistics)
	RSCH 8112 (Survey Research Methods)*	RSCH 8220 (Advanced Measurement)
	Select Secondary Area Course*	
		Qualifying Exams
Summer2	RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*	
Fall 3	RSCH 8150 (Structural Equation Modeling Methods)*	RSCH 8196 (Program Evaluation Methods)* Select Secondary Area Course*
	Select 1 Secondary Area Course*	
	RSCH 8699 (Proposal Design)*	
Spring 3	Select 1 Secondary Area Course* RSCH 8999 (Dissertation Research)	RSCH 8112 (Survey Research Methods)* Select Secondary Area Course*
Summer3		RSCH 8410 (Internship -Applied Research Project in a school or other educational agency)*
		RSCH 8150 (Structural Equation Modeling Methods)* Select Secondary Area Course*
Spring 4		
		RSCH 8699 (Proposal Design)*
Summer 4		RSCH 8999 (Dissertation Research)

Note. *Course selection may vary depending on student's concentration.

While we appreciate the suggestion that we consider an Ed.D. degree, we believe that pedagogically it makes more sense to offer the Ph.D.. The argument by some members of the Council for this program moving forward as an Ed.D. instead of a Ph.D. seems to rest on how the rationale for the proposal was written. In rereading the proposal, we can see how the Council could misinterpret our intent. Readers may have viewed the need for this program in Charlotte and the surrounding region as an indicator that the program focuses only on local educational problems. Further, our many support letters from nonprofits and community members were seen as a strength but also as an indication that the program fits better as a practitioner oriented degree rather than a research doctorate. Clearly, we may have overemphasized the importance of the program to our local area. It is important to remember that we take our mission seriously. We are the only public institution serving one of the fastest growing large (>500,000 population) cities in the U.S. We believe that we have demonstrated that there is local

demand for the program that is not easily met by other institutions in the state. This is of primary importance to us, but not the sole driver for the program.

Another example that may have appeared "local" was in our example of internship sites. We illustrated that the integrated data housed in the Institute for Social Capital (which would provide a research site for some students and which is North Carolina's only member of the national network of integrated data systems) could answer a critical question about education and criminal justice in the Charlotte area. And while that example appears local, it is exactly the sort of research study that forms the basis for extrapolation to national and international audiences and communities. We also stand by our statement that one of our goals is to prepare researchers who understand the world of education practitioners. This is a hallmark of a Ph.D. in education and not unlike other fields where research has practical implications, e.g., engineering, public health, clinical psychology. Excellent education research addresses authentic problems asked by people who have lived those problems. Our Ph.D. program will develop educational researchers committed to generating the knowledge most needed in the field of education and thus making important contributions to the research literature. Without question, the goal of our proposed program will be to solve education problems that can be generalized to national and international contexts and populations.

As shown in a Ph.D.- Ed.D. comparison table by Young (2013), the Ph.D. "prepares professional researchers, scholars, or scholar-practitioners" compared to the Ed.D. that prepares superintendents and school leaders. The purpose of a Ph.D. is aligned with our stated vision for the program, which is to "prepare professionals to frame sound educational research questions, to conduct rigorous, systematic inquiry that addresses educational problems, and to disseminate research findings that improve all levels of education practice." Further, on pages 14-15 of the proposal, we are careful to distinguish the sorts of questions the Ph.D. students in this program will be asking from the kinds of questions students in the Ed.D. program ask. UNC Charlotte has an Ed.D. that prepares school leaders. Our goals for this new program are very different. Our case for the Ph.D. is laid out on pages 15-16 in the table developed by the University of Missouri comparing the two degrees.

Finally, we have asked Dr. David Imig, Chair of the Board of Directors of the Carnegie Project on the Education Doctorate (CPED) to review the proposal for characteristics of a Ph.D. or Ed.D. Dr. Imig knows the literature on doctoral education and especially the differences between a Ph.D. and Ed.D. extremely well. He writes in support of the proposed program as a Ph.D. Importantly, as the field of education moves toward differentiating these two degrees, UNC Charlotte does not want to be on the wrong side of history by beginning a new Ed.D. degree that is in contrast to the CPED movement.

As evidenced by the many letters we received from school superintendents and others, the demand for individuals with the proposed degree is not exclusively for faculty positions at institutions of higher education. This does not mean that the program of study is inappropriate for a Ph.D. There are many fields in which the majority of Ph.D. graduates' work outside higher education. Engineering, computer science, and psychology are a few examples.

For at least the past 15 years, leaders in graduate education have recognized the importance of preparation of doctoral candidates for both academic and non-academic careers. Thus, the fact that we have focused our attention on the needs of school systems and non-profit organizations in addition to the traditional preparation of doctoral candidates for faculty positions should be regarded as a strength. We assert that the demand for a program with an emphasis on the needs of school systems for high quality research in educational measurement and outcomes is as great as the need of the healthcare industry for those doing research in health outcomes. Indeed, the appropriate comparison for our proposed program is not the Ed.D. in Educational Leadership but our Ph.D. in Health Services Research. Many of our students in this program work on datasets and problems that emerge in our local hospital systems. The implication of their work is national in scope.

Overview of Revisions Made Based on Feedback

The original proposal for the program has been revised twice. First, after the proposal was reviewed in spring of 2013, including by the Education deans at NC State, Chapel Hill, and Greensboro, we revised the number of students we expect and hope to serve. With the additional researcher we recently hired who will focus on value added studies that link teacher preparation programs to K-12 outcomes, we now expect that we can admit up to 10 students per year (we previously said 8). We can make this change because there is room in the courses. We also decided it was important to conduct a feasibility study (Hanover Research) and an analysis of capacity (Academic Analytics); we suspected some did not know about the talent at UNC Charlotte. Both reports provided additional data we included in the proposal. We also described more deeply the sorts of practical research experiences the students will have in working with large integrated datasets through our centers and institutes and local school systems. We clarified the goals of the program and the sort of candidates we will admit to the program. Finally, we emphasized that this program will be created from existing courses and faculty, and we will recruit students in the Charlotte area, a region that desperately needs more high quality education researchers, as shown by the many letters of support accompanying this proposal.

After the feedback from the Graduate Council, we revised the proposal a second time. We used comments and recommendations from the deans to make changes to the program and to the proposal. In this new version, we have taken out much of the language that focuses on Charlotte's needs. While Charlotte and the surrounding region *does* have a need for this program and the positions to support it, we recognize that for many, a Ph.D. provides an opportunity to work in higher education, should the graduate choose this route. Thus, to ensure that the program educates and socializes the students into the next generation of education research scholars and teachers, we decided to borrow from the extensive scholarship on doctoral education to provide a state-of-the-art Ph.D. model program. A few decisions include: 1) recruit and accept students interested in studying full-time as well as part-time; 2) plan a proposed schedule for each of the full- and part-time groups, including a cohort model for full-time students; 3) commit to the development of mentoring and apprenticeship activities, both for-credit and informal, in which all students use actual educational data to learn research skills; 4) commit to faculty development on doctoral socialization and student conflict resolution; and 5) re-think options for culminating exams and dissertations to ensure it is work that advances the field.

Feasibility of Collaboration across Programs

Many opportunities are available for collaboration with the three institutions offering similar degrees. First, we anticipate that some of our students will want to take courses from the talented professors in our sister institutions, and we will encourage it to the extent that courses are available to students online or in the Charlotte area. Indeed, NC State has one successful doctoral program that we host on the UNC Charlotte campus. We recently held meetings (March, May, and August 2014) to discuss how professors at the two universities can work together to better serve all our doctoral students (e.g., as experts on certain topics, sitting on dissertation committees of students from the other institution, cross listing courses). The collaboration between UNC Charlotte and NC State can be a model for how institutions can support one another's programs.

We also expect to build on the current collaborations among institutions to evaluate programs across several UNC universities. For example, several UNC Colleges of Education (including Chapel Hill, NC State, East Carolina, and UNC Charlotte) are conducting a study using the UNC-GA teacher quality data on elementary teacher preparation programs, teacher performance and students' achievement to explain the teacher quality scores. The deans of UNC Charlotte, NC State, East Carolina University, and UNC Greensboro recently collaborated on an AACTE proposal to share a descriptive study comparing our teacher preparation programs. The deans at UNC Charlotte, NC State, and East Carolina University also recently collaborated with UNC GA on an article on the possibilities for data sharing.

4. Are there plans to offer all or a portion of this program to students off-campus or online? If so,

    a. Briefly describe these plans, including sites and method(s) of delivering instruction.

The proposed UNC Charlotte Ph.D. program will accommodate both full- and part-time students. Many students in this program will be adults working full-time. To better meet the students' needs, approximately 50% of all course work will be delivered in classes that meet face-to-face on campus or in our Center City Building in centrally-located Uptown Charlotte and the remaining 50% will be delivered through distance education technologies, with each of the online courses a "hybrid" model. This instructional delivery will appeal to both students interested in full-time study and busy working adults and provide opportunities to bring students together for collaborative learning, while allowing time for self-study. Faculty members in the College have extensive experience with online learning and create outstanding student experiences in these courses.

    b. Indicate any similar programs being offered off-campus or online in North Carolina by other institutions (public or private).

While there are other institutions that offer 100% online programs (e.g., the University of Phoenix), none of these programs offer a Ph.D. in educational research. Most of the institutions in North Carolina offer some blend of face-to-face and distance education classes at the doctoral level. Instructors in the proposed program have a deep understanding of the needs of North Carolina educators, and especially the needs of the greater Charlotte area, which will make this an ideal program for improving education in the state.

    c. What is the estimated percentage of courses in the degree program that will be offered/available off-campus or online: _50%_

    d. Estimate the number of off-campus or online students that would be enrolled in the first and fourth years of the program:

First Year Full-Time <u>2</u>   *Part-Time* <u>6-8</u>

Fourth Year Full-Time <u>2</u>   *Part-Time* <u>6-8</u>

Note: If a degree program has not been approved by the Board of Governors, its approval for alternative, online, or distance delivery is conditioned upon BOG program approval. (400.1.1[R], page 3)

5. **Estimate the total number of students that would be enrolled in the program during the <u>first</u> year of operation:** *Full-Time* <u>2</u> *Part-Time* <u>6-8</u>

   Estimate the total number of students that would be enrolled in the program during the <u>fourth</u> year of operation: *Full-Time* <u>8</u>   *Part-Time* <u>24-36</u>

6. **Will the proposed program require development of any new courses**:   Yes ____ No <u>X</u>
   If yes, briefly explain. NA

7. **Will any of the resources listed below be required to deliver this program? (If yes, please briefly explain in the space below each item, and state the source of the new funding and resources required.)**

   a.   New Faculty: Yes_____ No <u>X</u>

   b.   Additional Library Resources: Yes _____ No <u>X</u>

   c.   Additional Facilities and Equipment: Yes _____ No <u>X</u>

   d.   Additional Other Program Support: Yes _____ No <u>X</u>

8. **For graduate programs only:**

   a.   Does the campus plan to seek approval for a tuition differential or program specific fee for this new graduate program?   Yes _____ No <u>X</u>

   b.   If yes, state the amount of tuition differential or fee being considered, and give a brief justification.

9. **For doctoral programs only:**

   a.   **Describe the research and scholarly infrastructure in place (including faculty) to support the proposed program.**

The University of North Carolina at Charlotte is a state-of-the-art institution with all necessary components for developing scholars and researchers. As examples, the J. Murray Atkins Library contains more than one million volumes and state-of-the-art computer labs. Atkins library is a leader in digital collections acquisitions and management, doubling the size of the collection to two million volumes from 2007 to 2014. Furthermore, the library currently has two full-time education librarians (one hired this year). The College of Education building has smart classrooms, two computer labs, and two

computer teaching labs. All classrooms are technology enhanced. As stated, the proposed new program requires no new resources.

The College of Education is continuing to grow in talented researchers each year and in the number of faculty members conducting funded research. In 2013, the College brought in nearly $8M in new grant funds, for a total of $20M in active grant funding, with some of the largest grants from the National Science Foundation (NSF) and the Department of Education (DOE) Institute for Education Sciences (IES). IES has awarded grants to only a few Colleges of Education in the state. IES funds only what is widely considered the *gold standard* of education research. Many of the Ph.D. students in the proposed Educational Research, Measurement and Evaluation Program will have opportunities to work directly with faculty on such funded projects.

The College of Education has made other recent additions to its research infrastructure. To assist with post-award grant activity, the College hired a grants manager to assist faculty in administering their grant funding. In October 2013, the College hired its first Associate Dean for Research and Graduate Studies to oversee all research conducted in the College. In January of 2014, the College hired an experienced pre-award grants manager from Brookhaven Labs in Long Island. This new hire, who also spent many years in the SUNY system of higher education, assists faculty in identifying funding sources, organizing grant proposals, developing budgets, and providing the infrastructure for faculty development around research. This new infrastructure is visible through the new dedicated space for the College Research Office. While most of the activities of this new office have been practiced for decades in the College, the volume of the grant awards and scholarship has increased significantly, necessitating new space and a new identity for the College of Education around research and grant procurement.

The greatest strength of the program will be the faculty who teach and advise students. The Department of Educational Leadership has nine tenured or tenure-track research faculty members who teach in graduate-level programs in the College of Education. All faculty members have research agendas that support the University's and the College of Education's mission and contribute to improving education in North Carolina. Many of these faculty members have extraordinary research publication records and most publish works with graduate students, scaffolding the students' research and scholarly output.

Research faculty members at UNC Charlotte have regional, national, and international reputations. For example, researcher Dr. Bob Algozzine is frequently cited in the ISI Web of Knowledge database, which highlights the top 250 researchers in the United States. Dr. Richard Lambert is a member of the technical advisory group for the Head Start Family and Child Experiences Survey. Dr. Claudia Flowers serves on the North Carolina Department of Public Instruction Technical Advisors Panel, which examines the technical quality of the public school assessment and accountability system and makes recommendations for system improvement. Dr. Chuang Wang is writing a book on Hierarchical Linear Modeling (HLM), one of the more sophisticated statistical procedures students in the new program will learn. These are only a few of the outstanding faculty with expertise in educational research methodology and design who will teach and advise in this program. In addition to research methodology faculty, UNC Charlotte has distinguished faculty members in endowed professorships in secondary areas, including Drs. Diane Browder in Special Education (an O. Max Gardner awardee) and Chance Lewis in Urban Education, all of whom are able to provide additional contextual expertise and opportunities for applied study. (See letters from Bowder and Lewis in proposal attachments).

Finally, in response to the Council for the Accreditation of Educator Preparation (CAEP)'s new, highly rigorous teacher education accreditation standards (described earlier in this proposal), the College of Education has hired an additional researcher whose expertise focuses specifically on evaluation of educational programs that link program attributes to student outcomes (value-added studies). Dr. Ann Cash was enticed to come to UNC Charlotte from Johns Hopkins University in part because of the research talent in the College. Students interested in working directly on such important studies will have experts as guides.

Descriptions of all faculty members' research achievements and interests are found in the Appendix.   All College of Education faculty members are active in state, national and international professional organizations. In addition, faculty members have published over 900 articles in peer-reviewed journals and they serve as editors, co-editors, and reviewers for top-tier journals in their field. Research faculty members' responsibilities include providing support for students' involvement in creative, scholarly, and research endeavors. These faculty members have served on over 200 dissertation committees and have published over 150 articles with students. Graduates of the Ph.D. in Educational Research, Measurement, and Evaluation will have the skills to readily apply research and scholarship to improve North Carolina's educational systems.

b.   **Describe the method of financing the proposed new program (including extramural research funding and other sources) and indicate the extent to which additional state funding may be required.**

No new funds will be needed for this program.

As presented above, there is an experienced cadre of outstanding research faculty sufficient to operate the program so no new hires will be needed. The courses for this program already exist in the College, and the new program will allow more students in each class, serving as a model for efficiency.   The modest number of new admits to the proposed program (8-12 per year) will not necessitate any new funds. Further, faculty members who will serve the program are eager to mentor new students on individual research. They currently work with doctoral students in other Ph.D. programs in the College and in the Ed.D. program in the College. They will concentrate their efforts mentoring the students in this program, and new faculty (we hired 9 in 2014 and will hire 4 more in 2015) will move into doctoral mentoring in the other programs.

We expect both full-time and part-time students to apply for graduate funding, if needed.

An additional revenue source that will help support doctoral students' research is the Center for Educational Measurement and Evaluation (CEME). CEME obtains external funds to conduct research in schools and other educational agencies and currently employs two doctoral students. Further, the external funding for the College of Education will allow employment of graduate assistantships and research associates. The College external funding has exceeded five million dollars of new awards per year for the past five years, $8M in 2013, and another $4M just since September.   Of course, many students in the program will continue to work and will not require assistantship support.

c.   **State the number, amount, and source of proposed graduate student stipends and related tuition benefits that will be required to initiate the program.**

The new program will not require new graduate student stipends or related tuition benefits. The program is aimed primarily at working professionals. With our existing funds we should be able to hire up to eight full-time students as 20-hour-per-week graduate assistants over the course of four years. This will accommodate the needs of full-time students in the program. (We expect to admit two full-time students a year.) Currently, the department hires students outside of the College of Education to help fill many of the graduate assistant positions. In addition to the nine-month stipend that each student will receive, students will be able to take advantage of the Graduate School's Graduate Assistant Support Plan (GASP), a program that provides full payment of tuition and health insurance for full-time doctoral students with graduate assistantships and fellowships.

10. **List the names, titles, e-mail addresses and telephone numbers of the person(s) responsible for planning the proposed program.**

Primary Contact

- Claudia Flowers, Professor of Educational Research, ClaudiaFlowers@uncc.edu, 704-687-8862

UNC Charlotte Faculty

- Lynn Ahlgrim-Delzell, Associate Professor of Educational Research, laahlgri@uncc.edu, 704-687-8636
- Bob Algozzine, Professor of Educational Research, rfalgozz@uncc.edu, 704-687-8859
- Sandra Dika, Assistant Professor of Educational Research, sdika@uncc.edu, 704-687-8873
- Claudia Flowers, Professor of Educational Research, ClaudiaFlowers@uncc.edu, 704-687-8862
- Dawson Hancock, Associate Dean for Research and Graduate Studies and Professor of Educational Research, dhancock@uncc.edu, 704-687-8863
- Do-Hong Kim, Associate Professor of Educational Research, dkim15@uncc.edu, 704-687-8874
- Richard Lambert, Professor of Educational Research, rglamber@uncc.edu, 704-687-8867
- Jae Hoon Lim, Associate Professor of Educational Research, jhlim@uncc.edu, 704-687-8864
- Chuang Wang, Associate Professor of Educational Research, cwang15@uncc.edu, 704-687-8708

Outside Members of Planning Committee

- Jason Schoeneberger, Charlotte-Mecklenburg Schools Research and Evaluation Analysis, jasona.schoeneberger@cms.k12.nc.us, 980-343-1718
- Terri Manning, Director of Research at Central Piedmont Community College, Terri.Manning@cpcc.edu, 704-330-6592

This request for authorization to plan a new program has been reviewed and approved by the appropriate campus committees and authorities.

Chancellor _____   **Date**_____

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References

Austin, A.E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education*, 73, 94-122.

Austin, A.E., & McDaniels, M. (2006). Preparing the professoriate of the future: Graduate students socialization for faculty roles. In J.S. Smart (Ed.), *Higher Education: Handbook of Theory and Research*, 397-456.

Baker, V.L. & Lattuca, L.R. (2010). Developmental networks and learning: toward an interdisciplinary perspective on identity development during doctoral study. *Studies in Higher Education,* 35, 807-827.

Barnes, B.J. & Austin, A.E. (2009). The role of doctoral advisors: A look at advising from the advisor's perspective. *Innovative Higher Education,* 33, 297-315.

Borkowski, N.A. (2006). Changing our thinking about assessment at the doctoral kevel. In P.L. Maki and N.A. Borkowski (Eds.), *The Assessment of doctoral education: Emerging criteria and new models for improving outcomes*. Sterling, Virginia: Stylus Publishing (pp. 11-51).

Deem, R. & Brehony, K.J. (2000). Doctoral students' access to research cultures-are some more unequal than others? *Studies in Higher Education, 25*, 149-165.

Eisenhart, M. & DeHaan, R.L. (2005). Doctoral preparation of scientifically-based education researchers. *Educational Researcher,* 34, 3-13.

Fedynich, L. & Bain, S.F. (2010). Mentoring the successful graduate student of tomorrow. *Research in Higher Education,* 1-7.

Gardner, S.K. (2008). Fitting the mold of graduate school: a qualitative study of socialization in doctoral education. *Innovative Higher Education,* 33, 125-138.

Gardner, S.K. (2009). Student and faculty attributions of attrition in high and low-completing doctoral programs in the United States. *Higher Education,* 58, 97-112.

Gardner, S. (2010). Doctoral student development. In S.K. Gardner and P. Mendoza (Eds.), *On Becoming a scholar: Socialization and development in doctoral education* (pp. 203-227). Sterling, VA: Stylus Publishers, LLC.

Gardner, S.K. (2010). Keeping up with the Joneses: Socialization and culture in doctoral education at one striving institution. *The Journal of Higher Education,* 81,728-749.

Golde, C. & Dore, T.M. (2001). At cross purposes: What the experiences of today's doctoral students reveal about doctoral education. Survey by Pew Charitable Trusts**.** ED450628

Golde, C. (2007). Signature pedagogies in doctoral education: Are they adaptable for the preparation of education researchers? *Educational Researcher,* 36, 344-351.

Johnson, R.W. & Conyers, L.M. (2001). Surviving the doctoral dissertation: a solution-focused approach. *Journal of College Counseling,* 4, 77-79.

Johnson, W.B. (2002). The intentional mentor: strategies and guidelines for the practice of mentoring. *Professional Psychology: Research and Practice,* 33, 88-96.

Kamler, B. (2008). Rethinking doctoral publication practices: writing from and beyond the thesis. *Studies in Higher Education,* 33, 283-294.

Leech, L.N. (2012). Educating knowledgeable and skilled researchers in doctoral programs in schools of education: a new model. *International Journal of Doctoral Studies,* 7, 19-37.

Neumann, R. & Rodwell, J. (2009). The 'invisible' part-time research students: a case study of satisfaction and completion. *Studies in Higher Education,* 34, 55-68.

Nyquist, J.D. & Woodford, B.J. (2000). *Re-envisioning the Ph.D.: What concerns do we have*? Washington DC: Pew Charitable Trusts.

Nyquist, J.S. (2002). The Ph.D.: A tapestry of change for the 21st century. *Change: The Magazine of Higher Learning,* 34, 12-20).

Page, R. (2001). Reshaping graduate preparation in educational research methods: One school's experience. *Educational Researcher,* 30, 19-25.

Paglis, L.L., Green, S.G., & Bauer, T.N. (2006). Does adviser mentoring add value? A longitudinal study of mentoring and doctoral student outcomes. *Research in Higher Education*, 47, 451-476.

Pallas, A.M. (2012). Preparing education doctoral students for epistemological diversity. *Educational Researcher,* 30, 6-11.

Richardson, V. (2007). Stewards of the field: The doctorate in education. In C.M. Golde and G.E. Walker (Eds), *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline. Carnegie Essays on the Doctorate.* San Francisco, CA: Josey-Bass, (pp. 251-267).

Shulman, L., Golde, C., Bueschel, A., & Garabedian, K. (2006). Reclaiming education's doctorates: a critique and a proposal. *Educational Researcher*, 35, 25-32.

Young, L.T. (2001). Border crossings and other journeys: Re-envisioning the doctoral preparation of education researchers. *Educational Researcher,* 30, 3-5.

October 1, 2013

Dean Ellen McIntyre
College of Education
University of North Carolina at Charlotte
9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dr. McIntyre,

It was a pleasure to review the proposed Ph.D. program in Research, Measurement and Evaluation at UNC Charlotte. The proposal clearly aligns with and supports the institutional mission of the University of "Stimulating increased research, creative activities, and community engagement with a focus on programs and partnerships that address the major needs of the Charlotte region." In addition, the program could also fill a regional need within our K-12 schools. There is a shortage of highly qualified educators with the knowledge and skills of using research to inform teaching and learning.

The College of Education at UNC Charlotte, its member institutions and centers, and regional school districts have a strong record of collaboration. These partnerships continue to prove successful in identifying and addressing the major educational needs within the greater Charlotte Region. The proposed Ph.D. program will offer substantial opportunities to enrich these programs and partnerships by stimulating increased research into the specific needs of the K-12 educational institutions. The program, built upon the documented expertise and experience of the nine faculty members, will enable doctoral-level professionals to engage in research in support of local school districts. Aligned with the University and College of Education's missions, this research could potentially inform and improve education in the Charlotte area and throughout the Carolinas.

The proposed Ph.D. program extends the current scope of doctoral opportunities at the University and in North Carolina. Current UNC Charlotte doctoral opportunities build expertise in the specific content areas of educational leadership, special education, curriculum and instruction, or counseling, while offering research electives within the program of study. The proposed program will blend expertise in research, measurement and evaluation, with the practical needs of educational systems. In North Carolina K-12 educational institutions, there is currently a dearth of expertise in this blending of theory and application. While three other North Carolina universities provide doctoral studies in educational research, this proposed program would be unique in producing skilled researchers who are equally adept in educational practice.

In summary, the proposed Ph.D. Program in Research, Measurement and Evaluation has the potential to develop highly qualified educators who can use research to inform educational practice. A program that links theory and application is needed to address the rapid educational changes and requirements faced within our schools and within North Carolina.

Sincerely,

Drew R. Maerz, Ed.D.
Director of Testing and Accountability

Cabarrus
County Schools

4401 Old Airport Road   704-262-6123
PO Box 388   704-262-6175 fax
Concord NC 28026-0388

January 14, 2014

Dr. Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross,

With great enthusiasm, I wish to express my strong support of the Ph.D. in Educational Research, Measurement, and Evaluation proposed by the Department of Educational Leadership at the University of North Carolina at Charlotte. I am most impressed by the group of outstanding research methodologists ready to provide our region with skilled researchers ready to help solve some of the most pressing problems in education.

Cabarrus County Schools is a data-driven organization, collecting and analyzing data with which to monitor and influence the academic progress of our students. Locating and hiring professionals with the knowledge and skills to analyze large volumes of quantitative and qualitative data is difficult. Graduates of UNC Charlotte's Ph.D. in Educational Research, Measurement, and Evaluation program would have the expertise that would allow us to examine school and student performance data with which to create programs and make decisions that can develop the full potential of every student in our district.

Cabarrus County Schools wishes to partner with UNC Charlotte to provide Ph.D. students with practical experience working with our data to inform the decisions for the children in our district. I recommend this program without reservation.

Please feel free to contact me if you need additional justification for establishing this degree program. I am available to discuss with you further if you so desire.

Sincerely,

Barry C. Shepherd, Ed.D.
Superintendent

Carolinas HealthCare System

Division of Medical Education
Lisa Howley. PhD, MEd

AVP, Medical Education & Physician Development
Director, Center for Physician Leadership

September 10, 2013

Dean Ellen McIntyre
College of Education
UNC Charlotte
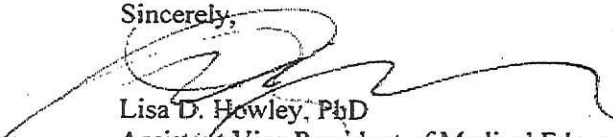9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dr. McIntyre:

Dr. Claudia Flowers shared with me the proposed plan for a new doctoral program in educational evaluation and research. As a former faculty member within the College and educational researcher, I am thrilled to hear that this plan is moving forward and am very confident it will evolve into an excellent program for our future scholars in educational research.

The nine faculty members supporting this prospective program and the College of Education are extremely well suited to provide transformative doctoral-level training to our region. These faculty members' collective expertise in research methods, statistics, measurement and evaluation are impressive and will benefit your future doctoral students. Particularly striking is the proposed mission, goals and objectives of the program: Its emphasis on action and outcomes-based research is particularly important in today's climate and culture of education.

On behalf of the Division of Medical Education at Carolinas HealthCare System, I strongly support the addition of this program to our region and welcome future collaborations between healthcare practitioners and educational researchers. I also welcome the opportunity to meet with you to discuss potential collaborative partnerships.

I strongly support the development of this program and wish you great success as you move forward with this important endeavor.

Sincerely,

Lisa D. Howley, PhD
Assistant Vice President of Medical Education & Physician Development
Division of Medical Education
Carolinas HealthCare System
LDH:nbb

August 22, 2013

Dean Ellen McIntyre
College of Education
UNC Charlotte
9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dean McIntyre,

I am an associate vice president over Institutional Research, Institutional Effectiveness, Quality Assurance and the Center for Applied Research at Central Piedmont Community College. I employ a staff of approximately 16 who function as educational researchers, evaluators and data analysts. Many of my staff members have master's degrees and would like to complete doctorates but have few choices that are a fit with their job roles and responsibilities. I have looked at the Ph.D. plan of study in Research, Measurement, and Evaluation and I am excited about the opportunities this program will bring to the community-based and educational institutions in the region.

In the current economy, creating a culture of evidence is critical in educational institutions. Decisions are made daily based on data and information that impact college policy and student outcomes and success. The need for analytics that predict student strengths and barriers is becoming greater and greater, particularly in the Charlotte region where students transition from K-12 to community college to the university all in the same county. This doctoral program will provide quality advanced training to staff members currently employed in the 58 community colleges in North Carolina but will be the most helpful for the many community colleges and universities in the Charlotte statistical area. It will also help establish a link between staff currently working in these fields to increase communication thus impacting student outcomes.

Central Piedmont Community College works regularly with UNC-Charlotte on articulated curricula and student tracking between institutions. The Center for Applied Research has conducted the last three follow-up studies of UNCC graduates for the University Career Center for Work, Service, and Internships. Several of my staff members mentioned this new potential Ph.D. program to me and indicated they were waiting for its formal approved so they could apply.

I am very excited about this new opportunity for UNC Charlotte and am looking forward to working with the program faculty on this new Ph.D. program.

Sincerely,

Terri M. Manning, Ed.D.

January 23, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223

Dear Dean McIntyre,

I was very excited to read about the new Ph.D. in Education Research, Measurement, and Evaluation proposed by the Department of Educational Leadership in the College of Education at UNC Charlotte. I found the proposal to highly worthy and needed and am writing to show my full support. In 2012, I served on Superintendent Morrison's Task Force on an Accountability Framework. That experience affirmed, in my mind, the need to measure, collect the data and then use the data to improve processes and outcomes.

The program you are seeking to create will prepare researchers who can analyze education data for all sorts of educational institutions, including school districts, companies, and government and other non-profits agencies. I appreciate that the College of Education is well aware that educational programs and products often work outside of schools, and recognizes that these agencies will need to have experts ready to evaluate program innovations. In today's world of "big data," it is essential that we have professionals prepared to conduct rigorous studies with multiple variables that can inform practice. I believe the UNC program will produce such professionals.

I look forward to watching the progress of this program and the graduates of it who can help make the Charlotte region a better place through improved education. I support the program without reservation.

UNC Charlotte has a growing reputation for excellent programs and I am proud to support another one.

Sincerely,

Natalie Haskins English
SVP, Public Policy

August 23, 2013

Tom Ross, President
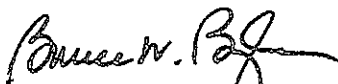University of North Carolina
Chapel Hill, North Carolina

Dear President Ross:

I am writing to strongly endorse the University of North Carolina at Charlotte's proposed Ph.D. in Educational Research, Measurement, and Evaluation.

Each year we hire professionals who must establish systems that collect and analyze data related to student achievement. These data must then be evaluated and presented in ways that teachers and administrators can use to improve the learning of every student. This is a difficult task that requires talented and well-trained researchers who can work with educators at all levels to apply the results in practice. This proposed Ph.D. in Educational Research, Measurement, and Evaluation program will produce the professionals needed to accomplish these tasks in our school district.

Please feel free to contact me if I can provide additional information as you consider this important proposal.

Sincerely,

Bruce W. Boyles, Ed.D.
Superintendent

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Charlotte-Mecklenburg Schools

Every Child. Every Day. For a Better Tomorrow.

Office of the Superintendent

Charlotte-Mecklenburg Government Center
600 East Fourth Street
Charlotte, North Carolina 28202

Jan. 13, 2014

Tom Ross, President
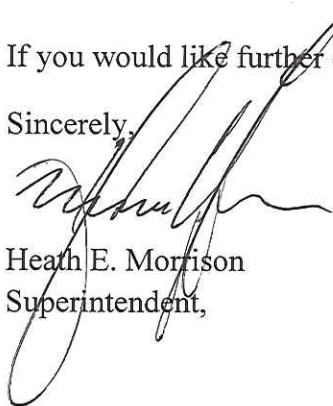University of North Carolina
Chapel Hill, North Carolina

Dear President Ross:

It was my pleasure to review the proposal for the new Ph.D. in Educational Research, Measurement, and Evaluation by the Department of Educational Leadership at the University of North Carolina at Charlotte. I write to support the program fully, as it is a significant need in the region community right now.

Public schools today face formidable challenges regarding student achievement and accountability of performance. Relying on external consultants to advise us on these issues does not help grow capacity of our employees to understand, use and manage data. UNC Charlotte's proposed Ph.D. program in in Educational Research, Measurement, and Evaluation directly supports our vision to develop professionals who can design and implement high quality programs, collect and analyze school data, and help principals ensure that we provide every student the opportunity to succeed.

A helpful feature of the proposed program is "real world" practicum experience that will be required of the graduate students. We need graduates of the program ready to analyze large sets of data so we can make informed policy decisions for all students. We advocate strongly for the program will produce the next generation of policy analysts for the Western part of North Carolina.

If you would like further evidence of the need for this Ph. D. program, please contact me.

Sincerely,

Heath E. Morrison
Superintendent,

August 27, 2013

Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross:

I very much support approval of the University of North Carolina at Charlotte's proposed Ph.D. in Educational Research, Measurement, and Evaluation.

As the second largest school district in North Carolina, Charlotte-Mecklenburg Schools collects large volumes of school data related to student achievement and school performance. As a result, we have an ongoing need for professionals who can analyze and interpret these school data in order to ensure the success of every child in the district. The Ph.D. in Educational Research, Measurement, and Evaluation proposed by UNC Charlotte will produce professionals with the expertise that we greatly need in order to accomplish these tasks.

We look forward to the establishment of this program in our region.

Sincerely,

Ann Blakeney Clark
Deputy Superintendent

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Accountability Services

4511 Monroe Rd.
Charlotte, North Carolina 28205

August 24, 2013

Dean Ellen McIntyre
College of Education
UNC Charlotte
9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dr. McIntyre:

It is my pleasure to write a letter in support of the proposed Ph.D. in Research, Measurement, and Evaluation at the University of North Carolina at Charlotte (UNCC) in the College of Education.

I am currently a Senior Analyst and Interim Director in the Research & Evaluation department in Charlotte-Mecklenburg Schools (CMS) and am also under a 3-year contract with the UNCC College of Education as an Associate Faculty member. As a Senior Analyst, I am responsible for the acquisition, summarization and analysis of data and information to inform policy and planning decisions in CMS. The majority of my work involves conducting research and evaluation projects related to specific policies are programs instituted in CMS, as well as the creation, management and analysis of all large, annual surveys in CMS. As an Associate Faculty member at UNCC, I am currently teaching Education Research Methods in Fall 2013 semester to the CMS Principal Pipeline cohort focusing on principal development.

I have reviewed the request to plan the Ph.D. in Research, Measurement, and Evaluation program and am excited about impact and quality of the program on the educational system in Charlotte, North Carolina and the country at large. As an analyst and person responsible for filling vacancies, I can assure you that CMS typically struggles to find well-trained researchers with a focus devoted to education. Given Charlotte's prominence as a banking center, many individuals applying to positions in our department have some of the required data management skills, but lack the contextual appreciation for the education environment and do not necessarily possess the inferential quantitative skills we are looking for. In the past we have attempted to recruit students from the two nearest educational research programs (UNC-Greensboro and University of South Carolina), but have been unsuccessful in obtaining students from those programs. We typically lose UNC-Greensboro students to educational institutions on the eastern side of North Carolina, and many students from the USC program remain in their state as well. A local program providing Ph.D. level training in education research would greatly benefit the policymakers in CMS and ultimately, the greater Charlotte Community.

On a larger scale, a local Ph.D. program in Research, Measurement, and Evaluation would provide positive experiences for both CMS and students of the program. Charlotte-Mecklenburg Schools would benefit by having both students and graduates of the program engaging in high-quality research efforts that will ultimately improve the academic experience for CMS students, create a more fiscally efficient school system, and inform the community about the efforts within CMS that are positively impacting students. In turn, students and graduates of the Ph.D. program would gain valuable experience in an applied setting outside of the classroom, where they can engage in data mining activities, qualitative data collection, and develop skills in summarizing technical information to non-technical audiences. The value in hands-on experience in the educational research setting cannot be overstated.

Several years ago, Dr. Dawson Hancock, Dr. Bob Algozzine and myself collaborated to formalize a relationship between the UNCC College of Education and the CMS Research & Evaluation office. As part of that agreement, Dr. Algozzine has served as the liaison between our respective institutions, offering not only his personal expertise and insight, but also connections to other faculty in the college of education. On several occasions, Dr. Algozzine brokered assistance from other faculty members to engage in educational research work that otherwise would have to have been completed by CMS staff. In turn, UNCC faculty logged the hours as part of their service requirement, and also gained access to CMS data. Also, UNCC has assigned a graduate assistant to process all UNCC COE student requests to conduct research in CMS; yet another instance of off-setting work that otherwise would be completed by CMS-based staff. Overall, the relationship that exists between UNCC COE and CMS Research and Evaluation has been mutually beneficial and a positive experience for everyone involved.

On a more personal note, I would have greatly appreciated the existence of this program back in 2007. As a working professional looking to obtain a Ph.D. in education research, I had two options available to me given my location here in Charlotte: UNC-Greensboro and USC-Columbia. The UNC-Greensboro program was an excellent program, but was, and I believe still is, a more psychometrically-oriented program. I ultimately chose to attend USC and had a great experience, but at a great cost. Commuting 180 miles roundtrip, twice a week, for nearly 4 years and the inability to engage more heavily with fellow graduate students in applied settings made my completion of the program that much more difficult. A similar program here in Charlotte would provide an avenue for local students to obtain a more developed skill-set and higher professional degree right here in their community. I would say as of right now, there are probably three individual working in CMS that would be interested in this program were it established at UNCC.

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4511 Monroe Rd.
Charlotte, North Carolina 28205

In conclusion, I fully support the efforts of the UNCC College of Education as they seek support to establish a Ph.D. in Research, Measurement, and Evaluation program designed to prepare professional who seek advanced research and statistical skills and leadership positions in education institutions, with the intent of utilizing their skills and abilities to help improve the educational experience for students in North Carolina and beyond. I hope that should the program come to fruition, I can be involved in my role with CMS or even continuing my role as a faculty member.

Sincerely,

Jason Schoeneberger

Senior Research Analyst, Charlotte Mecklenburg Schools

Associate Faculty Member (Adjunct), University of North Carolina at Charlotte

Council for Children's Rights

January 31, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223

Dear Dean McIntyre,

I read with great interest the Department of Education's proposal for a new Ph.D. program in Education Research, Measurement, and Evaluation. As the Executive Director of the region's largest children's advocacy organization, I know quite well how important it is that education policy and practice be informed by high quality research. I am writing to offer my full support for the program.

We are currently involved in a search for a Director of Research and Planning, and the job description for this individual dovetails nicely with the kind of professional this program is designed to produce. In today's world of "big data," it is essential that we have professionals prepared to conduct rigorous studies with multiple variables that can inform practice. It is also critical that these folks can translate the data for those in decision-making roles. I believe the UNC program will produce such professionals.

We have worked closely with UNC-Charlotte over the years, in partnership with the Urban Institute, Institute for Social Capital, and Departments of Psychology and Education. Many of our employees have studied or taught courses there as well. The university has a growing reputation for excellent programs and I am proud to support another one.

I look forward to watching the progress of this program and the graduates of it, who can help make the Charlotte region a better place through improved education. I support the program without reservation.

Sincerely,

Susan K. Campbell, Ph.D.

Susan K. Campbell, Ph.D.
Executive Director
Council for Children's Rights

DAVIDSON

January 14, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223

Dear Dean McIntyre,

I am pleased to offer my support for the proposed Ph.D. in Education Research, Measurement, and Evaluation within the Department of Educational Leadership in the College of Education at UNC Charlotte.

This new program will create a cadre of graduates who are able to analyze educational data focusing on schools and school districts. Importantly, the emphasis on educational research will produce high quality graduates who can evaluate programs within schools and school districts with the ultimate goal of improving education in the state.

In particular, the proposal mentions the need for researchers skilled enough to know how to link teacher preparation programs to K-12 pupil outcomes, a new standard for accreditation by the Council for the Accreditation of Education Preparation (CAEP). Many smaller colleges and universities who have outstanding teacher preparation programs do not always have staff ready to evaluate programs in this way. The UNC Charlotte Ph.D. program distinguishes itself in this regard. Again, I am pleased to offer my full support.

Sincerely,

Kristie L. Foley, PhD
Professor and Associate Director
Medical Humanities and Public Health
Davidson College
Davidson, North Carolina

Kannapolis City Schools

100 DENVER STREET
KANNAPOLIS, NC 28083

704-938-1131   FAX: 704-933-6370

http:/www.kcs.k12.nc.us

Creating
the
Future
KCS
Kannapolis City Schools

Pamela D. Cain, Ed.D.
Superintendent
Pam.cain@kcs.k12.nc.us

January 15, 2014

Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross,

I wish to express my strong support of the Ph.D. in Educational Research, Measurement, and Evaluation proposed by the Department of Educational Leadership at the University of North Carolina at Charlotte. UNC Charlotte has a group of outstanding research methodologists ready to provide our region with skilled researchers ready to help solve some of the most pressing problems in education.

Our school district routinely collects and analyzes data with which to monitor and influence the academic progress of our students. Locating and hiring professionals with the knowledge and skills to analyze large volumes of quantitative and qualitative data is difficult. Graduates of UNC Charlotte's Ph.D. in Educational Research, Measurement, and Evaluation program would have the expertise that would allow us to examine school and student performance data with which to create programs, conduct program evaluations and make decisions that can develop the full potential of every student in our district.

I would like to see UNC Charlotte partner with Kannapolis City Schools to provide some of the PhD students with practical experience working with our data to determine the best decisions for the children in our district. I recommend this program with no reservations.

Please feel free to contact me if you need additional justification for establishing this degree program.

Sincerely,

Pam Cain, Ed. D.
Superintendent
Kannapolis City Schools

MeckEd

January 13, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223

Dear Dean McIntyre,

It was my pleasure to read about the new Ph.D. in Education Research, Measurement, and Evaluation proposed by the Department of Educational Leadership in the College of Education at UNC Charlotte. I am proud to see the University take on this important work. The proposal is of utmost importance to our community; I found the proposal to highly worthy and am writing to show my full support.

The program seeks to prepare researchers who can analyze education data for all sorts of educational institutions, including school districts, companies, and government and other non-profits agencies. The College of Education is well aware that educational programs and products often work outside of schools, and they recognize that these agencies will need to have experts ready to evaluate program innovations. In today's world of "big data," it is essential that we have professionals prepared to conduct rigorous studies with multiple variables that can inform practice. I believe your program will produce such professionals.

I look forward to watching the progress of this program and the graduates of it who can help make the Charlotte region a better place through improved education. I support the program without reservation.

UNC Charlotte has a growing reputation for excellent programs and I am proud to support another one.

Sincerely,

Bill Anderson, Ed.D.
Executive Director
MeckEd

Mooresville
Graded School District

January 15, 2014

Tom Ross, President
University of North Carolina
P.O. Box 2688
Chapel Hill, North Carolina 27414

Dear President Ross,

It is with great enthusiasm that I express my support, on behalf of the Mooresville Graded School District, of the new *Ph.D. in Educational Research, Measurement, and Evaluation* proposed by the Department of Educational Leadership at the University of North Carolina at Charlotte. Based upon my review of the proposal, UNC-Charlotte appears to have a group of outstanding research methodologists ready to provide our region with skilled researchers who can assist our school districts and state department to solve some of the most pressing problems in education.

Our school district routinely collects and analyzes data with which to monitor and influence the academic progress of our students. Locating and hiring professionals with the knowledge and skills to analyze large volumes of quantitative and qualitative data is difficult. Graduates of UNC Charlotte's Ph.D. in Educational Research, Measurement, and Evaluation program would have the expertise that would allow us to examine school and student performance data with which to create programs and make decisions that can develop the full potential of every student in our district.

I would like to see UNC Charlotte partner with Mooresville Graded School District to provide some of the PhD students with practical experience working with our data to determine the best decisions for the children in our district. I recommend this program with no reservations.

Please feel free to contact me if you need additional justification for establishing this degree program.

Sincerely,

Dr. Mark A. Edwards
Superintendent

cc: Dr. Ellen McIntyre, UNC-Charlotte
        Ric Vandette, Southwest Education Alliance
        Dr. Jim Bird, UNC-Charlotte

QUEENS UNIVERSITY OF CHARLOTTE

Jeremiah B. Wills, Ph.D.
Department of Sociology
Queens University of Charlotte
willsj@queens.edu
704-688-2835

January 14, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223

Dear Dean McIntyre,

It is my pleasure to offer my full support of the PhD program in Education Research, Measurement, and Evaluation proposed by the Department of Educational Leadership in the College of Education at UNC Charlotte. As the proposal describes, such a program committed to evidence-based practice in the field of education is critical.

The new UNC Charlotte program will train PhD-level researchers to work with education data with applications for a variety of organizations and agencies, especially within the regional community. This will further extend the College of Education's commitment to improving the quality of education in our state. More practically speaking, the program will address new accreditation standards of the Council for the Accreditation of Education Preparation by training researchers to evaluate the effects of teacher preparation programs on K-12 student outcomes.

Clearly, the College of Education at UNC Charlotte is well prepared to offer this doctoral program. The faculty are impressive scholars in their specialty areas, and the necessary administrative structure is in place. The doctoral students who complete the program will be trained to offer a needed service to the many smaller colleges and universities in the area that focus on teacher training but do not have the resources to conduct sophisticated evaluations of their programs.

I look forward to seeing this important and exciting new program in place.

Sincerely,

Jeremiah B. Wills

Dr. Ric Vandett
Director
828-302-0293
drvandett@charter.net

Southwest
Education Alliance

Jennifer Camden
Administrative Assistant
704-292-4872
jennifer.camden@ucps.k12.nc.us

January 13, 2014

Dr. Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross,

As a partner with the University of North Carolina at Charlotte, I was given the opportunity to review UNCC's Department of Educational Leadership's proposal for the new Ph.D. in Educational Research, Measurement, and Evaluation. After reading the proposal, and knowing what I know about the quality of the Department of Educational Leadership at UNCC, I offer my and the Southwest Education Alliance's (SWEA) full support of the proposal.
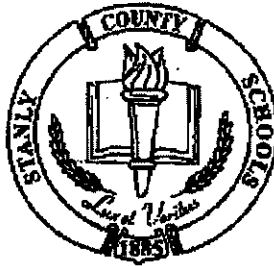
As the SWEA works with the eleven school districts in our region, we have become acutely aware of the challenges facing the schools as they struggle to meet the demands of legislators and others who constantly put obstacles in the way of schools achieving their goals. The changing demands coupled with reduced resources makes it imperative that schools have staff who have the knowledge and skills needed to analyze data which would lead to designing programs offering opportunities for all students to be successful.

The proposal's component of offering a real world practicum experience ensures that the students would be using pertinent data relevant to each school's situation. These experiences will help the graduates become agents of policy change, and they would be working within the public schools saving the schools from having to outsource data to get the information the schools need to effect change.

I give my unqualified support to this proposal and look forward to partnering with the university by providing schools within the region that can be used for lab settings.

Ric Vandett, Ed.D.
Director
Southwest Education Alliance

January 13, 2014

Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross,

I wish to express my strong support of the Ph.D. in Educational Research, Measurement, and Evaluation proposed by the Department of Educational Leadership at the University of North Carolina at Charlotte. UNC Charlotte has a group of outstanding research methodologists ready to provide our region with skilled researchers ready to help solve some of the most pressing problems in education.

Our school district routinely collects and analyzes data with which to monitor and influence the academic progress of our students. Locating and hiring professionals with the knowledge and skills to analyze large volumes of quantitative and qualitative data is difficult. Graduates of UNC Charlotte's Ph.D. in Educational Research, Measurement, and Evaluation program would have the expertise that would allow us to examine school and student performance data with which to create programs and make decisions that can develop the full potential of every student in our district.

I would like to see UNC Charlotte partner with Stanly County Schools to provide some of the PhD students with practical experience working with our data to determine the best decisions for the children in our district. As a professional educator, superintendent and alumni of UNCC, I understand the quality of past and current programs at UNCC and strongly recommend this program with no reservations.

Please feel free to contact me if you need additional justification for establishing this degree program.

Sincerely,

Dr. Terry Griffin
Superintendent, Stanly County Schools

UCPS
UNION COUNTY PUBLIC SCHOOLS

Department Name

400 North Church Street
Monroe, NC 28112
Phone 704.296.9898 Fax 704.289.9182
www.ucps.k12.nc.us

January 16, 2014

President Tom Ross
University of North Carolina
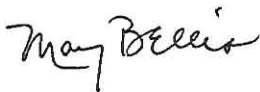Chapel Hill, North Carolina

Dear President Ross,

I wish to express my strong support of the Ph.D. in Educational Research, Measurement, and Evaluation proposed by the Department of Educational Leadership at the University of North Carolina at Charlotte. UNC Charlotte has a group of outstanding research methodologists ready to provide our region with skilled researchers ready to help solve some of the most pressing problems in education.

Our school district routinely collects and analyzes data with which to monitor and influence the academic progress of our students. Locating and hiring professionals with the knowledge and skills to analyze large volumes of quantitative and qualitative data is difficult. Graduates of UNC Charlotte's Ph.D. in Educational Research, Measurement, and Evaluation program would have the expertise that would allow us to examine school and student performance data with which to create programs and make decisions that can develop the full potential of every student in our district.

I would like to see UNC Charlotte partner with Union County Public Schools to provide some of the PhD students with practical experience working with our data to determine the best decisions for the children in our district. I recommend this program with no reservations.

Please feel free to contact me if you need additional justification for establishing this degree program.

Sincerely,

Mary B. Ellis, Ed. D.
Superintendent
Union County Public Schools

August 29th, 2013

Dear Dean McIntyre,

As the Director of the Institute for Social Capital, I hold a unique position at UNC Charlotte where I am charged with the dual mission of advancing University research while also supporting data-based decision making in our community. In this role, I work with both academics and community leaders to utilize research to inform practice. Prior to taking on this role in 2012, my career was at the school level, and as such, my expertise is related to educational research. I hold two degrees from UNC Charlotte, a Master's in School Administration and a Ph.D. in Curriculum & Instruction, Urban Education.

I have reviewed the request to plan the Ph.D. in Research Measurement, and Evaluation. I enthusiastically express my support for this program, both as a former student who had to take methods classes outside of the COE due to a lack of advanced offerings, and as a community researcher who knows firsthand the dearth of expertise in this area within our community.

My role as ISC Director places me as a liaison between governmental agencies and non-profits and the University. I am often the "academic" voice in many community discussions around a variety of topics, particularly education. These discussions have, at times, left me dismayed by the lack of understanding there exists regarding data quality, research methods, and standards of evaluation, even from fellow UNC Charlotte Graduates. My own concerns have been echoed by Directors throughout the city who talk about the difficulty of finding good "data people."

Our community indicates tremendous opportunities for individuals with expertise as it relates to researching educational outcomes. I would go as far to say that there are few professionals in our community, outside of the University environment, that have the skills and expertise needed to successfully conduct or even interpret educational research. As agency funding becomes more and more tied to outcomes and indicators, professionals in this field are more and more in demand, and harder to find. The proposed Ph.D. would meet this need and I would venture to say that graduates of this program would be highly sought after.

I hope you strongly consider the proposed request to plan for the Ph.D in Research Measurement, and Evaluation as it would be an important contribution to the strength of the College of Education and the greater community.

Best Regards,

Amy Hawn Nelson, Ph.D.

August 26, 2013

Dear Dr. Flowers:

This letter is written in support of the new PhD in Research, Measurement, and Evaluation. This new PhD program will strengthen the work of all the doctoral programs in the College of Education. There are at least three ways the program will strengthen the PhD in Special Education. First, the new PhD will provide additional coursework for students who want more advanced research training while pursuing a PhD in Special Education. Second, students will have peers in all of their research courses who have greater aptitude in research design. Currently some of our doctoral students in special education discover they know as much, or more, about research design than anyone in their design courses. Having peers gaining advanced expertise in this area will challenge our own doctoral students to go deeper in their knowledge of design and provide opportunities for class discussions and examples with a higher level of challenge. Finally, having a cohort of doctoral students gaining this advanced expertise will provide a community of scholars who value the advancement of research. This creates the opportunity for both formal and informal research colloquia and discussion groups.

I strongly endorse the PhD in Research, Measurement, and Evaluation and look forward to the contribution it will make to the PhD programs in this College.

Sincerely,

Diane M. Browder

Diane M. Browder, PhD
Lake and Edward Snyder Distinguished Professor of Special Education and Coordinator of PhD Program in Special Education

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August 30, 2013

Ellen McIntyre, Ph.D.
Dean, College of Education
University of North Carolina at Charlotte

Dean McIntyre:

I am pleased to write a letter of support on behalf on the proposed doctoral program in Education Research, Measurement and Evaluation. I consider this a welcome addition to the doctoral offerings in the College of Education at UNC Charlotte.

Let me begin with the punch line—this proposed doctoral program in Education Research, Measurement and Evaluation would elevate the doctoral offerings and intellectual rigor, not only in this proposed program, but also in the other doctoral programs in the College of Education. As program coordinator of the Urban Education Strand in the Curriculum and Instruction doctoral program, I firmly believe that our students will benefit from the additional course offerings of this program. As an example, a large majority of our doctoral students have aspirations for careers in higher education. Given that we are one of the few higher education institutions in the United States that prepare students in the field of urban education at the doctoral level, the new courses with the proposed doctoral program will allow graduates of our program to be strongly considered for tenure-track positions at top-tier research institutions. Additionally, this proposed doctoral program would also better prepare our doctoral students to be future leaders at the practitioner-level in urban educational settings around the United States.

In closing, I strongly support this proposed doctoral program as a welcome addition in the College of Education. If you have any questions concerning this letter of recommendation, I can be reached at (704) 743-4207 (Office) or by e-mail chance.lewis@uncc.edu.

Regards,

Chance W. Lewis

Chance W. Lewis, Ph.D.
Carol Grotnes Belk Distinguished Professor of Urban Education
Director, *The Urban Education Collaborative*
College of Education
University of North Carolina at Charlotte

William B. Ware, McMichael Term Professor of Education 2011-2013
Learning Sciences and Psychological Studies
wbware@unc.edu

CAMPUS BOX 3500
118 PEABODY HALL
CHAPEL HILL, NC 27599-3500

September 26, 2013

Dean Ellen McIntyre
College of Education
UNC Charlotte
9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dr. McIntyre,

I write to support the proposed program entitled Research, Measurement, and Evaluation to be offered within the College Education. I have read the 13-page Appendix which described the program and also the letter of support from Professor Karvonen. I believe that she has done an excellent job justifying the need for such a program in the Charlotte area and I concur with her. Not wanting to duplicate her contribution, I will present my argument from a different perspective.

As the proposal correctly notes, there are three other somewhat similar programs in North Carolina. However, it also notes that there are important differences in the proposed program, and I agree. I would like to address more specifically the differences between the proposed program and the program at UNC-Chapel Hill. First, the title of our program, Educational Psychology, Measurement, and Evaluation (EPME) emphasizes the areas of psychometrics and statistical methods. The Evaluation part of the title was to showcase the expertise of Professor Henry Frierson, who has left the University and who has not been replaced. Thus, it is a bit of a stretch so suggest that we have a program which includes the area of Evaluation. The word was retained in the title for internal "political" reasons. Another important difference is that the Ph.D. program at Chapel Hill is a full-time program, and as such, is not available to a large potential population of students.

Perhaps most important is that the EPME program has been discontinued in the process of our revising our Ph.D. program within the School of Education. The EPME faculty has been dispersed to help staff two new programs, 1) Learning Sciences and Psychological Studies and 2) Applied Development. Of lesser importance is the fact that I am currently 71 years old and will not be here forever. I am the only person in our School teaching applied statistics and there is no plan currently in place to replace me.

For all these reasons, I support the proposed program at UNC-Charlotte. I have read the proposal and think that the program will make a real contribution to the State. I know several of the proposed faculty both professionally and personally; they are fine people in both venues.

The program has my support without any reservations.

Sincerely,

William B. Ware

William B. Ware, Professor
Learning Sciences and Psychological Studies
McMichael Term Professor 2011-2013

August 30, 2013

Dean Ellen McIntyre
College of Education
UNC Charlotte
9201 University City Blvd
Charlotte, NC 28223-0001

Dear Dr. McIntyre,

Thank you for the opportunity to review UNC Charlotte's proposed Ph.D. program in Educational Evaluation and Research. The proposal outlines a program that would transform educational practitioners into researchers and prepare them for a variety of roles in K-12 and higher education settings. The gap between educational research and educational practice has been a persistent challenge in the field, and is often a theme prioritized by national organizations in the discipline. UNCC's proposed program offers an intentional and theory-driven model that has the potential to bridge that gap.

The proposed program capitalizes on resources already in place. The department has nine faculty members to support the broad array of course offerings. These faculty members have diverse backgrounds and areas of specialization that will be critical for delivering a program that spans research and evaluation including quantitative and qualitative methods. The strong record of external funding in the College of Education, and the presence of the Center for Educational Measurement and Education within the college, will offer substantial opportunities for students to develop as researchers through applied experiences. The proposed program also appears to be well aligned to the university's mission, particularly regarding outreach to the region. The existing relationships between UNCC and area school districts and community colleges would no doubt be strengthened by the program.

In summary, the proposed program shows great promise in developing doctoral-level professionals who can help bridge the gap between educational research and practice, in service of the Charlotte region and the state of North Carolina. A program with this type of mission would clearly fill a gap in the offerings within the UNC System.

Sincerely,

Meagan Karvonen, Ph.D.
Associate Director

February 3, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC

Dear Dr. McIntyre,

With this letter, I am pleased to offer my strong support for the proposed Ph.D. program in Education Research, Measurement and Evaluation at UNC Charlotte. This will offer new opportunities to define and improve education in North Carolina through careful data-driven analyses.

The new program is distinctive for two reasons. First, the program is designed to stimulate increased regional research, creative activities, and community engagement with a focus on partnerships that address the major needs of educational programs. Second, the proposed Ph.D. program will be located in close proximity to our schools and other educational agencies, allowing for greater collaboration. The Research and Economic Development organization of UNC Charlotte will strongly support the partnerships developed by this new program. New opportunities for graduate research and practical experience provided by this program will greatly contribute to the growth of research and the research culture at UNC Charlotte.

The objectives of the proposed program are highly aligned with the needs of our community. Developing collaborative relationships that assist in designing and conducting research that expands knowledge in the educational field will provide a foundation for building evidence-based practices for making decisions that enhance our educational programs and improve student learning. The program will prepare education research scholars committed to finding solutions to the challenges facing public education. This doctoral program will also fill a regional need with the K-12 educational system while mutually benefiting our community and the UNC Charlotte.

UNC Charlotte is the Urban Research University for North Carolina. This new program demonstrates the opportunities and potential that can be realized by growing the research enterprise in Charlotte and closely coupling it with state and regional partners.

Sincerely,

Robert G. Wilhelm, Ph.D.
Vice Chancellor for Research & Economic Development
Executive Director, Charlotte Research Institute
Professor of Mechanical Engineering & Engineering Science

UNC CHARLOTTE

College of Education

Center for Science, Technology, Engineering, and Mathematics [STEM] Education
College of Education Bldg., Suite 222
9201 University City Blvd., Charlotte, NC 28223-0001

January 31, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC

Dear Dr. McIntyre,

The Center for Science, Technology, Engineering, and Mathematics [STEM] Education at UNC Charlotte is pleased to write a letter of support for the proposed Ph.D. program in Education Research, Measurement and Evaluation at UNC Charlotte. This endeavor offers an exciting opportunity for improving education in North Carolina through data-based decisions based on in-depth analysis.

The new program is distinctive for two reasons. First, the increased regional research and related creative activities and community engagement and resulting partnerships will address the major needs of educational programs. Second, the proposed Ph.D. program will be located in close proximity to our schools and other educational agencies, allowing for greater collaboration. In fact, the Center for STEM Education is committed to collaborating with the College of Education, and expects to provide avenues for practical experience analyzing data for the students.

The objectives of the proposed program are aligned with the needs of our community. Developing collaborative relationships that assist in designing and conducting research that expands knowledge in the educational field will provide a foundation for building evidence-based practices for making decisions that enhance our educational programs and improve student learning. The program will prepare education research scholars committed to finding solutions to the challenges facing public education. This doctoral program will also fill a regional need with the P-12 educational system while mutually benefiting our community and the UNC Charlotte.

Our numerous programs with PK-12 schools provide multiple opportunities for engagement of doctoral students in developing research and analyzing data that will provide us with information to better inform our decisions about our work. The Center's grant funded projects will also benefit tremendously from this proposed program by providing a level of expertise and support that will allow for effective evaluation of our activities.

Sincerely,

David K. Pugalee, Ph.D.
Director

February 4, 2104

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC

Dear Dr. McIntyre,

It is a pleasure to write a letter of support for the proposed Ph.D. program in Education Research, Measurement and Evaluation at UNC Charlotte. This new initiative offers an exciting opportunity for benchmarking education systems and for improving education in North Carolina through rigorous data-driven analyses.

The new program is distinctive for two reasons. First, the program is designed to stimulate increased regional research, creative activities, and community engagement with a focus on partnerships that address the major needs of educational programs. Second, the proposed Ph.D. program will be located in close proximity to our schools and other educational agencies, allowing for greater collaboration. In fact, a core mission of Project Mosaic is to conduct collaborative scholarship among social scientists at UNC Charlotte, and a close collaboration with the College of Education in critical to this mission. Project Mosaic is poised to provide avenues for practical experience analyzing data for the students enrolled in the program.

The objectives of the proposed program are aligned with the needs of our community. Developing collaborative relationships that assist in designing and conducting research that expands knowledge in the educational field will provide a foundation for building evidence-based practices for making decisions that enhance our educational programs and improve student learning. The program will prepare education research scholars committed to finding solutions to the challenges facing public education. This doctoral program will also fill a regional need with the P-12 educational system while mutually benefiting our community and the UNC Charlotte.

While Project Mosaic is brand new and collaboration with the College of Education remains to be fully realized, my contacts with researchers of the College have revealed tremendous potential for deep and long-lasting research opportunities that will enrich the policy and practical relevance of education measurement and evaluation research to the local, regional, and national educational community, and thus to the national economy at large. The unique combination of talent of the faculty involved in the proposed doctoral program is instrumental to this endeavor. I am delighted to provide my enthusiastic support for the proposed new doctoral program.

Sincerely,

Jean-Claude Thill
Knight Foundation Distinguished Professor of Public Policy
Director, Project Mosaic

February 6, 2014

Ellen McIntyre, Dean
College of Education
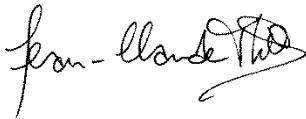UNC Charlotte
Charlotte, NC

Dear Dr. McIntyre,

It is a great pleasure to write a letter of support for the proposed Ph.D. program in Education Research, Measurement and Evaluation at UNC Charlotte. This new degree program presents an exciting opportunity for our College. The objectives of the proposed degree program are closely aligned with the needs of educational agencies in our state and region. Collaborative relationships with local school systems in which our students will have the opportunity to design and conduct research studies that support evidence-based practices and improve student learning will be an essential feature of the program. The program will prepare educational research scholars committed to finding solutions to the challenges facing public education. This doctoral program will also fill a regional need within the P-12 educational system while mutually benefiting our community and UNC Charlotte.

The Center for Educational Measurement and Evaluation at (CEME) at UNC Charlotte provides statistical, program evaluation, and measurement expertise and technical assistance to school systems and related agencies. CEME seeks to connect educational administrators, practitioners, and policy makers to UNC Charlotte faculty and students to engage them in mutually beneficial projects that lead to evidence-based practice, improved educational outcomes for students, and informed decisions about educational policy. CEME provides a vehicle through which university faculty and students establish research and evaluation collaborations with educational practitioners in our state and region. CEME will house an internship course for these students. We are very excited about involving the students from this new degree program in all of our ongoing work and fully expect to benefit greatly from their skills and energy.

Given that the field of education, both nationally and in the state of North Carolina, is currently focused on a range of reforms and data-driven accountability programs, and given that the need for professionals with the skills and passion to advance the knowledge base with state of the art research and evaluation skills has never been greater, UNC Charlotte through this new degree program is uniquely poised to help prepare the next generation of educational evaluators, researchers, and policy makers.

Sincerely,

Richard G. Lambert, Ph.D., Ed.S.
Professor
Department of Educational Leadership
Director
Center for Educational Measurement and Evaluation
University of North Carolina at Charlotte
9201 University City Blvd.
Charlotte, NC 28223-0001
Phone: 704-687-8867
E-mail: rglamber@email.uncc.edu

3 March 2014

Subject: Letter of Support for the Proposal to Add New Ph.D. Program in Education
             Research, Measurement, and Evaluation in UNC Charlotte's College of Education

I am writing this letter in support of the proposal to add a new academic program at UNC
Charlotte in the College of Education: Ph.D. in Education Research, Measurement and
Evaluation. I reviewed a copy of the revised program description (January 2014) and found the
stated approach to preparing professionals in "advanced research, statistical, and evaluation
skills" most suitable to the current education research climate in Charlotte. Charlotte-
Mecklenburg Schools, as well as the surrounding school districts, have become a shining beacon
for top-quality public education in the nation.

I direct the Charlotte Teachers Institute (CTI), an educational partnership among UNC
Charlotte, Davidson College and Charlotte-Mecklenburg Schools to strengthen teaching and
learning in public schools. Founded in 2009 on the Yale National Initiative Model to Strengthen
Teaching, CTI has served more than 300 teachers and collaborated with more than forty
university and college professors to offer thirty-six content-rich seminars. Housed in the College
of Liberal Arts and Science at UNC Charlotte, CTI is a unique professional development model
focused on classroom teachers' growth in content knowledge, collaboration, leadership and
creativity. Recently, CTI was recognized by the Council for Great City Schools with its Shirley
S. Schwartz Urban Education Impact Award. I am always looking for high quality research
collaborations to help evaluate the effectiveness of CTI's model for teachers and their students.
The addition of a Ph.D. program in Education Research will provide CTI with partnership
opportunities with doctoral students looking to test their research and evaluation skills through
work with programs, like CTI, serving real teachers and students in the community.

Additionally, I am currently a doctoral student in the Department of Educational
Leadership at UNC Charlotte working on an Ed.D. with a focus on Research and Evaluation.
This new Ph.D. degree offers much more in the area of education research by requiring both core
and advanced research content, in addition to methods coursework. The added rigor and
sharpened research attention will suit my studies quite well. I am very much in support of the
establishment of this new degree at UNC Charlotte.

Sincerely,

Scott R. Gartlan
Executive Director
Charlotte Teachers Institute

FAYETTEVILLE
STATE UNIVERSITY

June 27, 2014

Dr. Tom Ross, President
University of North Carolina
Chapel Hill, North Carolina

Dear President Ross:

The purpose of this letter is to strongly endorse approval of the Ph.D. in Educational Research, Measurement, and Evaluation proposed by the College of Education at the University of North Carolina at Charlotte.

This proposed Ph.D. program will allow candidates to attain advanced research, statistical, measurement and evaluation skills that are greatly needed in many public and private educational settings. My thorough review of the proposal suggests that future graduates of this program will possess the analytical and decision-making skills needed to address many of North Carolina's most pressing educational issues.

Although similar programs exist in a few of the other state institutions of higher education, the closest program to Charlotte is more than ninety miles away. UNC Charlotte's program will serve the needs of many school districts and organizations in the populous and rapidly growing region around Charlotte.

If you would like further justification for establishing this degree program, please feel free to contact me.

Sincerely,

Leontye L. Lewis, Ed.D.
Professor and Dean

GEORGE
MASON
UNIVERSITY

Office of the Dean

College of Education and Human Development
4400 University Drive, MS 2F1, Fairfax, Virginia 22030
Phone: 703-993-2004; Fax: 703-993-2001

June 30, 2014

Ellen McIntyre, Ph.D.
Dean and Professor
College of Education
COED 206
University of North Carolina at Charlotte
Charlotte, NC 28223-0001

Dear Dean McIntyre:

Thank you for the opportunity to review the Ph.D. in Education Research, Measurement, and Evaluation program proposed by the College of Education at UNC Charlotte. The proposal is compelling and well-conceived. The proposed curriculum and program requirements are contextually strong and will provide students with an important array of knowledge, skills, and abilities as well as considerable applied, professional experience. The description of the proposed Ph.D. program will expand the intellectual and programmatic collaboration within UNC Charlotte and across the greater Charlotte region, resulting in critical interdisciplinary scholarship in areas of educational policies and practice. There is an acute need for highly trained researchers in the fields of P-12 and higher education.

At George Mason University, in response to parallel challenges in Northern Virginia to identify highly trained personnel to staff and lead the research centers of public schools and higher education systems, we too have developed graduate-level programs in this domain, including doctoral-level training. It is an area of high need and specific specialization for which well-conceived doctoral programs are in demand by students and their graduates are in demand by employers.

The description of the proposed Ph.D. program, educational objectives, curricula, and course requirements will provide students with a solid foundation as educational researchers. UNC Charlotte's location in an urban environment and strong relationship with educational organizations in the community offer unique opportunities for students to engage in meaningful internships, which is an essential part of the doctoral-level training. The experiences that students will engage in will increase their capacity to research important questions that will serve to improve the educational experiences and life outcomes of children and youth and the capacity of schools.

UNC Charlotte has the resources to offer the Ph.D. in Education Research, Measurement, and Evaluation. The faculty is composed of established scholars in diverse educational fields, and the UNC Charlotte Research Institutes/Centers will create a vibrant environment for mentoring future educational researchers.

Please feel free to contact me if I can provide additional information as you seek to establish this important new doctoral program at UNC Charlotte.

Sincerely,

Mark R. Ginsberg, Ph.D.
Dean and Professor

LEMUEL WATSON
DEAN AND PROFESSOR
COLLEGE OF EDUCATION

June 25, 2014

Dr. Ellen McIntyre
Dean
College of Education
UNC Charlotte
Charlotte, NC 28223-0001

Dear Dr. McIntyre:

Thank you for the opportunity to review the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. I found the proposal compelling because of the skilled researchers it will produce and my awareness of the educational challenges in urban settings. Like UNC Charlotte, our institution strives to leverage university resources to address the challenges of raising the achievement of all students to high levels. The description of the proposed Ph.D. program will expand the intellectual and programmatic collaboration within UNC Charlotte and across the greater Charlotte region, resulting in critical interdisciplinary scholarship in areas of educational policies and practice. There has never been a greater need for highly trained researchers in the educational field.

The description of the proposed Ph.D. program, educational objectives, and course requirements will provide students with a solid foundation as educational researchers. UNC Charlotte's location in an urban environment and strong relationship with educational organizations, as noted in the letters of support, offer unique opportunities for students to engage in meaningful internships, which is an essential part of the doctoral students training. The relationships that students build will be extraordinarily rewarding and increase their capacity to qualitatively improve the educational experiences and life outcomes of children and youth in our urban educational agencies.

UNC Charlotte has the resources to offer the Ph.D. in Education Research, Measurement, and Evaluation. The faculty are established scholars in diverse educational fields, and the UNC Charlotte Research Institutes/Centers should create a vibrant environment for mentoring future educational researchers.

Please feel free to contact me if I can provide additional information at 803-777-3075 or lwatson@mailbox.sc.edu. Good luck in your efforts in establishing the new Ph.D. program.

Sincerely,

Lemuel Watson
Dean

CHALLENGING THE STATUS QUO ... EXCEEDING EXPECTATIONS

UNIVERSITY OF SOUTH CAROLINA • COLUMBIA, SOUTH CAROLINA 29208
803/777-3075 • FAX 803/777-3035 • E-MAIL COEDEAN@MAILBOX.SC.EDU

AN EQUAL OPPORTUNITY INSTITUTION

June 25, 2014

Dr. Ellen McIntyre
Dean, College of Education
UNC - Charlotte
Charlotte, NC 28223-0001

Dear Dean McIntyre:

After reviewing the proposal for the College of Education at UNC-Charlotte to offer a Ph.D. in Education Research, Measurement, and Evaluation, I am delighted to submit this letter of support. The curriculum described in the proposal represents responsiveness to the growing need for well-trained educational researchers, especially in the midst of today's complex social environments. Winston-Salem State University is committed to social justice education and closing the achievement gap in American public schools, and having a program as described in the proposal for a Ph.D. that focuses on research, measurement, and evaluation, will strengthen and improve educator preparation efforts, as well as inform related policy discussions – locally and nationally. The UNC system and its various stakeholders would be well-served by a program of such depth.

The proposed Ph.D. program builds on a strong College of Education foundation, being listed *by US News and World Report* as "one of America's best graduate schools in education." The program would clearly serve to advance the mission statement, which highlights the persistent need to prepare professionals to articulate sound educational research questions and engage in appropriate research methodologies aimed at answering critical questions that confront the profession and society. I believe UNC Charlotte's School of Education is uniquely positioned to leverage its complement of resources (faculty, community, professional organizations, etc.) directed at equipping students to address the serious issues embedded in 21st century education. If adopted, the Ph.D. program would build the capacity of educational researchers to employ evidence-based strategies that can systematically inform and evaluate structures of education in North Carolina and beyond.

Given UNC-Charlotte's stellar College of Education faculty and its overall vibrant academic community, I am confident of their ability to offer an outstanding Ph.D. program in Education Research, Measurement, and Evaluation. Please do not hesitate to contact me if you need additional information.

Sincerely,

Denise Pearson, Ph.D.
Interim Dean and Professor of Education

July 1, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223-0001

Dear Dr. McIntyre:

Thank you for the opportunity to review the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. Based on the description of the courses and objectives, I believe the program will provide graduates with a very solid foundation to function as educational researchers. Further, it appears that UNC Charlotte and the College of Education have the resources needed to provide the program within existing capacity. These resources include highly qualified faculty, existing courses, added support from institutes and centers, and the experience of managing a relatively large portfolio of external contracts and grants.

Moreover, UNC Charlotte is ideally positioned in a vibrant metropolitan area of the state and region and will most certainly build on already established relationships with schools and social agencies. These relationships can support the collaborative identification of research and evaluation projects of consequence, providing vital internship experiences for the students in the program and creating synergies for improved understanding of the practical and policy challenges of urban education. With better understanding comes more effective responses. This program will enhance that process by providing an increased number of researchers so needed in the field of education.

I congratulate you on the foresight shown by this proposal that not only takes advantage of existing capacity in UNC Charlotte but also responds to significant needs in the field.

Best regards,

Betty Lou Whitford, Dean
Wayne T. Smith Distinguished Professor

3084 HALEY CENTER

AUBURN, AL 36849-5218

TELEPHONE:

334-844-4446

FAX:

334-844-5785

www.auburn.edu

June 27, 2014

Dr. Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223-0001

Dear Dean McIntyre,

Thank you for the opportunity to review the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. I found the proposal compelling because of the skilled researchers it will produce to meet the high demand for scholars and practitioners in this field. The proposed program also responds to educational challenges in urban settings. Like UNC Charlotte, the College of Education and Human Development strives to leverage university resources to address the challenges of raising the achievement of all students to high levels. The description of the proposed Ph.D. program will expand the intellectual and programmatic collaboration within UNC Charlotte and across the greater Charlotte region, resulting in critical interdisciplinary scholarship in areas of educational policies and practice. There has never been a greater need for highly trained educational researchers, evaluators, and policy analysts.

Based on my extensive experience as a program reviewer and insights as a Vice Dean and now incoming Dean of a large urban college of education, the description of the proposed Ph.D. demonstrates that the educational objectives are sound; the admission standards are high; and the programmatic course requirements are rigorous and promise to provide students with a solid foundation as educational researchers. UNC Charlotte's location in an urban environment and strong relationship with educational organizations, as noted in the letters of support, offer unique opportunities for students to engage in meaningful internships, which is an essential part of the doctoral students training. The relationships that students build will be extraordinarily rewarding and increase their capacity to qualitatively improve the educational experiences and life outcomes of children and youth in our urban educational agencies. This proposed Ph.D. will complement existing programs as well as UNC Charlotte's institutional mission and its Strategic Plan.

UNC Charlotte has the necessary resources conducive to offering a strong and effective Ph.D. in Education Research, Measurement, and Evaluation. The faculty are established scholars in diverse educational fields, and the UNC Charlotte Research Institutes/Centers should create a vibrant environment for mentoring future educational researchers. Moreover, as the dean and leader of UNC-C's College of Education, you have extensive evidence of scholarship at the highest level which is apropos for a Research university's doctoral emphases, including through your publications, texts, editorial board service, grant funding, presentations, peer reviews, and professional development delivery. You have also been successfully engaged in assessment, accreditation, and accountability endeavors which provide evidence of your expertise and attention to standards and external audiences and assessors to ensure program quality, assurances, and sustainability.

Please feel free to contact me if I can provide additional information. Best wishes in your efforts in establishing the new Ph.D. program. I look forward to following your College's progress with this program.

Sincerely,

Ann Elisabeth Larson, Ph.D.
Dean, College of Education and Human Development, beginning July 1, 2014
University of Louisville
Professor, Department of Middle and Secondary Education
Immediate Past-President, Kentucky Association of Colleges for Teacher Education (KACTE), a state affiliate of the American Association of Colleges for Teacher Education (AACTE)
502-852-3235
ann.larson@louisville.edu

UNIVERSITY OF MARYLAND

3119 Benjamin Building
College Park, Maryland 20742-1121
301.405.2334 TEL 301.314.9890 FAX
www.education.umd.edu

COLLEGE OF EDUCATION

Office of the Dean

June 26, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
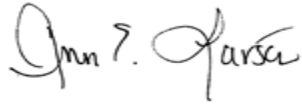Charlotte, NC 28223-0001

Dear Dean McIntyre,

Thank you for the opportunity to review the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. I found the proposal compelling because of the skilled researchers it will produce and my awareness of the educational challenges in urban settings. Like UNC Charlotte, our institution strives to leverage university resources to address the challenges of raising the achievement of all students to high levels. The description of the proposed Ph.D. program will expand the intellectual and programmatic collaboration within UNC Charlotte and across the greater Charlotte region, resulting in critical interdisciplinary scholarship in areas of educational policies and practice. There has never been a greater need for highly trained researchers in the educational field.

The description of the proposed Ph.D. program, educational objectives, and course requirements will provide students with a solid foundation as educational researchers. UNC Charlotte's location in an urban environment and strong relationship with educational organizations, as noted in the letters of support, offer unique opportunities for students to engage in meaningful internships, which is an essential part of the doctoral students training. The relationships that students build will be extraordinarily rewarding and increase their capacity to qualitatively improve the educational experiences and life outcomes of children and youth in our urban educational agencies.

UNC Charlotte has the resources to offer the Ph.D. in Education Research, Measurement, and Evaluation. The faculty are established scholars in diverse educational fields, and the UNC Charlotte Research Institutes/Centers should create a vibrant environment for mentoring future educational researchers.

Please feel free to contact me if I can provide additional information. Good luck in your efforts in establishing the new Ph.D. program.

Sincerely,

Donna L. Wiseman
Dean

June 20, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223-0001

Dear Dean McIntyre,

I have reviewed the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. I am supportive of the efforts of your college to establish this program at UNC Charlotte for several reasons. First, there is a general need for programs such as the program you propose across the United States. We have a similar Ph.D. program at our university and find our graduates in are in great demand from a variety of employers. Moreover, I can think of no group of students who are in greater demand while they are working on their doctoral degree. Most of our students are working on funded projects throughout their time in the program because their skills are in such high demand. There has never been a greater need for highly trained researchers in the educational field and we have clearly seen that with students in our program.

Second, UNC Charlotte has the capacity to offer this well-designed program. You clearly have the faculty and a well-developed academic program, which will provide students with the experiences and skills needed to have a meaningful impact. They will have capacity to impact the educational experiences and outcomes for children and youth. In fact, I can think of many instances in which the students in our doctoral program have had a direct impact on student learning in K-12 settings through collaborations with local school districts. Third, the educational challenges in urban settings are well documented and the program has the potential to have an impact on schools in the greater Charlotte area. UNC Charlotte's location strong relationship with educational organizations in this area offer unique opportunities for students to engage in meaningful experiences outside of the classroom, which will impact the doctoral students and the local region.

I believe a Ph.D. in Education Research, Measurement, and Evaluation at UNC Charlotte would be of great benefit and fill an important need. Please feel free to contact me if I can provide additional information and best of luck in establishing the new Ph.D. program.

Sincerely,

Dr. Daniel F. Mahony
Dean and Professor

July 8, 2014

Ellen McIntyre, Dean
College of Education
UNC Charlotte
Charlotte, NC 28223-0001

Dear Dean McIntyre,

Thank you for the opportunity to review the proposed Ph.D. in Education Research, Measurement, and Evaluation in the College of Education at UNC Charlotte. I found the proposal compelling because of the skilled researchers it will produce and my awareness of the educational challenges in urban settings. Like UNC Charlotte, our institution strives to leverage university resources to address the challenges of raising the achievement of all students to high levels. The description of the proposed Ph.D. program will expand the intellectual and programmatic collaboration within UNC Charlotte and across the greater Charlotte region, resulting in critical interdisciplinary scholarship in areas of educational policies and practice. There has never been a greater need for highly trained researchers in the educational field.

The description of the proposed Ph.D. program, educational objectives, and course requirements will provide students with a solid foundation as educational researchers. UNC Charlotte's location in an urban environment and strong relationship with educational organizations offer unique opportunities for students to engage in meaningful internships, which is an essential part of the doctoral students' training. The relationships that students build will be extraordinarily rewarding and increase their capacity to qualitatively improve the educational experiences and life outcomes of children and youth in our urban educational agencies.

UNC Charlotte has the resources to offer the Ph.D. in Education Research, Measurement, and Evaluation. The faculty are established scholars in diverse educational fields, and the UNC Charlotte Research Institutes/Centers should create a vibrant environment for mentoring future educational researchers.

Please feel free to contact me if I can provide additional information. Good luck in your efforts in establishing the new Ph.D. program.

Sincerely,

Deborah L. Voltz
Dean, UAB School of Education

217 Education Building
901 13th Street South
205.934.5322
Fax 205.934.2375

The University of
Alabama at Birmingham
Mailing Address:
EB 217
1530 3RD AVE S
BIRMINGHAM AL 35294-1250

Program Demand – PhD of Educational Research, Measurement, and Evaluation

Prepared for the University of North Carolina at Charlotte

December 2013

In the following report, Hanover Research assesses the market for a doctoral program in educational research, measurement, and evaluation (ERME). We review the student demand for this program by examining recent completions in similar programs at national, regional, and state levels. We also examine the national, regional, and state labor outlook for ERME-related occupations. Finally, we profile potential competitors of the proposed ERME program at the University of North Carolina at Charlotte.

TABLE OF CONTENTS

EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

The University of North Carolina at Charlotte (UNCC) has requested the assistance of Hanover Research in assessing the viability of a proposed doctoral degree program in educational research, measurement, and evaluation. The proposed program would be offered to practitioners with "'real-world' experience in schools (e.g., teachers or administrators) or other educational agencies (e.g., as evaluators)."[1]

The following report describes the market for a doctoral program in educational research, measurement, and evaluation (ERME). The report is divided into three sections and five appendices as follows:

- **Section I: Student Demand** analyzes potential student demand for a doctoral program in educational research, measurement, and evaluation through an examination of national, regional, and state degree completions data obtained from the National Center for Education Statistics. This section also investigates the prevalence of distance learning options in this program area.

- **Section II: Labor Market Outlook** considers the national, regional, and state employment outlook for the occupations most commonly associated with ERME-related doctoral degrees. We examine regional and state employment projections gathered from state labor departments, as well as recent nationwide job postings.

- **Section III: Competitor Profiles** examines key aspects of four ERME-related programs at regional competitor institutions, including program characteristics, admissions requirements, enrollment data, curriculum, funding, and career opportunities. The four profiled institutions are:
  - University of North Carolina at Greensboro
  - North Carolina State University
  - University of North Carolina at Chapel Hill
  - Virginia Tech

- Appendix A: Southeast State Completions in ERME-Related Fields

- Appendix B: CIP 2010 to SOC 2010 Crosswalk Keyword Search

- Appendix C: University of North Carolina at Greensboro Syllabus of Courses

- Appendix D: North Carolina State University Syllabus of Courses

- Appendix E: University of North Carolina at Chapel Hill Syllabus of Courses

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[1] "University of North Carolina Request for Authorization to Plan a New Degree Program." The University of North Carolina at Charlotte, October, 2013, p. 2.

KEY FINDINGS

- **Student demand data for doctoral programs related to educational research, measurement, and evaluation are mixed.** Nationally and regionally, completions data from ERME-related PhD programs show strong growth of 11.1 percent and 17.2 percent, respectively, between 2008 and 2012. Completions for the two reporting institutions in North Carolina have also grown, from 4 completions in 2008 to 10 completions in 2012. However, among competitor institutions profiled in this report, enrollment trends appear to be institution-specific: some institutions have experienced strong overall growth, while others have seen a decline in enrollment.[2]

- **The design of ERME-related programs varies considerably by institution.** Some programs focus almost exclusively on research methodology, with little to no core or elective curricular offerings on educational background or theory, whereas other programs have a more balanced approach that integrates research methodology and other relevant content areas. For instance, the North Carolina State University curriculum requires courses in educational thought and policy research, and Virginia Tech's qualitative strand offers a course in Education and Anthropology.

- **There are meaningful differences between UNCC's proposed doctoral program and established ERME-related programs in North Carolina.**
  - UNCC's program is region-specific, thus content and context will be relevant to practitioners in the area.
  - UNCC's program will be more accommodating to the working professional, offering full- and part-time options, as well as an on-campus/online hybrid option. This level of accommodation is absent in many competitor programs.
  - UNCC's program design – to turn practitioners into researchers – is unique to the region. Programs may require teaching experience, but this is not standard practice.

- **The combination of "real-world" experience in schools and PhD-level research training at UNCC's proposed program will help provide graduates with the necessary skills and expertise to enter multiple fields**. Competitor programs have placed graduates in federal and state educational agencies, school districts, institutions of higher education, and testing organizations.

- **Available data do not provide sufficient information to determine the effect of new educational program development on existing programs.**

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[2] Furthermore, two of the profiled competitors do not publish program-specific enrollment figures, making it difficult to gauge student interest in ERME-related doctoral programs at these institutions.

SECTION I: STUDENT DEMAND

This section analyzes potential student demand for a PhD program in educational research, measurement, and evaluation by examining national, regional, and state degree completions data obtained from the National Center for Education Statistics' (NCES) Integrated Postsecondary Education Data System (IPEDS).

IPEDS METHODOLOGY

In this section, national, regional, and state student demand for a PhD in educational research, measurement, and evaluation (ERME) is estimated using recent degree completions data from the NCES. The NCES uses a taxonomic system of numeric codes to classify postsecondary academic programs, known as the Classification of Instructional Programs (CIP) system. Nationwide, institutions of higher education submit degree completions data, classified by CIP code, to IPEDS. All degree conferral data used in this report were drawn from IPEDS.[3]

Examining degree completions trends over the past five years allows for an estimate of potential student demand for PhD programs in ERME. For instance, if PhD conferrals among ERME programs have increased over time within a certain geographical area, it is reasonable to infer that demand for such a degree is trending upward within the region. Correspondingly, if completions have decreased, then it is likely that demand is also decreasing. Accordingly, this report gauges demand for PhD degrees in ERME as evidenced by completions data from 2007 to 2011.

There are five six-digit CIP codes that correspond to academic fields related to ERME. These fields involve knowledge and skills in areas relevant to ERME, such as educational evaluation and research, educational statistics and research methods, and educational assessment, testing, and measurement. Figure 1.1 on the following page provides descriptions of these fields as provided by the NCES.

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[3] "Integrated Postsecondary Education Data System." National Center for Education Statistics.
   http://nces.ed.gov/ipeds/datacenter/

Figure 1.1: CIP Codes Associated with ERME

EDUCATIONAL EVALUATION AND RESEARCH (13.0601)

- A program that focuses on the principles and procedures for generating information about educational programs, personnel, and methods, and the analysis of such information for planning purposes. Includes instruction in evaluation theory, evaluation research design and planning, administering evaluations and related data collection activities, data reporting requirements, data analysis and interpretation, and related economic and policy issues.

EDUCATIONAL STATISTICS AND RESEARCH METHODS (13.0603)

- A program that focuses on the application of statistics to the analysis and solution of educational research problems, and the development of technical designs for research studies. Includes instruction in mathematical statistics, research design, computer applications, instrument design, research methodologies, and applications to research problems in specific education subjects.

EDUCATIONAL ASSESSMENT, TESTING, AND MEASUREMENT (13.0604)

- A program that focuses on the principles and procedures for designing, developing, implementing and evaluating tests and other mechanisms used to measure learning, evaluate student progress, and assess the performance of specific teaching tools, strategies and curricula. Includes instruction in psychometric measurement, instrument design, test implementation techniques, research evaluation, data reporting requirements, and data analysis and interpretation.

LEARNING SCIENCES (13.0607)

- A program that focuses on the multiple aspects of learning in different environments, including specific aspects of the content to be mastered, cognitive aspects of the student, the instructional environment and materials, the preparation and activities of the instructor, socio-cultural and linguistic components, and assessment outcomes. Includes instruction in the social, organizational, and cultural dynamics of learning; learning and cognition; learning strategies; educational psychology; educational testing and measurement; instructional design and technology; and statistical design of educational research.

EDUCATIONAL ASSESSMENT, EVALUATION, AND RESEARCH, OTHER (13.0699)

- Any instructional program in educational evaluation, research, and statistics not listed above.

Source: NCES[4]

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[4] "CIP 2010." NCES. http://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55

When interpreting completions data, there are several considerations that must be taken into account:

- **Slight modifications were made in 2010** to the NCES's classification of programs from the 2000 version of the CIP taxonomy. In particular, the title of CIP code 13.0607 "Learning Sciences" is new as of 2010. It is possible that some institutions reclassified their programs in response to CIP title changes. No changes were made to the other ERME codes included in this report.

- **Institutions classify their programs independently**, meaning that two programs that are identical in all respects could hypothetically be classified under different CIP codes. In addition, for any given institution, it cannot always be assumed that IPEDS completions data for an individual CIP classification always correspond directly to an individual program. For instance, specialized programs related to educational research, measurement, and evaluation may not be classified under the "Education Evaluation and Research" CIP code, but instead may be placed under a different or more general classification. Therefore, the actual number of programs related to educational research in the United States may be skewed in the IPEDS data.

- **Newer programs** that have been created in the past one or two years may also be excluded from completions data, as these programs will not have graduated students yet.

- Finally, **IPEDS data do not distinguish between degrees completed on campus or online**. However, IPEDS introduced a distance option category during the 2011-2012 data collection, which indicates whether or not a particular degree program is offered online. Nevertheless, completions data trends, particularly national completions data trends, can still indirectly indicate potential demand for online programs if degree completions have increased substantially in general.

NATIONAL COMPLETIONS TRENDS

Figure 1.2 presents completions data for PhD degrees in the above five CIP codes related to educational research, measurement, and evaluation. For tables in this section, a cell containing a dash (--) indicates that completions were not reported by the institution for that year, whereas a zero indicates that the institution reported zero completions. In addition to providing raw completions numbers, the tables include three metrics that summarize annual trends:

- The first measure, **compound annual growth rate** (CAGR), provides a *smoothed* measurement of annual growth. It disregards year-to-year fluctuations in the data and instead provides an indication of overall five-year growth.

- The second measure, **average annual change**, provides the average number by which completions rose or fell annually. This figure offers an indication of the raw magnitude of growth, which the CAGR does not.

- Lastly, **standard deviation of annual changes** gauges the volatility of annual growth. The larger the standard deviation of annual changes, the less consistent the growth

from one year to the next. Inconsistent growth may reflect either annual fluctuations or accelerating growth or decline of conferrals in a particular field.

In aggregate, PhD degree programs in educational research, measurement, and evaluation and related fields have demonstrated annual growth nationwide over the past five years, at 11.1 percent. In particular, completions exhibited pronounced growth in two award categories: Educational Statistics and Research Methods (12.9 percent annual growth) and Educational Assessment, Evaluation, and Research, Other (46.8 percent annual growth). Excluding Educational Assessment, Testing, and Measurement, all fields have shown consistently positive growth. Among Educational Assessment, Testing, and Measurement PhD programs, national completions remained fairly steady from 2008-2011, with a notable decrease in conferrals in 2012.

Each field's CIP code definition is closely related, which may indicate why the greatest number of institutional conferrals were reported in the most general field: "Educational Assessment, Evaluation, and Research, Other." These data suggest that **demand is likely to be much higher for programs in fields with a focus on assessment evaluation (i.e., statistics) and research methodology.**

Figure 1.2: National Completions of PhD Degrees in ERME-Related Fields

FIELD	2008	2009	2010	2011	2012	CAGR	AVG. OF ANNUAL CHANGES	STD. DEV. OF ANNUAL CHANGES
Educational Evaluation and Research (13.0601)	47	32	44	73	53	3.0%	1.5	20.0
Educational Statistics and Research Methods (13.0603)	16	26	26	26	26	12.9%	2.5	4.3
Educational Assessment, Testing, and Measurement (13.0604)	26	32	33	35	11	-19.3%	-3.8	11.8
Learning Sciences (13.0607)*	-	-	-	1	2	--	--	--
Educational Assessment, Evaluation, and Research, Other (13.0699)	14	15	41	46	65	46.8%	12.8	10.2
National Totals	**103**	**105**	**144**	**181**	**157**	**11.1%**	**13.5**	**26.2**

Source: IPEDS
*Compound annual growth rate, average annual change, and standard deviation of annual change data not available for the field Learning Sciences due to the recent CIP code addition.

REGIONAL COMPLETION TRENDS

Figure 1.3 presents completions trends in the University of North Carolina at Charlotte's geographical region, the Southeast. For the purposes of this report, this geographic region is defined as the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. **The data show strong growth at the regional level, which outpaces overall national growth in ERME-related fields.** Completions in two fields, Educational Statistics and Research Methods, and Educational Assessment, Evaluation, and Research, Other, have risen markedly, 15.8 percent and 59.7 percent respectively. In contrast, PhD degree conferrals in the field of Educational Assessment, Testing, and Measurement have shown no growth. However, none of the ERME-related degrees have decreased regionally over the past five years.

Detailed state-by-state breakdowns of completions appear in Appendix A.

Figure 1.3: Regional Completions of PhD Degrees in ERME-Related Fields

FIELD	2008	2009	2010	2011	2012	CAGR	AVG. OF ANNUAL CHANGES	STD. DEV. OF ANNUAL CHANGES
Educational Evaluation and Research (13.0601)	17	12	14	20	25	10.1%	2.0	4.3
Educational Statistics and Research Methods (13.0603)	5	14	10	6	9	15.8%	1.0	5.4
Educational Assessment, Testing, and Measurement (13.0604)	2	1	5	3	2	0.0%	0.0	2.3
Educational Assessment, Evaluation, and Research, Other (13.0699)	2	--	--	--	13	59.7%	2.8	0.0
Regional Totals	**26**	**27**	**29**	**29**	**49**	**17.2%**	**5.8**	**8.3**

Source: IPEDS

STATE COMPLETION TRENDS

Figure 1.4 below presents completions data for North Carolina institutions. **Although there is a trend of modest growth overall, North Carolina institutions exhibit small, fluctuating patterns of conferrals.** Notably, the majority of awards are classified under the "Educational Evaluation and Research" category. As of 2012, no North Carolina institution had reported PhD completions in Educational Statistics and Research Methods; Learning Sciences; or Educational Assessment, Evaluation, and Research, Other.

Figure 1.4: North Carolina PhD Completions in ERME-Related Fields

Institution	2008	2009	2010	2011	2012	CAGR	Avg. of Annual Changes	Std. Dev. of Annual Changes
Educational Evaluation and Research (13.0601)								
North Carolina State University at Raleigh	2	4	3	6	8	41.4%	1.5	1.5
Educational Assessment, Testing, and Measurement (13.0604)								
University of North Carolina at Greensboro	2	1	5	3	2	0.0%	0	2.3
State Totals	4	5	8	9	10	25.7%	1.5	0.9

Source: IPEDS

In order to identify more precisely which North Carolina institutions offer PhD credentials in ERME-related fields, we referred to a directory provided by the American Educational Research Association (AERA).[5] The directory, while not exhaustive, is the most extensive single listing of educational research participating programs in the United States. To supplement the information in this directory, we reviewed the websites of institutions that reported PhD completions in ERME-related fields. Figure 1.5 displays the three graduate programs located in North Carolina uncovered by this search.

Figure 1.5: North Carolina Institutions Offering ERME-Related PhD Programs

Institution	Program Title
University of North Carolina Greensboro	Educational Research Methodology
University of North Carolina State University	Education Research and Policy Analysis
University of North Carolina Chapel Hill	Educational Psychology, Measurement, and Evaluation

Source: GradSchools.com[6]

ONLINE COMPLETIONS

As previously noted, in 2011-2012, IPEDS began to collect data on completion trends among institutions offering a distance option for students. However, the IPEDS system does not distinguish between degrees completed either fully or partially online and those completed on campus. Figure 1.6 shows the total number of national distance doctoral degree programs related to ERME. Only one ERME-related field, Educational Assessment, Evaluation, and Research, Other, reported offering a distance doctoral degree option.

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[5] "Participating Institutions." American Educational Research Association. http://www.aera.net/Portals/38/docs/Education_Research_and_Research_Policy/DocStudy/Participating%20Institutions_%20no%20grids.pdf

[6] "10 Education Research Doctorate Graduate Programs in North Carolina & United States." GradSchools.com. http://www.gradschools.com/search-programs/educational-research/doctorate/north-carolina/united-states

Figure 1.6: National Institutions Offering Distance ERME-Related PhD Degrees

FIELD	DISTANCE OPTION	ON-CAMPUS ONLY	TOTAL INSTITUTION	% OF INSTITUTIONS OFFERING DISTANCE OPTION
Educational Evaluation and Research (13.0601)	--	53	53	0.0%
Educational Statistics and Research Methods (13.0603)	--	26	26	0.0%
Educational Assessment, Testing, and Measurement (13.0604)	--	11	11	0.0%
Learning Sciences (13.0607)	--	2	2	0.0%
Educational Assessment, Evaluation, and Research, Other (13.0699)	38	27	65	58.5%

Source: IPEDS

Regionally, no institutions offer a distance doctoral degree option for ERME-related fields.

SECTION II: LABOR MARKET OUTLOOK

This section of the report considers the employment outlook for the occupations most commonly associated with educational research, measurement, and evaluation doctoral programs. We attempted to examine national, regional, and state labor projections using data from the Bureau of Labor Statistics and state labor departments. However, due to the specialized nature of the proposed program, we focused on regional and state labor projections associated with ERME-related academic programs, as explained in our methodology below. To further assess the viability of this degree on the national market, we also examined job postings at the American Educational Research Association and *The Chronicle of Higher Education*.

METHODOLOGY

ACADEMIC PROGRAM-OCCUPATIONAL OUTLOOK

In order to link educational research, measurement, and evaluation degree programs to relevant occupations, Hanover attempted to match the five CIP codes specified in the previous section to occupations using a degree-to-occupation crosswalk provided by the NCES. The Bureau of Labor Statistics (BLS) provides occupational profiles and employment projections for these occupations, classified by Standard Occupational Classification (SOC) codes. Using this matrix, the newest available CIP code, Learning Sciences (13.0607), was the only code with occupational matches. Learning Sciences was matched to the following related occupations:[7]

- 19-3099: Social Scientists and Related Workers, All Other
- 25-1069: Social Science Teachers, Postsecondary, All Other
- 25-1081: Education Teachers, Postsecondary
- 25-9099: Education, Training, and Library workers, All Other

Three of the above occupations are related to professional and/or faculty positions, as identified in UNCC's "*Request for Authorization to Plan a New Degree Program*" ("Plan"): Social Scientists and Related Workers, All Other (19-3099); Social Science Teachers, Postsecondary, All Other (25-1069); and Education Teachers, Postsecondary (25-1081). However, upon reviewing the occupational descriptions, we determined that these labor projections were too broad to serve as a gauge for the job market of proposed graduates of the UNCC's proposed program. For example, the definition for SOC codes 19-3099 and 25-1069 is "[a]ll social scientists and related workers not listed separately," which may include occupations such as intelligence specialists and philologists.[8] The occupation that appears to

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[7] [1] "CIP 2010 to SOC 2010 Crosswalk." IPEDS. http://nces.ed.gov/ipeds/cipcode/resources.aspx?y=55
[2] There were no matches for CIP codes 13.0601, 12.0603, 13.0604, and 13.0699
[8] [1] "Occupational Employment and Wages, May 2012: 19-3099 Social Scientists and Related Workers, All Other." Bureau of Labor Statistics. http://www.bls.gov/oes/current/oes193099.htm#ind

be the best fit, Education Teachers, Postsecondary (25-1081), is also quite broad, as indicated by the following occupational description:

> Teach courses pertaining to education, such as counseling, curriculum, guidance, instruction, teacher education, and teaching English as a second language. Includes both teachers primarily engaged in teaching and those who do a combination of teaching and research.[9]

Furthermore, although a specific SOC code exists for Education Teachers, Postsecondary, national projections and some state projections do not specify occupational growth for this code, instead providing projections for all postsecondary teachers as a group.[10] To supplement the NCES-identified crosswalk occupations, we did a manual search of keywords to identify additional related occupations, which yielded six additional ERME-related occupations. The four occupations associated with Learning Sciences and the six additional occupations identified through this manual search served as a guide for the regional and state labor market projections included below. See Appendix B for a full list of keywords and identified occupations.

REGIONAL LABOR MARKET ASSESSMENT

Figure 2.1 on the following pages displays projected employment in ERME-related fields in the Southeast region, encompassing the following states: Alabama, Florida, Georgia, Kentucky, Mississippi, South Carolina, Tennessee, Virginia, and West Virginia. North Carolina projections are presented separately in Figure 2.2. We include projections for the nine ERME-related fields identified by the keyword search. However, please note that due to the lack of occupations that are precisely correlated to ERME-related academic programs, these occupational projections serve as a broad gauge for relevant occupational fields, rather than a precise indicator of employment opportunities for graduates of UNCC's proposed program. In addition, some states do not report data for certain occupations. Unreported values are marked with a dash ("--").

Almost all available data indicate that employment in ERME-related occupations will grow across the region, though the rate of growth will vary by state and occupation. In general, forecasted growth is high in categories closely related to ERME, such as Social Science Teachers, Postsecondary, and Education Teachers, Postsecondary, with estimated annual growth ranging from 0.6 percent to 34.8 percent. Forecasts for the less relevant category – Managers, All Other – are more modest, ranging from 4.3 percent to 19 percent.

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[2] "Occupational Employment and Wages, May 2012: 25-1069 Social Sciences Teachers, Postsecondary, All Other." Bureau of Labor Statistics. http://www.bls.gov/oes/current/oes251069.htm

[3] "Social Scientists and Related Workers, All Other." O*Net Code Connector. http://www.onetcodeconnector.org/ccreport/19-3099.00

[9] "Occupational Employment and Wages, May 2012: 25-1081 Education Teachers, Postsecondary." Bureau of Labor Statistics. http://www.bls.gov/oes/current/oes251081.htm

[10] "Employment Projections, Employment by Occupation." Bureau of Labor Statistics. http://bls.gov/emp/ep_table_102.htm

Figure 2.1: Regional Employment Projections for ERME-Related Fields

SOC Code	Occupation	Employment		Change 2010-2010		Avg. Annual Job Openings*
		2010	*2020*	*Number*	*Percent*	
Alabama[11]						
11-9199	Managers, All Other	9,830	10,260	430	4.37%	260
15-2031	Operations Research Analysts	580	640	60	10.34%	25
15-2041	Statisticians	270	300	30	11.11%	20
19-3022	Survey Researchers	160	190	30	18.75%	5
19-3041	Sociologists	--	--	--	10.00%	5
19-3099	Social Scientists and Related Workers, All Other	190	200	10	5.26%	10
19-4061	Social Science Research Assistants	120	130	10	8.33%	5
25-1069	Social Sciences Teachers, Postsecondary, All Other	60	70	10	16.67%	0
25-1081	Education Teachers, Postsecondary	910	1,080	170	18.68%	30
Arkansas[12]						
11-9199	Managers, All Other	4,082	4,371	289	7.10%	120
15-2031	Operations Research Analysts	333	370	37	11.10%	15
19-3099	Social Scientists and Related Workers, All Other	180	208	28	15.60%	11
19-4061	Social Science Research Assistants	182	198	16	8.80%	10
25-1069	Social Sciences Teachers, Postsecondary, All Other	97	109	12	12.40%	3
25-1081	Education Teachers, Postsecondary	730	811	81	11.10%	20
Florida[13]						
11-9199	Managers, All Other	28,744	31,126	2,382	8.30%	932
15-2031	Operations Research Analysts	6,991	7,721	730	10.40%	307
15-2041	Statisticians	837	1,006	169	20.20%	64
19-3022	Survey Researchers	852	1,069	217	25.50%	49
19-3041	Sociologists	49	58	9	18.40%	2
19-3099	Social Scientists and Related Workers, All Other	1,676	1,846	170	10.10%	91
19-4061	Social Science Research Assistants	410	486	76	18.50%	27

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[11] "Long Term Occupational Projection Data." Alabama Department of Labor.
http://www2.dir.state.al.us/Projections/Default.aspx

[12] "Long Term Occupational Projection Data." Arkansas Department of Workforce Services.
http://www.discoverarkansas.net/cgi/dataanalysis/AreaSelection.asp?tableName=Occprj
[13] "Long Term Occupational Projection Data." Florida Department of Economic Opportunity.
http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections

SOC CODE	OCCUPATION	EMPLOYMENT		CHANGE 2010-2010		AVG. ANNUAL JOB OPENINGS*
		2010	*2020*	*NUMBER*	*PERCENT*	
25-1069	Social Sciences Teachers, Postsecondary, All Other	1,095	1,285	190	17.40%	41
25-1081	Education Teachers, Postsecondary	3,045	3,615	570	18.70%	119
Georgia[14]						
11-9199	Managers, All Other	16,990	17,960	970	5.70%	480
15-2031	Operations Research Analysts	2,600	2,870	270	10.20%	110
15-2041	Statisticians	890	990	100	11.10%	60
19-3022	Survey Researchers	830	950	120	13.90%	30
19-3041	Sociologists	20	20	0	9.50%	0
19-3099	Social Scientists and Related Workers, All Other	550	540	-10	-2.40%	20
19-4061	Social Science Research Assistants	980	1,250	270	27.30%	70
25-1069	Social Sciences Teachers, Postsecondary, All Other	110	150	40	34.80%	0
25-1081	Education Teachers, Postsecondary	1,660	2,180	520	31.60%	80
Kentucky[15]						
11-9199	Managers, All Other	7,490	8,550	1,060	14.20%	280
15-2031	Operations Research Analysts	430	480	50	11.60%	20
15-2041	Statisticians	120	140	20	16.70%	10
19-3022	Survey Researchers	60	80	20	33.30%	0
19-3099	Social Scientists and Related Workers, All Other	530	580	50	9.40%	20
25-1069	Social Sciences Teachers, Postsecondary, All Other	100	110	10	10.00%	0
25-1081	Education Teachers, Postsecondary	1,060	1,260	200	18.90%	40
Louisiana[16]						
11-9199	Managers, All Other	10,800	11,680	890	8.10%	330
15-2031	Operations Research Analysts	640	710	70	10.90%	30
15-2041	Statisticians	40	40	10	0.00%	0
19-3099	Social Scientists and Related Workers, All Other	150	180	30	20.00%	10
25-1081	Education Teachers, Postsecondary	330	380	50	15.20%	10

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[14] "Long Term Occupational Projection Data." Georgia Department of Labor.
http://www.dol.state.ga.us/em/occupational_outlook.htm
[15] "Long Term Occupational Projection Data." Kentucky Office of Employment and Training.
http://www.workforcekentucky.ky.gov/gsipub/index.asp?docid=429
[16] "Long Term Occupational Projection Data." Louisiana Workforce Commission.
http://www.laworks.net/LaborMarketInfo/LMI_employmentprojections.asp

SOC Code	Occupation	Employment		Change 2010-2010		Avg. Annual Job Openings*
		2010	*2020*	*Number*	*Percent*	
Mississippi[17]						
11-9199	Managers, All Other	700	730	30	4.30%	20
15-2031	Operations Research Analysts	120	130	10	8.30%	10
15-2041	Statisticians	20	20	0	0.00%	0
19-3022	Survey Researchers	210	250	40	19.00%	10
19-3041	Sociologists	30	30	0	0.00%	0
19-3099	Social Scientists and Related Workers, All Other	120	130	10	8.30%	10
19-4061	Social Science Research Assistants	30	30	0	0.00%	0
25-1069	Social Sciences Teachers, Postsecondary, All Other	40	50	10	25.00%	0
25-1081	Education Teachers, Postsecondary	560	670	110	19.60%	20
South Carolina[18]						
25-1081	Education Teachers, Postsecondary	1,064	1,270	206	19.00%	38
11-9199	Managers, All Other	5,980	6,826	846	14.00%	218
15-2031	Operations Research Analysts	559	647	88	16.00%	27
19-4061	Social Science Research Assistants	51	53	2	4.00%	2
19-3099	Social Scientists and Related Workers, All Other	177	162	-15	-8.00%	7
15-2041	Statisticians	265	306	41	15.00%	20
19-3022	Survey Researchers	492	606	114	23.00%	24
Tennessee[19]						
11-9199	Managers, All Other	12,280	13,310	1030	8.40%	405
19-3022	Survey Researchers	270	330	60	22.20%	15
19-3099	Social Scientists and Related Workers, All Other	250	260	10	4.00%	10
19-4061	Social Science Research Assistants	430	460	30	7.00%	20
25-1081	Education Teachers, Postsecondary	1590	1600	10	0.60%	30
Virginia[20]						

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[17] "Long Term Occupational Projection Data." Mississippi Department of Employment Security. https://mesc.virtuallmi.com/default.asp

[18] "Long Term Occupational Projection Data." South Carolina Department of Employment and Workforce. https://jobs.scworks.org/analyzer/Default.asp

[19] "Long Term Occupational Projection Data." Tennessee Department of Labor and Workforce Development, Employment Security Division, Labor Market Information Section, Statewide Employment Projections 2012-2020. http://www.tn.gov/labor-wfd/dropdown_text_only.html#occupations

[20] "Long Term Occupational Projection Data." Virginia Workforce Connection. http://www.vawc.virginia.gov/analyzer/default.asp

SOC CODE	OCCUPATION	EMPLOYMENT		CHANGE 2010-2010		AVG. ANNUAL JOB OPENINGS*
		2010	*2020*	*NUMBER*	*PERCENT*	
11-9199	Managers, All Other	35,901	37,833	1,932	5.40%	991
15-2031	Operations Research Analysts	4,411	5,563	1,152	26.10%	256
15-2041	Statisticians	521	624	103	19.80%	41
19-3022	Survey Researchers	300	332	32	10.70%	11
19-3041	Sociologists	0	0	0	--	0
19-3099	Social Scientists and Related Workers, All Other	4,214	5,073	859	20.40%	261
19-4061	Social Science Research Assistants	658	799	141	21.40%	42
25-1069	Social Sciences Teachers, Postsecondary, All Other	87	110	23	26.40%	3
25-1081	Education Teachers, Postsecondary	1,647	2,134	487	29.60%	75
11-9199	Managers, All Other	35,901	37,833	1,932	5.40%	991
West Virginia[21]						
11-9199	Managers, All Other	35,901	37,833	1,932	5.40%	991
15-2031	Operations Research Analysts	4,411	5,563	1,152	26.10%	256
15-2041	Statisticians	521	624	103	19.80%	41
19-3022	Survey Researchers	300	332	32	10.70%	11

Source: State labor departments
*Due to growth and replacements

NORTH CAROLINA LABOR MARKET PROJECTIONS

Available data indicate that employment in ERME-related occupations will grow in the State of North Carolina (Figure 2.2 on the following page). Although the rate of growth varies by occupation, overall the projections show strong growth across all occupations. In particular, Survey Researchers and Statisticians are projected to have the highest growth, at 23.5 percent and 22.2 percent, respectively.

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[21] "Long Term Occupational Projection Data." Workforce West Virginia. http://workforcewv.org/lmi/OCCUDATA.HTM

Figure 2.2: North Carolina Employment Projections for ERME-Related Occupations

| SOC CODE | OCCUPATION | EMPLOYMENT | | CHANGE 2010-2010 | | AVG. ANNUAL JOB OPENINGS* |
		2010	*2020*	*NUMBER*	*PERCENT*	
11-9199	Managers, All Other	20,420	22,100	1,680	8.2%	620
15-2031	Operations Research Analysts	1,120	1,250	130	11.6%	50
15-2041	Statisticians	810	990	180	22.2%	70
19-3022	Survey Researchers	340	420	80	23.5%	20
19-3041	Sociologists	60	70	10	16.7%	0
19-3099	Social Scientists and Related Workers, All Other	1,310	1,510	200	15.3%	70
19-4061	Social Science Research Assistants	1,150	1,350	200	17.4%	70
25-1069	Social Sciences Teachers, Postsecondary, All Other	250	300	50	20.0%	10
25-1081	Education Teachers, Postsecondary	2,060	2,470	410	19.9%	70

Source: North Carolina Department of Commerce[22]

REVIEW OF NATIONAL JOB POSTINGS

In the University of North Carolina at Charlotte's "Request for Authorization to Plan a New Degree Program," attached letters of support from regional stakeholders provide strong evidence of a healthy regional labor market outlook for graduates of the proposed program. To supplement these local employment opportunities, Hanover conducted a job listing search of nationwide positions posted on educational organizations, including the American Educational Research Association and *The Chronicle of Higher Education*. On September 3, 2013, UNCC conducted a preliminary job search on the abovementioned websites and found a combined total of 449 listings.[23] On December 12, 2013, Hanover conducted a search on the same sites.[24]

Figures 2.3 and 2.4 on the following pages are a synthesis of the findings from Hanover's job search. Each figure includes the following information from each relevant job posting: the organization name, location, position title, whether the position is ERME-related, date posted, and additional notes. The guidelines used to rate whether a position is ERME-related, as well as an explanation of the "Additional Notes" category are listed below:

- To determine the extent which a job position was related to ERME, a position was rated on a scale from 0 to 2 according to the following criteria:
  - **"Not related" (0)** if the job description did not mention any of the skills outlined in the "Educational Objectives" section of UNCC's "Plan"
  - **"Partially related" (1)** if the skills acquired over the course of UNCC's proposed program are required for the position

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[22] "Long Term Occupational Projection Data." North Carolina Department of Commerce. http://www.ncesc1.com/lmi/occupational/occupationMain-NEW.asp

[23] "University of North Carolina Request for Authorization to Plan a New Degree Program," Op. cit., p. 8.

[24] The different listserv search dates result in different outcomes.

o **"Related" (2)** if the job description indicates that a doctoral degree or doctoral-level experience in educational research are required for the position

▪ Where appropriate, additional notes are included, which describe educational requirements or preferences in experience as listed in the job posting.

The following search criteria used on the American Educational Research Association's website resulted in 21 jobs: **Job Function → Evaluation & Research → All States**. Of those positions, six are directly relevant to an ERME PhD, 11 are partially related, and four are not related (Figure 2.3).

Figure 2.3: American Educational Research Association's Job Postings

Organization	Location	Position Title	ERME-Related	Date Posted	Additional Notes
PI Worldwide	MA	Psychometrician	1	12/3/13	MS degree + experience
Basis Policy Research	MI	Associate	2	11/18/13	N/A
University of Alabama at Birmingham	AL	UAB Educational Psychology and Research Program Assistant/Associate Professor, Department of Human Studies	2	12/6/13	N/A
Johns Hopkins University	MD	Assessment & Evaluation Analyst	1	12/3/12	MA degree
University of California Agriculture and Natural Resources	CA	Area Youth, Families, and Communities Advisor	1	12/2/13	MA (minimum) & program evaluation experience
Universidad Diego Portales	Chile	Assistant or Associate Professor	0	11/27/13	N/A
University of Illinois	IL	Measurement Specialist	1	11/26/13	Doctorate preferred
The Annie E. Casey Foundation	MD	Senior Associate, Research & Evaluation	1	11/26/13	Related field
CETE/KU	KA	Research Assoc./Psychometrician	2	11/19/13	N/A
Ontario Institute for Studies in Education of the University of Toronto	Ontario	Assistant Professor - Language and Literacies Education	1	11/18/13	Language and/or literacies education & teaching experience
Measured Progress	NH	Internship - Psychometrics	1	11/18/13	Enrolled in doctoral program
American Board of Internal Medicine	PA	Research Associate	1	11/18/13	BA degree

Organization	Location	Position Title	ERME-Related	Date Posted	Additional Notes
The College Board	PA	Research Scientist - Higher Education Research	2	11/18/13	N/A
American Nurses Association	MD	Research Scientist	1	11/16/13	Relevant training, different focus
WestEd	CA	Project Coordinator Level 2 Job#4354	0	11/13/12	MS degree & Experience
WestEd	CA	ASDS Project Coordinator III Job#4352	0	11/14/12	MS degree & Experience
The College Board	PA	Lead Statistician	0	11/12/13	BA degree; MS preferred
University of Southern Maine	ME	Research Associate II - Center for Education Policy, Applied Research and Evaluation	2	11/12/13	N/A
Walden University - Laureate Education	MN	Educational Researchers	1	11/6/13	Teaching experience
Purdue University	IN	Ben and Maxine Miller Professor	1	10/30/12	Related field
University of Northern Iowa, College of Education	IA	Richard O. Jacobson Endowed Chair in Literacy (Associate/Full Professor)	2	10/17/13	N/A

Source: American Educational Research Association[25]

Figure 2.4 presents our findings regarding job postings related to ERME on *The Chronicle of Higher Education*. The following search criteria used on *The Chronicle of Higher Education*'s website resulted in 116 U.S. jobs: **Position Type → Faculty & Research → Education → Curriculum & Instruction**. Due to the high number of positions from *The Chronicle* search, only positions closely related to educational research are included. Of those eight positions, two are directly relevant to an ERME PhD, while the remaining six are partially related.

[25] "Online Job Board." American Educational Research Association. http://www.jobtarget.com/c/search_results.cfm?site_id=557

Figure 2.4: The Chronicle of Higher Education's Job Postings

INSTITUTION	LOCATION	POSITION	ERME-RELATED	DATE POSTED	ADDITIONAL NOTES
University of Texas of the Permian Basin	TX	Assistant/Associate Professor of Education	2	11/14/13	N/A
Iowa State University	IA	Open Rank Professor in Mutlicultural Education	1	11/13/13	Doctorate in Education or another field or related field; scholarly research (external funding); and teaching experience/ effectiveness
University of Oregon	OR	Tenure-Line, Open Rank Faculty Position, Educational Methodology & Policy	1	11/18/13	N/A
INSTITUTION	LOCATION	POSITION	ERME-RELATED	DATE POSTED	ADDITIONAL NOTES
The Ohio State University	OH	IES-Funded Postdoctoral Training Program in Education Sciences	1	10/30/13	Postdoctoral training on language design/ testing & literacy practices to improve educational outcomes, (Reading and Writing, Early Learning Programs)
Ball State University	IN	Assistant/Associate Professor/Early Childhood Education	1	11/25/12	N/A
Barnard College	NY	Visiting Professor and Chair of Education Program	1	11/26/13	N/A
Western Carolina University	NC	Assistant Professor of Educational Research	2	12/9/13	N/A
Wartburg College	IA	Assistant Professor, Tenure Track in Department of Education	1	12/9/13	N/A

Source: The Chronicle of Higher Education[26]

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[26] "Vitae." The Chronicle of Higher Education. https://chroniclevitae.com/job_search/new

SECTION III: COMPETITOR PROFILES

This section provides information on program characteristics, admissions requirements, enrollment figures, curriculum, funding opportunities, and career outlook for four institutions that offer PhD programs in an ERME-related field. Three of the profiled institutions were included per request by the University of North Carolina at Charlotte due to their proximity to UNCC and the established nature of their ERME-related programs. The fourth institution was chosen because of its relative proximity (Southeast region), its well-established program, and the flexible delivery method of its course offerings (i.e., online and multiple campuses). The four institutions profiled in this section of the report include:

- University of North Carolina at Greensboro
- North Carolina State University
- University of North Carolina at Chapel Hill
- Virginia Polytechnic Institute and State University (Virginia Tech)

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

PROGRAM CHARACTERISTICS

The University of North Carolina at Greensboro (UNCG) offers a doctoral degree program in Educational Research Methodology through its School of Education. The UNCG Department of Educational Research Methodology (ERM) "is committed to advancing knowledge and practice within the fields of research methodology, measurement sciences, program evaluation, and applied statistics… manifested through the pursuit of excellence in four broad areas:"[27]

- preparing professionals to have a positive impact at all levels of organizations with missions related to research methodology;

- providing outstanding instruction and development opportunities (e.g., classroom experiences, participation in research) to students in our department's educational programs and to students across UNCG;

- engaging in scholarship and applied research that advances related fields; and

- serving as a methodological resource for researchers at UNCG and beyond.

The ERM program's methodological approach uses descriptive and inferential statistics, contemporary statistical modeling, modern measurement and psychometric modeling techniques, case studies, and qualitative analyses to address the department's intended purposes outlined in Figure 3.1 on the following page.

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[27] Bullet points taken verbatim from: "Mission and Goals." The University of North Carolina at Greensboro. http://erm.uncg.edu/about-us/erm-overview/

Figure 3.1: The ERM Department's Intended Purpose, UNCG

To answer research questions about teaching, learning, and other behavioral systems
To assess knowledge, skills, abilities, and cognitive traits
To evaluate educational and social programs

Source: The University of North Carolina at Greensboro[28]

The ERM department provides three degree paths for prospective students: an MS, a PhD, and a joint MS/PhD program. The MS degree "provides applied training in research methodology, data analysis, assessment, measurement, and program evaluation" while the PhD program "offers more in depth training with a stronger focus on conducting original research that advances the field of methodology."[29]

Although the majority of students are enrolled full time, students are also able to enroll on a part-time basis. However, part-time students are not eligible for financial aid. Furthermore, some courses are offered during the day, therefore part-time students must have the flexibility to meet all degree requirements.[30]

ADMISSIONS REQUIREMENTS

Prospective students interested in applying to the University of North Carolina at Greensboro's PhD of Educational Research Methodology program must submit a completed online application, a nonrefundable application fee ($60), and the following supporting documentation by December 15th:[31]

- One official transcript from every college and university previously attended. If credit from one institution has been transferred to another, a transcript from the original institution is not required. If an applicant is currently enrolled in a degree program and will not graduate prior to an admission deadline, transcripts should be provided that reflect courses in progress.

- Applicants with a degree from a college or university outside the U.S.A. must submit transcripts to a third party credential evaluation service recognized by UNCG.

- Three letters of recommendation from former professors, employers, or persons well acquainted with the applicant's academic potential.

- Official results of GRE scores or other examinations as required by the program to which one applies. Scores are valid for five years from the time originally taken.[32]

- Personal statement of interest and background, resume or CV.

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[28] "Department Overview." The University of North Carolina at Greensboro. http://erm.uncg.edu/about-us/erm-overview/

[29] Ibid.

[30] "Frequently Asked Questions." The University of North Carolina at Greensboro. http://erm.uncg.edu/prospective-studentsadmission/

[31] Bullet points taken verbatim from: "Guide to Admissions: The Graduate School, UNCG 2013-2014." The University of North Carolina at Greensboro. p. 6. http://grs.uncg.edu/wp-content/uploads/2013/11/139551_Guide-To-Admissions_13-14_Lo-res.pdf

[32] Applicants to the PhD ERM program have a combined Verbal and Quantitative Reasoning score that exceeds 1200 (old scale) and 310 (new scale). "Frequently Asked Questions," Op. cit.

Students entering the PhD program come from a variety of academic and professional backgrounds, thus there is no "ideal academic preparation"; however, students are expected to have training in statistics similar to what the ERM master's-degree program offers.[33]

ENROLLMENT

Enrollment data for the ERM doctoral program is available for academic years 2009-2012. Figure 3.2 shows the enrollment breakdown by full-time, part-time, and FTE (full-time equivalent) student. Overall, program enrollment has increased, with the highest rate of growth among full-time students, at 33.4 percent.

Figure 3.2: ERM Graduate Enrollment by Enrollment Status, UNCG

ENROLLMENT TYPE	2009	2010	2011	2012	CAGR	AAC
Full-Time	8	8	9	19	33.4%	3.67
Part-Time	11	11	20	13	5.7%	0.67
FTE	14.75	16.00	22.75	27.75	23.4%	4.33

Source: The University of North Carolina at Greensboro[34]

CURRICULUM

Overview of Training and Resources

The graduate program curriculum offered by the ERM department is designed to provide high-quality instruction in applied statistics, assessment, measurement, and program evaluation methodology. The department employs eight full-time faculty and offers approximately 30 graduate-level methods-related courses, making it "one of the largest concentrations of research methodology training in the nation."[35] The ERM department's measurement and psychometric modeling course offerings include a focus on validity and validation, classical test theory, introductory item response theory, advanced item response theory, multidimensional item response theory, linking and equating, language testing, computer-based testing, and structural equation modeling.[36]

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[33] "Frequently Asked Question," Op. cit.

[34] [1] 2009: "Graduate Enrollment by AOS Code, School, Department, Major, Full/Part-Time Status, and FTE, Fall 2009." The University of North Carolina at Greensboro. p. 3. http://ire.uncg.edu/pages/factbook/2009-10/PDFs/enrollment/F-P_FTE_GR_Fa09.pdf

[2] 2010: "Graduate Enrollment by AOS Code, School, Department, Major, Full/Part-Time Status, and FTE, Fall 2010." The University of North Carolina at Greensboro. p. 3. http://ire.uncg.edu/pages/factbook/2010-11/PDFs/enrollment/F-P_FTE_GR_Fa10.pdf

[3] 2011: "Graduate Enrollment by AOS Code, School, Department, Major, Full/Part-Time Status, and FTE, Fall 2011." The University of North Carolina at Greensboro. p. 3. http://ire.uncg.edu/pages/factbook/2011-12/PDFs/enrollment/F-P_FTE_GR_Fa11.pdf

[4] 2012: "Graduate Enrollment by AOS Code, School, Department, Major, Full/Part-Time Status, and FTE, Fall 2012." The University of North Carolina at Greensboro. p. 3. http://ire.uncg.edu/pages/factbook/2012-13/PDFs/enrollment/F-P_FTE_GR_Fa12.pdf

[35] "Graduate Programs in Research Methodology, Educational Measurement, and Program Evaluation." The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/

[36] "Department Overview," Op. cit.

Practical Experience

The Educational Research Methodology department understands that "practical, hands-on learning experience is a critical component of graduate training in research methodology, educational measurement, and program evaluation."[37] As such, a core component of the ERM graduate program provides opportunities for students to obtain hands-on experience with data analysis, evaluation projects, and scholarly research. These experiences are offered through ERM's Office of Assessment, Evaluation, and Research Services (OAERS), summer internships, and collaborative work with faculty.

OAERS is a component of the ERM department, providing students with the opportunity to gain applied experience in data analysis, research methods, measurement, and evaluation by facilitating internships, practicums, and field experience.[38] To provide students with a wide range of learning experiences, OAERS cultivates on-going relationships with organizations that offer internship and practicum opportunities (Figure 3.3).

Figure 3.3: ERM Internship, Practicum, and Field Experience, UNCG

COLLABORATION PARTNERS	
▪ Educational Testing Service (ETS) ▪ Pearson ▪ CTB/McGraw-Hill ▪ National Council of State Boards of Nursing ▪ ACT ▪ The Program Evaluation Division of the North Carolina General Assembly ▪ The Government Accountability Office in Washington, DC	▪ The College Board ▪ Measured Progress ▪ The Medical Council of Canada ▪ Physicians for Peace ▪ Winston-Salem/Forsyth County Schools ▪ The United Way ▪ SERVE Center for Evaluation Services ▪ Numerous offices and centers at UNCG

Source: The University of North Carolina at Greensboro[39]

Scholarly research opportunities are available for students interested in collaborating with ERM faculty who are engaged in research that aligns with the student's interest. A formal matching process occurs at the end of the student's first year of enrollment.[40] Over the past several years, students have published research in scholarly journals and presented research at national and international conferences (Figure 3.4).

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[37] "Practical Experience: A Core Component of ERM." The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/program-of-study/

[38] Ibid.

[39] "Internships, Practicums, & Field Experiences. The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/program-of-study/

[40] "Student Research Experience." The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/program-of-study/

Figure 3.4: ERM Publications and Presentations of Scholarly Research, UNCG

JOURNAL PUBLICATIONS	NATIONAL AND INTERNATIONAL CONFERENCE PRESENTATIONS
- Multivariate Behavioral Research - Educational and Psychological Measurement - Teachers College Record - Journal of Classification - Applied Measurement in Education	- American Educational Research Association (AERA) - National Council on Measurement in Education (NCME) - American Evaluation Association (AEA) - Psychometric Society

Source: The University of North Carolina at Greensboro[41]

Course Offerings

The PhD program consists of 66 required credit hours. Figure 3.5 presents a breakdown of core and elective courses. The curriculum focuses primarily on methodology. Students have the choice of two elective courses in a content area other than methods: "Contemporary Problems Seminar" and "Independent Study." Figure 3.6 is an overview of ERM course offerings by specialization. See Appendix C for a full syllabus with course descriptions.

Figure 3.5: ERM PhD Curriculum, UNCG

CORE REQUIRED COURSES (33 CREDIT HOURS)	
- ERM 633: Language Assessment and Testing - ERM 642: Evaluation and Educational Programs - ERM 643: Applied Educational Evaluation - ERM 668: Survey Research Methods in Education - ERM 669: Item Response Theory - ERM 675: Data Presentation and Reporting - ERM 682: Multivariate Analysis	- ERM 727: Computer-Based Testing: Methods and Applications - ERM 728: Exploratory and Confirmatory Factor Analytics Methods for Scale Construction - ERM 729: Advanced Item Response Theory - ERM 731: Structural Equation Modeling
ELECTIVE COURSES (21 CREDIT HOURS)	
- ERM 636: Advanced Studies in Second Language Testing - ERM 688: Contemporary Problems Seminar - ERM 692: Independent Study - ERM 711: Experimental Course - ERM 725: Applied Methods on Educational Research - ERM 726: Advanced Topics in Educational Measurement - ERM 730: Practicum in Educational Research and Evaluation	- ERM 732: Hierarchical Linear Modeling - ERM 734: Equating - ERM 735: Multidimensional Item Response Theory - ERM 742: Advanced Topics in the Evaluation of Educational Programs - ERM 750: Case Study Methods in Educational Research - TED 730: Qualitative Analysis - STA 551: Introduction to Probability - STA 552: Introduction to Mathematical Statistics
DISSERTATION	
In addition to coursework, students must complete a dissertation (12 credit hours)	

Source: The University of North Carolina Greensboro[42]

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[41] Ibid.
[42] "Resources." The University of North Carolina Greensboro. http://erm.uncg.edu/resources/

Figure 3.6: Overview of ERM Course Offerings by Specialization, UNCG

RESEARCH METHODOLOGY AND STATISTICS	
▪ ERM 604: Methods of Educational Research ▪ **ERM 668: Survey Research Methods in Education** ▪ **ERM 675: Data Presentation and Reporting** ▪ ERM 680: Intermediate Statistics Methods in Education ▪ ERM 681: Design and Analysis of Educational Experiments	▪ **ERM 682: Multivariate Analysis** ▪ ERM 685: R for Education and the Social Sciences ▪ ERM 693: Seminar in Advanced Research Methods ▪ **ERM 731: Structural Equation Modeling** ▪ ERM 732: Hierarchical Linear Modeling
MEASUREMENT, ASSESSMENT, AND PSYCHOMETRICS	
▪ ERM 600: Validity and Validation** ▪ ERM 605: Educational Measurement and Evaluation ▪ **ERM 633: Language Assessment and Testing** ▪ ERM 636: Advanced Studies in Second Language Testing ▪ ERM 667: Foundations of Educational Measurement Theory ▪ **ERM 669: Item Response Theory**	▪ ERM 726: Advanced Topics in Educational Measurement ▪ **ERM 727: Computer-Based Testing: Methods and Applications** ▪ **ERM 728: Exploratory and Confirmatory Factor Analytics Methods for Scale Construction** ▪ **ERM 729: Advanced Item Response Theory** ▪ ERM 734: Equating ▪ ERM 735: Multidimensional Item Response Theory
PROGRAM EVALUATION	
▪ **ERM 642: Evaluation and Educational Programs** ▪ **ERM 643: Applied Educational Evaluation** ▪ ERM 730: Practicum in Educational Research and Evaluation	▪ ERM 742: Advanced Topics in the Evaluation of Educational Programs ▪ ERM 750: Case Study Methods in Educational Research

Source: The University of North Carolina at Greensboro[43]

*Note: Core courses are presented in bold

**Pending course approval by the SOE and UNCG Curriculum Committees

FUNDING OPPORTUNITIES

Most students in the ERM graduate program who seek financial funding opportunities receive them, with the exception of part-time students and students employed full-time in other professional positions.[44] In addition to funding, students may receive a tuition waiver. ERM funding opportunities come from four different sources, including: scholarships and fellowships, departmental assistantships, contracts and grants, and other UNCG units.

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[43] "Overview of ERM Courses." The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/course-syllabi/

[44] "Funding Opportunities." The University of North Carolina at Greensboro. http://erm.uncg.edu/prospective-studentsadmission/

CAREER OUTLOOK

According to the program's website, individuals who have earned a graduate degree in research methodology, educational measurement, program evaluation, and psychometrics "are in extremely high demand across a range of private sector and nonprofit professional environments,"[45] and are prepared to work in a variety of educational and social science settings, outlined in Figure 3.7. Figure 3.8 is a partial list of recent ERM alumni's job positions and titles. Both figures show that graduates from UNCG's ERM PhD program are likely to work in technical positions as program evaluators, research analysts, and postsecondary educators.

Figure 3.7: Careers for Individuals with an ERM Graduate Degree, UNCG

EMPLOYMENT SETTINGS: NON-PROFIT AND FOR-PROFIT ORGANIZATIONS	
▪ School Districts	▪ Research and Evaluation Centers
▪ State Boards of Education	▪ Colleges and Universities
▪ Federal Organizations	▪ Private Measurement Consultants
▪ Testing Organizations (e.g., ETS, ACT)	▪ Private Education Consultants
▪ Research Agencies	▪ Private Statistical Consultants

MEASUREMENT AND ASSESSMENT POSITIONS
Highly technical positions that concentrate on conducting rigorous statistical analyses to project management and/or director positions focusing in development, administration, scoring, and score reporting associated with assessments
Knowledge
Methodologies and statistical models used in developing assessments, assigning scores to individuals on assessments, and evaluating the validity and reliability of scores generated by assessments, including: classical test theory, item response theory, linking and equating, scaling, computer adaptive testing, language testing and assessment, diagnostic modeling, and dimensionality analysis
PROGRAM EVALUATION POSITIONS
Support and enhance the well-being of individuals, communities, and organizations in the fields of education, business, and the social and health services
Knowledge
Must possess a working knowledge of methodologies used to conduct systematic assessment and inquiry (e.g., statistical methods, experimental and quasi-experimental research designs, qualitative approaches, and mixed methodologies
QUANTITATIVE METHODOLOGY POSITIONS
Highly technical positions that concentrate on conducting rigorous statistical analyses to project management and/or director positions responsible for overseeing particular data-based and research initiatives
Knowledge
Working knowledge of descriptive and inferential statistics methods associated with making statements about individual population parameters Rigorous statistical modeling methods that include general linear models, structural equation modeling, hierarchical linear modeling, and other forms of latent traits and latent class modeling

Source: The University of North Carolina at Greensboro[46]

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[45] "Department Overview," Op. cit.
[46] "Careers." The University of North Carolina at Greensboro. http://erm.uncg.edu/about-us/careers/

Figure 3.8: Recent ERM Alumni Positions, UNCG

Winston-Salem/Forsyth County Schools – Program Evaluation Specialist
North Carolina State Education Assistance Authority (NCSEAA) – Scholarship and Grant Manager
U.S. Department of Education – Research & Evaluation Specialist
North Carolina Community College System – Educational Research Analyst
Physicians for Peace - Director, Program Evaluation
The College Board – Associate Psychometrician
Elon University – Director of Institutional Research
UNCG – Clinical Assistant Professor of Educational Research Methodology
Educational Testing Service – Associate Psychometrician

Source: The University of North Carolina at Greensboro[47]

NORTH CAROLINA STATE UNIVERSITY

PROGRAM CHARACTERISTICS

North Carolina State University (NCSU) offers a doctoral degree program in Educational Research and Policy Analysis (ERPA) through its College of Education. NCSU offers four variations of the PhD program, depending on an individual's desired specialization: PhD in ERPA; PhD in ERPA, Adult and Community College Education; PhD in ERPA, Elementary & Secondary Education; and PhD in ERPA, Workforce and Human Resource Education.[48] For this report, Hanover will focus on the PhD in Educational Research and Policy Analysis, Elementary and Secondary Education.

The NCSU Educational Research and Policy Analysis, Elementary and Secondary Education program's mission "is to improve education through the preparation of researchers, analysts, and evaluators who will work in agencies that investigate, govern, or offer educational services to youths and adults."[49] Graduates of the program will be able to

> conceptualize, design, translate, and disseminate their work from multiple perspectives using a broad repertoire of theoretical frameworks and methodological skills. They will be capable of conducting high quality investigations of field-relevant questions in an objective, ethical, and sensitive manner. They will balance the desire for collaboration with individual responsibility, and they will balance rigorous technological mastery with personal vision and caring.[50]

The PhD in ERPA's objectives are outlined in Figure 3.9 on the following page.

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[47] "Listing of Recent Alumni." The University of North Carolina at Greensboro. http://erm.uncg.edu/alumni/
[48] Ibid.
[49] "PhD Educational Research and Policy Analysis Specialization in Elementary and Secondary Research." North Carolina State University. http://ced.ncsu.edu/lpahe/erpa/doctoral/k12
[50] Ibid.

Figure 3.9: The Educational Research and Policy Analysis' Program Objectives, NCSU

Provide students with foundations of knowledge that will enable them to understand the context within which they practice as researchers and policy makers
Prepare students with a comprehensive knowledge of the philosophical assumptions underlying inquiry
Prepare students with strong observational, analytical, synthesis, and evaluation skills
Prepare students with knowledge of theory and its contribution to research and practice
Prepare students who are predisposed to examine educational phenomena from multiple theoretical and analytical perspectives
Prepare students who are able to conceptualize and execute theory-driven inquiry independently
Prepare students who value and are capable of disseminating their research findings to multiple audiences
Prepare students who practice educational research and policy analysis from responsible ethical perspectives

Source: NCSU[51]

ADMISSIONS REQUIREMENTS

Prospective students interested in applying to North Carolina State University's ERPA doctoral program must submit a completed application, a non-refundable application fee ($75), and the following supporting documentation by December 1st:[52]

- Your [personal] statement should be typed, single-spaced, and should be between two to three pages and address the following:
  - Identify your current career goals and aspirations to improve education and society and indicate how the program to which you are applying could help you fulfill those goals and aspirations.
  - A successful dissertation is an important contribution to knowledge to help solve problems facing education and advance equity. One role of the PhD program is to guide students as they work to become scholar leaders able to make such contributions. Please describe your research interest or focus that you would like to pursue as a doctoral student (be as specific as possible).
  - Identify your experiences that could help you succeed and also benefit others in a PhD program.
- Your professional resume.
- Transcripts from all institutions attended except NC State University.
- Three recommendations from persons who can attest to your scholarly aptitude and motivation.
- Official results of the Graduate Record Examination (GRE) or Miller's Analogy Test, depending upon program.
- Proof of English proficiency for International applicants.
- North Carolina residency application.

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[51] Objectives taken verbatim from: Ibid.
[52] Bullet points taken verbatim from: "Prospective Students." North Carolina State University.
http://ced.ncsu.edu/lpahe/admissions

ENROLLMENT

NCSU's Final Fall Status Report for the College of Education does not differentiate enrollment data for the different doctoral programs. Figure 3.10 shows the breakdown of the total number of applications, admissions, and enrollments in the College of Education for the academic years 2008-2012. Overall, NCSU's College of Education graduate enrollment has declined over 12 percent; however, available data do not indicate enrollment trends for the ERPA program in particular.

Figure 3.10: College of Education Graduate Enrollment, NCSU

ENROLLMENT	2008	2009	2010	2011	2012	CAGR	AAC
Applied	170	216	150	151	168	-0.3%	-0.5
Admitted	116	132	66	77	70	-11.9%	-11.5
Enrolled	104	101	55	65	60	-12.8%	-11.0

Source: North Carolina State University[53]

CURRICULUM

The PhD program requires a minimum of 72 graduate credit hours beyond a bachelor's degree. Students who have earned a master's degree from an institution other than NCSU may apply a maximum of 18 relevant graduate credit hours toward the 72 credit-hour minimum with consent from the student's Graduate Advisory Committee. Furthermore, students may not apply 400-level courses (or lower) or 900-level courses to the 72 credit-hour minimum.

For the ERPA doctoral degree, students are required to take three fundamental core courses, four courses in the qualitative and quantitative research sequence, and one applied research course. The ERPA Elementary and Secondary Education specialization can either emphasize disciplinary depth (e.g., quantitative research methods, political science, or public administration) or an interdisciplinary perspective. Figure 3.11 on the following page is an overview of ERPA course offerings. See Appendix D for a full syllabus with course descriptions.

FUNDING OPPORTUNITIES

Students are encouraged to participate in apprenticeships with program faculty who are engaged in research relevant to educational policy and practice. When funding is available, students are offered Graduate Student Support Plan positions to work with faculty on their research. Furthermore, students may receive credit for conducting their own research under the direction of program faculty.[54]

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[53] [1] 2008: "Final Graduate Admission Totals, Fall Semester." North Carolina State University.
http://upa.ncsu.edu/sites/upa.ncsu.edu/files/Final%20Graduate%20Admission%20Totals-%202008.pdf
[2] 2009-2010: "Final Graduate Admission Totals, Fall Semester." North Carolina State University.
http://upa.ncsu.edu/sites/upa.ncsu.edu/files/Final%20Graduate%20Admission%20Totals-2010.pdf
[3] 2011-2012: "Final Graduate Admission Totals, Fall Semester." North Carolina State University.
http://upa.ncsu.edu/sites/upa.ncsu.edu/files/Final%20Graduate%20Admission%20Totals-2012.pdf
[54] "PhD Educational Research and Policy Analysis Specialization in Elementary and Secondary Research," Op. cit.

Figure 3.11: ERPA PhD Curriculum, NCSU

REQUIRED COURSES
Research Core (12 credit hours)
- ED 710: Quantitative Research   - ED 711: Quantitative Research-Advanced   - ED 730: Qualitative Research   - ED 731: Qualitative Research-Advanced
Foundational Core (9 credit hours)
- ED 724: Contemporary Educational Thought   - ED 735: Policy Research in Education   - ED 780: Evaluation Theory & Practice in Education
Specialization ERPA-Elementary and Secondary Education (18-36 credit hours)
- ELP 751: Politics of Education   - ELP 728: School Law   - ELP 729: Education Finance   - ELP 720: Cases   - ELP 795: Special Topics (i.e., Implementation Evaluation)
Applied Research (3 credit hours)
Selected in consultation with advisor (may include advanced methods courses, independent study, or doctoral supervised research)
Preliminary Comprehensive Examination
Students must pass a preliminary comprehensive examination (written and oral components)*
Dissertation (12 credit hours minimum)
The doctoral dissertation must present the results of the student's original investigation in the field of primary interest. It must represent a contribution to knowledge, adequately supported by data, and be written in a manner consistent with the highest standards of scholarship. Student must also pass their final comprehensive oral examination (dissertation defense).

Source: North Carolina State University[55]
*See Appendix D for detailed description of comprehensive examination requirements

CAREER OUTLOOK

Similar to the University of North Carolina at Greensboro, Educational Research and Policy Analysis doctoral graduates pursue jobs as "faculty members at colleges and universities, policy makers, educational researchers, independent consultants, senior leaders in school districts, government agencies, nonprofit organizations, and the private sector."[56]

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

PROGRAM CHARACTERISTICS

The University of North Carolina at Chapel Hill (Chapel Hill) offers a doctoral degree program in Educational Psychology, Measurement, and Evaluation through its School of Education. Chapel Hill offers two emphasis areas for the Educational Psychology, Measurement, and Evaluation (EPME) PhD program: Cognition, Development & Learning, and Quantitative Research Methods. [57] Hanover will focus on the PhD in Educational Psychology, Measurement, and Evaluation, Quantitative Research Methods due to its similarity to UNCC's proposed program.

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[55] Ibid.

[56] "PhD Educational Research and Policy Analysis Specialization in Elementary and Secondary Research," Op. cit.

[57] "Education PhD" The University of North Carolina at Chapel Hill.
http://soe.unc.edu/academics/phd_ed_epme/pos.php

The School of Education "is committed to the preparation of candidates who can assume leadership roles in the field of education."[58] Designed to "foster collaboration among faculty and students from diverse disciplines,"[59] the mission of the EPME program is to "develop scholars with the psychological knowledge and inquiry skills necessary to advance the field while ...contributing to the translation and application of psychological principles in educational settings."[60] Candidate development is supported in the following ways:

> [T]hrough curriculum, instruction, research, field experiences, clinical practice, assessments, evaluations, and interactions with faculty and peers. All of these elements work together to build a solid foundation for exemplary practice in education, creating educational practitioners who are prepared to better serve children, families and schools, as well as business and agencies of government within North Carolina, across the nation and throughout the world.[61]

The School of Education's goal – for candidates to become leaders who support and promote student development and learning – is guided by the following four principles:[62]

- Candidates possess the necessary content knowledge to support and enhance student development and learning.

- Candidates possess the necessary professional knowledge to support and enhance student development and learning, including meeting student needs across physical, social, psychological, and intellectual contexts. Candidates incorporate a variety of strategies, such as technology, to enhance student learning.

- Candidates possess the necessary knowledge and skills to conduct and interpret appropriate assessments.

- Candidates view and conduct themselves as professionals, providing leadership in their chosen field, including effective communication and collaboration with students and stakeholders.

Figure 3.12 further highlights the foundation to the School of Education: "Equity and Excellence."

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[58] "Education, PhD Conceptual Framework." The University of North Carolina at Chapel Hill. http://soe.unc.edu/academics/phd_ed_epme/framework.php
[59] "Education PhD," Op. cit.
[60] "Education, PhD Program Description." The University of North Carolina at Chapel Hill. http://soe.unc.edu/academics/phd_ed_epme/
[61] Education, PhD Conceptual Framework," Op. cit.
[62] Bullet points taken verbatim from: Ibid.

Figure 3.12: School of Education, Equity and Excellence, Chapel Hill

EQUITY
▪ The state, quality, or ideal of social justice and fairness.
▪ Individual and cultural achievement benefits all students and educators.
▪ Acknowledges that ignorance of diversity's richness limits human potential.
▪ Supports the closure of achievement gaps by acknowledging the discrimination based on ability, parents' income, race, gender, ethnicity, culture, neighborhood, sexuality, or home language.
EXCELLENCE
▪ Striving for optimal development, high levels of achievement and performance for all.
▪ Preparatory programs are effective when curriculum and instruction further excellence when they develop individual expertise as a thinker, problem solver, and creator of knowledge.
▪ Entails a commitment to fully developing candidates academically, morally, and politically.

Source: University of North Carolina at Chapel Hill[63]

ADMISSIONS REQUIREMENTS

Prospective students are required to have earned a master's degree prior to admission to the EPME PhD program at Chapel Hill.[64] Students must submit a completed application, a nonrefundable application fee ($85), and the following supporting documents electronically by February 11th (December 17th to be considered for funding):[65]

▪ Transcripts (complete, not selected courses). One unofficial transcript from each university attended must be uploaded within the application. Please do not mail transcripts as part of your admission application; we only accept unofficial uploads for application evaluation. If you are offered admission, one official transcript for each university attended will be required prior to the first day of the term.

▪ Current letters of recommendation. The email address of three recommenders will be required within the application for electronic submission.

▪ Standardized test scores (GRE, GMAT, etc.; no more than 5 years old.)

▪ Statement of purpose.

▪ Resume/CV

▪ Supplemental information. Applicants are not required to submit writing samples as part of their application. However, applicants are encouraged to include brief writing samples (no longer than 10 pages) demonstrating their ability to compose academic arguments

▪ Minimum graduate admissions requirements include an average grade of B (cumulative GPA of 3.0) or higher.

After the deadline, incomplete applications will not be reviewed for admission. Faculty members review completed application files beginning in January; applications submitted in December have better odds of admission, and the program aims to enroll 10 new PhD students each year. The EPME PhD program does not have a formal "years of teaching experience" requirement. However, many education jobs require three to five years of

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[63] Ibid.
[64] "Education, PhD Program Description," Op. cit.
[65] "Instructions for Graduate Applicants." The University of North Carolina at Chapel Hill.
    http://gradschool.unc.edu/admissions/instructions.html

teaching experience, as well as a permanent teaching license, thus faculty tend to admit students who can be placed in appropriate positions after graduation. Additionally, teaching experience improves a student's likelihood to receive funding. [66]

ENROLLMENT

Chapel Hill's Fact Book provides enrollment data for the School of Education doctoral program, but it does not differentiate among the School's different doctoral programs. Figure 3.13 shows the breakdown of graduate enrollment headcount by full-time equivalent status for the academic years 2008-2012. Overall enrollment and full-time equivalent enrollment in Chapel Hill's School of Education have both grown over 12 percent.

Figure 3.13: School of Education Graduate Enrollment Headcount, Chapel Hill

ENROLLMENT	2008	2009	2010	2011	2012	CAGR	AAC
Headcount	320	360	616	542	515	12.6%	48.75
FTE	261.75	302.25	468.00	430.50	422.25	12.7%	40.13

Source: The University of North Carolina at Chapel Hill [67]

CURRICULUM

EPME students, along with other doctoral students in the School of Education, begin their first semester of study in several cohort-based courses, including a school-wide proseminar, a school-wide research methods seminar, an EPME proseminar, and a supervised research experience.[68] Doctoral candidates are expected to maintain full-time enrollment to ensure they graduate within three to four years.[69]

The PhD program consists of 52 required credit hours. On the following page, Figure 3.14 is a hypothetical four-year program of study for EPME doctoral students; on page 39, Figure 3.15 is an overview of the EPME program's course offerings. See Appendix E for a full syllabus with course descriptions. Although Chapel Hill's EPME program is primarily research methods-based, they do include a number of "Psychological Foundation" courses for students to choose from.

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[66] Ibid.

[67] [1] "Fact Book 2012-2013." The University of North Carolina at Chapel Hill. p. 8.
   http://oira.unc.edu/files/2012/03/fb2008_2009.pdf
[2] "Fact Book 2009-2010." The University of North Carolina at Chapel Hill. p. 7.
   http://oira.unc.edu/files/2012/03/fb2009_2010.pdf
[3] "Fact Book 2010-2011." The University of North Carolina at Chapel Hill. p. 7.
   http://oira.unc.edu/files/2012/03/fb2010_2011.pdf
[4] "Fact Book 2011-2012." The University of North Carolina at Chapel Hill. p. 7.
   http://oira.unc.edu/files/2013/04/fb2011_2012.pdf
[5] "Fact Book 2012-2013." The University of North Carolina at Chapel Hill. p. 7.
   http://oira.unc.edu/files/2013/06/fb2012_2013.pdf
[68] "Education, PhD Program Description," Op. cit.
[69] "Education, PhD Program Description," Op. cit.

Figure 3.14: Hypothetical Four-Year Program of Study, Chapel Hill

FIRST YEAR, FALL SEMESTER	
▪ EDUC 684: Statistical Analysis of Educational Data I (4hrs) ▪ EDUC 803: Proseminar in Education (3hrs)	▪ EDUC 806: Seminar in Education Psychology, Measurement and Evaluation (3hrs) ▪ EDUC 990: Supervised Research (1hr) ▪ EDUC Elective (if desired) (3hrs)
FIRST YEAR, SPRING SEMESTER	
▪ EDUC 824: Fundamentals of Educational Research (3hrs) ▪ EDUC 990: Supervised Research (1hr)	▪ EDUC Elective: Research (3hrs) ▪ EDUC Elective (3hrs) ▪ EDUC Elective (if desired) (3hrs)
SECOND YEAR, FALL SEMESTER	
▪ EDUC 802: Foundations of Educational Research (3hrs) ▪ EDUC 990: Supervised Research (1hr) ▪ EDUC Elective: Research (3hrs)	▪ PSYC Elective (3hrs) ▪ EDUC Elective (3hrs) ▪ EDUC Elective (if desired) (3hrs)
SECOND YEAR, SPRING SEMESTER	
▪ EDUC 990: Supervised Research (1hr) ▪ SOCI Elective (3hrs) ▪ EDUC Elective (3hrs)	▪ EDUC Elective (3hrs) ▪ EDUC Elective (if desired) (3hrs)
THIRD YEAR, FALL SEMESTER	
EDUC 994: Dissertation (3hrs)	
THIRD YEAR, SPRING SEMESTER	
EDUC 994: Dissertation (3hrs)	
FOURTH YEAR, FALL SEMESTER	
EDUC 994: Dissertation (3hrs)	
FOURTH YEAR, SPRING SEMESTER	
EDUC 994: Dissertation (3hrs)	

Source: University of North Carolina at Chapel Hill[70]

FUNDING OPPORTUNITIES

Although funding is available in the form of Teaching Assistant (T.A.) positions and Research Assistant (R.A.) positions, it is not guaranteed. T.A. and R.A. positions typically include tuition waivers (for both in-state and out-of-state students), health insurance, and a monthly or bi-weekly stipend. In order to be offered a T.A. position, a student must have already completed an MA degree.[71]

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[70] " Education, PhD Program of Studies." The University of North Carolina at Chapel Hill. http://soe.unc.edu/academics/phd_ed_epme/pos.php

[71] "Graduate Degree Programs." The University of North Carolina at Chapel Hill. http://gradschool.unc.edu/academics/degreeprograms/

Figure 3.15: EPME Curriculum, Chapel Hill

CORE COURSES	
- EDUC 803: Proseminar in Education - EDUC 801: Fundamentals in Educ. Research - EDUC 802: Foundations of Educ. Research	- EDUC 806: Seminar in Education, Psychology, Measurement, & Evaluation - EDUC 990: Supervised Research x3

QUALITATIVE AND QUALITATIVE METHODS	
- EDUC 784: Statistical Analysis of Educ. Data II - EDUC 884: Statistical Analysis of Educ. Data III	- EDUC 888: Intro to Structural Equation Modeling - EDUC 981: Field Tech. in Educ. Research

ELECTIVES (AT LEAST ONE OF THE FOLLOWING)	
- EDUC 982: Advanced Qualitative Analysis - ANTH 675: Ethnographic Methods - BIOS 665: Analysis of Categorical Data - BIOS 735: Statistical Computing - PLCY 801: Design of Policy-Oriented Research - PLCY 802: Advanced Research Design - PSYC 853: Analysis of Frequency Tables in Behavioral Research - PSYC 843: Factor Analysis - PSYC 835/PSYC 854: Meta-Analysis - PSYC 834: Data Analysis and Visualization	- PSYC 836: Analysis of Covariance Structures - PSYC 838: Computer Simulation Methods - PSYC 846: Multilevel Models - SOCI 718: Longitudinal and Multilevel Data Analysis - SOCI 711: Analysis of Categorical Data - SOCI 760: Data Collection Methods in Survey Research - SOCI 763: Introduction to Survey Computing - SOWO 911: Intro to Social Statistics & Data Analysis - SOWO 917: Long. and Multilevel Analysis

MEASUREMENT
EDUC 783: Applied Measurement Theory for Education
PSYC 859 (or equivalent): Seminar in Quantitative Psychology (IRT)

MEASUREMENT ELECTIVES (AT LEAST ONE OF THE FOLLOWING)	
- EDUC 787: Problems in Educ. Measurement - BIOS 664: Sample Survey Methodology - SOCI 754: Survey Sampling - SOCI 761: Questionnaire Design	- HBHE 852: Scale Development - PSYC 839: Test Theory - PSYC 842: Test Theory and Analysis - PSYC 851: Multidimensional Scaling

EVALUATION (AT LEAST ONE OF THE FOLLOWING)
EDUC 785: Program Evaluation
SOWO 810: Evaluation of Social Work Interventions

PSYCHOLOGICAL FOUNDATIONS (AT LEAST ONE OF THE FOLLOWING)	
- EDUC 781: Theory and Research in Human Development - EDUC 786: Problems in Educational Psychology - EDUC 788: Instructional Theories - EDUC 881: Seminar in Human Development - EDUC 782: Psychology of Learning in the Schools	- EDUC 882: Seminar in Human Learning and Cognition - PSYC 730: History of Cognitive Psychology - PSYC 731: Seminar in Cognitive Psychology: Learning and Memory - PSYC 735: Seminar in Cognitive Psychology: Methods and Models

ELECTIVE
One additional elective course agreed upon by student and the Program of Studies Committee

DISSERTATION RESEARCH
EDUC 994: Doctoral Dissertation Research x2

Source: The University of North Carolina at Chapel Hill[72]

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[72] "The University of North Carolina at Chapel Hill School of Education PhD Degree – EMPE Program." The University of North Carolina at Chapel Hill.
http://soe.unc.edu/services/student_affairs/forms/graduate/pos_phd_epme_qrm_option.pdf

CAREER OPPORTUNITIES

Chapel Hill's School of Education has career information for teachers on its website. However, there is no material relevant to educational researchers. An external site linked to the Chapel Hill's "Careers in Education" page lists the following sample jobs at the North Carolina Department of Public Instruction (Figure 3.16)

Figure 3.16: Work 4 NC Schools Sample Jobs

Principal/Assistant Principal	School Finance Officer
Counselor	Workforce Development Officer
School Social Worker	School Superintendent
School Psychologist	Associate Superintendent
Technology Facilitator/Instructional Technology Specialist	Job Class Specifications for Non-Certified Public School Personnel
Media Supervisor	Assistant Superintendent
Media Coordinator	Physical Therapist
Speech-Language Pathologist	Physical Therapist Assistant
Audiologist	Occupational Therapist
School Nurse	Occupational Therapist Assistant
Curriculum Instructional Specialist	Child Nutrition Director
Exceptional Children Program Director	

Source: Public Schools of North Carolina [73]

VIRGINIA TECH

PROGRAM CHARACTERISTICS

Virginia Tech (VT) offers a doctoral degree program in Educational Research and Evaluation through its School of Education. Established in 1971, VT's Educational Research and Evaluation (EDRE) program was the first educational research PhD program in Virginia. The program offers doctoral preparation in the content areas of measurement, program evaluation, qualitative research methods, and statistics as they relate to education.[74]

The EDRE program's "commitment to achieving excellence in teaching, research, and service to various communities" is emphasized through "high quality teaching and learning… aimed at preparing students to achieve success in their professional lives and to be active contributors to the academic community."[75] "In each facet of its mission, the EDRE program embraces a respect for, and a commitment to, diversity in its various forms."[76]

Although the program is primarily housed on the Blacksburg campus, to accommodate working professionals, students are able to take the introductory course sequence at one of

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[73] "Job Descriptions." Public Schools of North Carolina.
http://www.ncpublicschools.org/work4ncschools/employment/jobdescrip/
[74] "Educational Research and Evaluation." Virginia Tech. http://www.soe.vt.edu/edre/
[75] "Mission Statement." Virginia Tech. http://www.soe.vt.edu/edre/mission.html
[76] Ibid.

VT's Northern Virginia campuses (Alexandria, Arlington, Falls Church, Leesburg, Manassas, and Middleburg).[77] Furthermore, two 5000-level EDRE courses are offered online.[78]

ADMISSIONS REQUIREMENTS

Applications to the EDRE program are accepted on a rolling basis. Prospective students must submit a completed application, a nonrefundable application fee ($75), and the following supporting documents:[79]

- Completion of graduate application and payment of applicable fees

- Transcripts from all institutions of higher education that the applicant has attended

- 3.3 GPA in a master's program

- A copy of Graduate Record Examination Scores (GRE)

- Three letters of reference (We strongly encourage that at least one of these letters be from person in an academic position)

- Interview and writing sample may be requested

A personal interview may be requested, although it can be conducted online. The interview committee may engage applicants in the following topics of conversation:[80]

- Previous academic work;

- Leadership qualities;

- Experience in the field in which the student wishes to pursue a degree;

- Present level of understanding of issues and problems in the student's prospective major field of study; and

- Clarity of professional goals as related to doctoral study and relevance to the degree.

Students are not required to have earned a master's degree prior to admission to the EDRE program; however, if a student does not have a minimum of 18 credit hours in a master's-degree program, they must take at least 18 graduate credit hours beyond the PhD requirements.[81]

ENROLLMENT

The EDRE program reports that "[o]ver the years, the program has featured a small but high-quality group of students, conferring 145 PhD degrees as of 2010."[82] Enrollment data for the academic years 2008-2013 are depicted in Figure 3.17. Since 2008, enrollment in the EDRE graduate program has decreased minimally by less than one percent.

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[77] "Northern Virginia Center, Education." Virginia Tech. http://www.nvc.vt.edu/education/
[78] "Educational Research and Evaluation," Op. cit.
[79] Bullet points taken verbatim from: "Admissions." Virginia Tech. http://www.soe.vt.edu/edre/admissions.html
[80] Bullet points taken verbatim from: Ibid.
[81] "Areas of Focus," Op. cit.
[82] "Educational Research and Evaluation," Op. cit.

Figure 3.17: Total EDRE Graduate Enrollment, VT

2008	2009	2010	2011	2012	2013	CAGR	AAC
22	15	17	19	19	21	-0.9%	-0.2

Source: Virginia Tech[83]

CURRICULUM

There are five focus areas from which students enrolled in the EDRE doctoral program may choose: measurement, qualitative methods, statistics, evaluation, or mixed methods. Figure 3.18 highlights the differences among these five areas.

Figure 3.18: EDRE Focus Areas, VT

MEASUREMENT
The measurement focus engages students in course work and experiences relevant to developing psycho-educational instruments, evaluating the quality of measures from those instruments, conducting research relating to testing practices, and developing measurement models.
QUALITATIVE METHODS
The qualitative focus includes coursework and other experiences that prepare students to understand important theoretical issues in contemporary qualitative inquiry, design qualitative research, use a variety of data collection methods, analyze data appropriately, use a variety of writing formats and writing practices to report findings, and use appropriate criteria to evaluate various forms of qualitative research.
STATISTICS
The statistics focus includes coursework and other experiences that would prepare students for designing quantitative research studies, using and developing appropriate and cutting edge statistical methodologies for analysis of complex educational and social data, and conducting research studies relating to educational and socio-behavioral issues.
EVALUATION
Students may also focus on program evaluation. This includes study regarding the theoretical and philosophical bases for research regarding social science programming. Design and measurement alternatives are examined to build practical skills as an evaluation expert.

Source: Virginia Tech[84]

The EDRE PhD program requires a minimum of 90 hours (18 from a master's degree) of coursework beyond a bachelor's degree. Figure 3.19 is an overview of the EDRE curriculum.[85] Similar to the programs offered at UNCG and Chapel Hill, VT's EDRE curriculum is primarily focused on research methodology.

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[83] "Virginia Tech On-Campus Majors by Student Level, Fall Semesters 2004-2013." Virginia Tech. http://www.ir.vt.edu/work_we_do/demo_enroll/Majors/studentMajor.html

[84] Descriptions taken verbatim from: "Area of Focus." Virginia Tech. http://www.soe.vt.edu/edre/areas.html

[85] The Appendix does not include an EDRE program syllabus with course descriptions; included programs were mentioned in NCCC's *Request for Authorization to Plan a New Degree Program*."

Figure 3.19: EDRE Curriculum, VT

ONLINE COURSES (6 CREDITS, 3 CREDITS PER COURSE)	
▪ EDRE 5404: Foundations of Educational Research & Evaluation ▪ EDRE 5775: Introduction to Mixed Methods	
CORE RESEARCH METHODOLOGY (30 CREDITS, 3 CREDITS PER COURSE)	
▪ EDRE 6504: Qualitative Methods in Educational Research I ▪ EDRE 6534: Qualitative Methods in Educational Research II ▪ EDRE 6605: Quantitative Methods in Educational Research I ▪ EDRE 6606: Quantitative Methods in Educational Research II ▪ EDRE 6624: Measurement Theory in Education	▪ EDRE 6634: Advanced Statistics in Education (Regression) ▪ EDRE 6684: Instrument Development & Validation ▪ EDRE 6704: Evaluation Methods in Education ▪ EDRE 6744: Mixed Methods Research Design ▪ EDRE 5974: Independent Study (Research Apprenticeship)
FOCUS COURSES (STUDENTS CHOOSE ONE OF THE FOLLOWING)	
Measurement (minimum 9 credits, 3 credits per course)	
▪ EDRE 6754: Advanced Item Response Theory ▪ EDRE 6664: Application of Structural Equations in Education	▪ EDRE 6654: Multivariate Statistics for Applications to Educational Problems ▪ Elective (may be from another department)
Qualitative (minimum 9 credits, 3 credits per course)	
▪ EDCI 6034: Education and Anthropology ▪ EDCI 6534: Ethnographic Methods in Educational Research	▪ EDRE 6784: Advanced Issues in Qualitative Research ▪ Elective (may be from another department)
Statistics (minimum 12 credits, 3 credits per course)	
▪ EDRE 6694: Hierarchical Linear Modeling ▪ EDRE 6654: Multivariate Statistics ▪ EDRE 6794: Longitudinal Data Analysis	▪ EDRE 6754: Advanced Item Response Theory ▪ Elective (may be from another department)
Evaluation (minimum 9 credits, 3 credits per course)	
▪ EDRE 6794: Advanced Topics in Evaluation ▪ EDRE 5644: Questionnaire Design and Survey Research in Education	▪ Evaluation Related Elective (may be from another department)
Master's Degree Credits	
EDRE PhD students must have a minimum of 18 hours of credit in a master's-degree program that are approved by the Advisory Committee or must take at least 18 hours of graduate credit beyond the remaining requirements for a PhD in the EDRE program. These courses should constitute a cognate area outside of EDRE.*	
Dissertation Research	
EDRE PhD students must take a minimum of 30 hours of credit of dissertation research during the duration of their studies. Students should enroll for at least one hour of EDRE 7994 credit each semester and attend EDRE brownbag presentations to receive credit for those hours.*	

Source: Virginia Tech[86]
*Descriptions taken verbatim

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[86] [1] Online Courses: "Course Schedule." Virginia Tech. http://www.soe.vt.edu/edre/schedule.html
[2] All other courses: "Areas of Focus," Op. cit.

CAREER OUTLOOK

The EDRE doctoral program prepares students who are interested in developing research and evaluation skills. According to the program's website, "[c]urrently, graduates with these skills are in high demand due to the provisions of *No Child Left Behind*."[87] Figure 3.20 highlights EDRE graduates' skills and expertise; Figure 3.21 provides sample career opportunities for individuals with an EDRE doctoral degree.

Figure 3.20: EDRE Graduates' Skills and Expertise, VT

▪ Behavioral science research methodology	▪ Development and evaluation of psycho-educational tests
▪ Evaluation methodology	
▪ Qualitative research design	▪ Application and development of statistical methods for use in behavioral research
▪ Data collection and analysis	

Source: Virginia Tech[88]

Figure 3.21: Careers for Individuals with an EDRE Doctoral Degree, VT

RESEARCH METHODOLOGISTS
Education, Psychology, or Applied Statistics
TESTING INDUSTRY
ETS, ACT, CTB, Pearson
HIGHER EDUCATION
Evaluation and Assessment
STATE AND NATIONAL GOVERNMENT POSITIONS
Program Evaluation, Data Analysis, Instrument Development, Survey Administration

Source: Virginia Tech[89]

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[87] Ibid.
[88] "Employment Opportunities for EDRE Graduates." Virginia Tech. http://www.soe.vt.edu/edre/employability.html
[89] Ibid.

APPENDIX A: SOUTHEAST STATE COMPLETIONS IN ERME-RELATED FIELDS

FIELD	2007	2008	2009	2010	2011	CAGR
Educational Evaluation and Research (13.0601)						
Florida	1	--	3	--	4	41.4%
Kentucky	9	6	4	9	8	-2.9%
North Carolina	2	4	3	6	8	41.4%
South Carolina	5	2	4	5	5	0.0%
Subtotal	**17**	**12**	**14**	**20**	**25**	**10.1%**
Educational Statistics and Research Methods (13.0603)						
Alabama	2	0	2	1	2	0.0%
Florida	1	6	5	3	3	31.6%
Virginia	2	8	2	1	2	0.0%
Subtotal	**5**	**14**	**9**	**5**	**7**	**8.8%**
Educational Assessment, Testing, and Measurement (13.0604)						
North Carolina	2	1	5	3	2	0.0%
Subtotal	**2**	**1**	**5**	**3**	**2**	**0.0%**
Educational Assessment, Evaluation, and Research, Other (13.0604)						
Kentucky	2	--	--	--	13	59.7%
Subtotal	**2**	**--**	**--**	**--**	**13**	**59.7%**
Regional Totals	**26**	**27**	**28**	**28**	**47**	**16.0%**

Source: IPEDS

APPENDIX B: CIP 2010 TO SOC 2010 CROSSWALK KEYWORD SEARCH

SEARCH TERMS	
Evaluation, Research, Methodologist, Measurement, Statistics	
CIP 2010 CODE	**SOC 2010 CODE**
▪ 14.3701: Operations Research ▪ 52.1301: Management Science	15-2031: Operations Research Analysts
▪ 27.0501: Statistics, General ▪ 45.0102: Research Methodology and Quantitative Methods ▪ 52.0601: Business/Managerial Economics ▪ 52.1302: Business Statistics	19-3022: Survey Researchers
▪ 42.2799: Research and Experimental Psychology, Other ▪ 45.0102: Research Methodology and Quantitative Methods	11-9199: Managers, All Other
45.0101: Social Sciences, General	19-4061: Social Science Research Assistants
▪ 45.0102: Research Methodology and Quantitative Methods ▪ 26.1102: Biostatistics ▪ 27.0101: Mathematics, General ▪ 27.0501: Statistics, General ▪ 27.0503: Mathematics and Statistics ▪ 27.0599: Statistics, Other ▪ 52.1302: Business Statistics	15-2041: Statisticians
45.0102: Research Methodology and Quantitative Methods	19-3041: Sociologists
45.0102: Research Methodology and Quantitative Methods	19-3099: Social Scientists and Related Workers, All Other
45.0102: Research Methodology and Quantitative Methods	25-1069: Social Sciences Teachers, Postsecondary, All Other

Source: IPEDS[90]

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[90] "CIP 2010 to SOC 2010 Crosswalk," Op. cit.

Appendix C: University of North Carolina at Greensboro Syllabus of Courses

ERM 517: Statistical Methods in Education
Introductory course in applied descriptive statistics, correlational methods, and linear regression that provides a conceptual and theoretical foundation for more advanced work and a thorough grounding in the use of computers for descriptive statistical analysis and interpretation of results.
ERM 604: Methods of Educational Research
Techniques and uses of research in education. Designed to provide the student with the ability to read, understand, and critically evaluate published empirical research.
ERM 605: Educational Measurement and Evaluation
For teachers, counselors, school administrators. Principles of measurement and evaluation; methods of scoring and interpreting tests. Construction and use of teacher-made tests. Statistical concepts basic to understanding and interpreting test data. (Note: this course is offered as combination campus-based and internet-based course.)
ERM 633: Language Assessment and Testing
Theoretical and practical issues related to second language testing with special attention paid to the assessment of English as a second language, world Englishes, and foreign languages.
ERM 642: Evaluation and Educational Programs
Existing and emerging formulations of educational evaluation. Developing operational guidelines for conducting evaluation in educational settings.
ERM 643: Applied Educational Evaluation
An application course that uses modern evaluation models, data collection, statistical analysis, and interpretation of findings to establish the effectiveness and utility of educational programs.
ERM 667: Foundations of Educational Measurement Theory
Statistical foundations, classical test theory, reliability, validity, item analysis and norms; selected topics in modern test theory. Designed for those who will develop, evaluate, and select measurement instruments in their professional roles.
ERM 668: Survey Research Methods in Education
Theory, methods, and procedures of survey research as this methodology is applied to problems in education. Sampling from future populations.
ERM 669: Item Response Theory
Conceptual and mathematical foundations, parameter estimation, tests of model assumptions and goodness of fit, and practical applications of IRT.
ERM 675: Data Presentation and Reporting
Modern techniques for summarizing and visualizing univariate and multivariate data using various statistical and graphical software packages. Covers theories and research on graphics and the perception of visual data.
ERM 680: Intermediate Statistics Methods in Education
Introductory course in applied inferential statistics that includes applied probability theory, methods of estimation, and hypothesis testing for a wide variety of applications, and elementary analyses of variance. Concept learning, applications, computer analysis, and computational algorithms are stressed.
ERM 681: Design and Analysis of Educational Experiments
Experimental design, analysis of linear statistical models, interpretation of statistical results and research presentation. Analysis of variance, analysis of covariance, and multiple linear regression. Applications in education and the social sciences.
ERM 682: Multivariate Analysis
Multivariate normal distribution. Cluster analysis, discriminant analysis, canonical correlation, principal component analysis, factor analysis, multivariate analysis of variance. Use and interpretation of relevant statistical software.

ERM 688: CONTEMPORARY PROBLEMS SEMINAR: STATISTICAL COMPUTING WITH R
This course will introduce foundational concepts in statistical computing using the R language.
ERM 688: SEMINAR IN ADVANCED RESEARCH DESIGN IN EDUCATION
This course will provide a survey of classification models used to identify groups of people from a set of observed variables.
ERM 693: SEMINAR IN ADVANCED RESEARCH METHODS
Advanced techniques of research or measurement applied to educational or social and behavioral science problems.
ERM 726: ADVANCED TOPICS IN EDUCATIONAL MEASUREMENT
Technical developments and applications in classical test theory, item response theory, generalizability theory, models of selection bias, differential item functioning, and test score equating. (Syllabus is an example only. Topics will change as a function of new developments in educational measurement, assessment, and psychometrics.)
ERM 727: COMPUTER-BASED TESTING: METHODS AND APPLICATIONS
Computer-based testing applications including automated test assembly, item banking, computer-adaptive and multistage testing, web-based testing, large-scale assessment development and support systems, and computer-based performance assessments. Covers state-of-the-art research and developments.
ERM 728: EXPLORATORY AND CONFIRMATORY FACTOR ANALYTICS METHODS FOR SCALE CONSTRUCTION
Exploratory and confirmatory factor analysis and multidimensional scaling. Methods of estimation and rotation including the common factor model. Weighted and unweighted MDS.
ERM 729: ADVANCED ITEM RESPONSE THEORY
Advanced topics in item response theory, including maximum likelihood estimation, marginal maximum likelihood estimation, Markov chain Monte Carlo estimation, polytomous item response theory models, partial credit models, graded response models, and nominal models.
ERM 730: PRACTICUM IN EDUCATIONAL RESEARCH AND EVALUATION
Field-based and mentored practicum. (Syllabus is NOT available. Students arrange to participate in extended field experiences related to educational research, measurement, applied statistics, or program evaluation, with the consent of their advisor).
ERM 731: STRUCTURAL EQUATION MODELING IN EDUCATION
Formulation of statistical models, estimation of structural coefficients using LISREL, estimation of model fit, confirmatory factor analysis models, practical applications.
ERM 732: HIERARCHICAL LINEAR MODELING
Structure of hierarchical data, random intercepts, individual change/growth models, applications in meta-analysis, assessing hierarchical models, hierarchical generalized linear models, hierarchical models for latent variables, cross-classified random effects, estimation.
ERM 734: EQUATING
Equating designs, equating and scaling assumptions, design of anchor sets, observed score equating methods, true-score equating methods, standard error of equating, use and interpretation of relevant statistical software.
ERM 735: MULTIDIMENSIONAL ITEM RESPONSE THEORY
Multidimensional item response theory models including their estimation, representation, and application. Use of relevant estimation and graphing software discussed.
ERM 742: ADVANCED TOPICS IN THE EVALUATION OF EDUCATIONAL PROGRAMS
Theoretical understanding of evaluation design and strengthening of practical program evaluation skills.
ERM 750: CASE STUDY METHODS IN EDUCATIONAL RESEARCH
Overview of the methodology of case study research; enhancement of students' skills in using case study methods.

Source: The University of North Carolina at Greensboro[91]

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[91] [1] "Syllabi of ERM Courses." The University of North Carolina at Greensboro. http://erm.uncg.edu/academic-programs/course-syllabi/

[2] Descriptions not available for ERM 600: Validity and Validation, ERM 636: Advanced Studies in Second Language Testing, and ERM 685: R for Education and the Social Sciences.

APPENDIX D: NORTH CAROLINA STATE UNIVERSITY SYLLABUS OF COURSES

ED 710: QUANTITATIVE RESEARCH
This course is designed for educational researchers and leaders to gain experience with designing and evaluating research using a quantitative approach to answer research questions in educational research and policy analysis. Students will examine design issues in research, create data sets, develop research questions from data provided, use a variety of descriptive and inferential procedures to answer formulated research questions, interpret the results and write the results in the language of educational research. Restricted to doctoral students in Education or by permission of instructor.
ED 711: QUANTITATIVE RESEARCH-ADVANCED
Students will apply and enhance their quantitative skills through analysis of existing datasets. Course goals include practicing and extending Multiple Regression knowledge and skills, generating and testing hypotheses in a multiple regression framework, and appropriately disseminating results. Restricted to doctoral students in Education Research only.
ED 730: QUALITATIVE RESEARCH
Design of qualitative studies, conduct of field work (open-ended interviews & participant observation), analysis of data & understanding of theoretical & philosophical background of this research approach.
ED 731: QUALITATIVE RESEARCH-ADVANCED
Intensive course in the use of field-based and general qualitative research data analysis methods in the social study of education. The course is to help participants acquire skills and gain experience in using various methodological and analytical research techniques. The course emphasis is on the collection, management, analysis, and interpretation of qualitative data.
ED 724: CONTEMPORARY EDUCATIONAL THOUGHT; ED 735: POLICY RESEARCH IN EDUCATION; ED 780: EVALUATION THEORY & PRACTICE IN EDUCATION*
ELP 751: POLITICS OF EDUCATION
Analysis of political interactions of individuals and groups in P-12 education, specifically, how politics shapes educational decisions within a federal system of governance. Topics covered include micropolitics and macropolitical systems at the school, district, municipal, state, and federal levels, as well as political culture, interest groups, advocacy coalitions, and institutions. Doctoral standing req.
ELP 728: SCHOOL LAW
Comprehensive study of constitutional, statutory and case law as related to elem. & secondary school admin. Emphasis on legal issues assoc. with governance, finance, property, personnel curriculum.
ELP 729: EDUCATION FINANCE
Historical and sociopolitical contextual analysis of underlying values, methodologies & policies associated with economic & financial planning of K-12 education (efficiency, equity, liberty) &economic & financial mechanisms used to generate, distribute, and expend revenues for educational purposes.
ELP 720: CASES
Utilization of case study and case simulation approach to study of school administration. Development and application of administrative concepts to simulated situations and to actual case histories. View of administrative process as a decision-making process. Student expected to make decisions after considering alternative courses of action and after projecting probable consequences.
ELP 795: SPECIAL TOPICS IN EDUCATIONAL RESEARCH AND LEADERSHIP*

Source: North Carolina State University[92]   * Couse description not available.

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[92] Course descriptions taken verbatim from: [1] ED Courses: "ED-Education." North Carolina State The University.
http://www2.acs.ncsu.edu/reg_records/crs_cat/ED.html#ED 710
[2] ELP Courses: "ELP-Educational Leadership and Program Evaluation." North Carolina State The University.
http://www2.acs.ncsu.edu/reg_records/crs_cat/ELP.html#ELP 751

APPENDIX E: UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL SYLLABUS OF COURSES

EDUC 803: PROSEMINAR IN EDUCATION (3)
Students develop an in-depth understanding of scholarly traditions within education, histories of curricular area and current issues facing these areas and education as a whole, and application of these histories and issues to classrooms and schools.
EDUC 801: FUNDAMENTALS IN EDUCATIONAL RESEARCH (3)
Explores and analyzes the range of educational research designs including experimental, correlational, survey, descriptive, case study, ethnography, narrative, policy, and longitudinal research.
EDUC 802: FOUNDATIONS OF EDUCATIONAL RESEARCH (3)
Applies the philosophies of science, social science, language, and history (including recent theoretical issues) to the understanding of how educational research is conducted and what contribution it makes.
EDUC 806: SEMINAR IN EDUCATION, PSYCHOLOGY, MEASUREMENT, & EVALUATION (3)*
EDUC 990: SUPERVISED RESEARCH (1)
Open to graduate students only. Provides students with the opportunity to work with individual faculty members in collaborative research activities in association with a seminar during the second, third, and fourth semesters of study. May be repeated for credit.
EDUC 784: STATISTICAL ANALYSIS OF EDUCATIONAL DATA II (3)
Prerequisite, EDUC 710. Permission of the instructor for students lacking the prerequisite. A linear model approach to the analysis of data collected in educational settings. Topics include multiple regression, analysis of variance, and analysis of covariance, using computer packages.
EDUC 884: STATISTICAL ANALYSIS OF EDUCATIONAL DATA III (3)
Prerequisites, EDUC 710 and 784. An extension of the general linear model to analysis of educational data with multiple dependent variables, with computer applications.
EDUC 888: INTRO TO STRUCTURAL EQUATION MODELING (3)
Introduces structural equation modeling with both observed and latent variables. Applications include confirmatory factor analysis, multiple group analyses, longitudinal analyses, and multi-trait-multi-method models.
EDUC 981: FIELD TECHNIQUES IN EDUCATIONAL RESEARCH (3)
Prerequisite, EDUC 684. Introduces students to field research methods and analysis of qualitative data that focuses on the application of these techniques in evaluation and policy research.
EDUC 982: ADVANCED QUALITATIVE ANALYSIS (3)
This advanced seminar focuses on the needs of doctoral students immersed in qualitative research, with an emphasis on data analysis and representation.
ANTH 675: ETHNOGRAPHIC METHODS (3)
Intensive study and practice of the core research methods of cultural and social anthropology.
BIOS 665: ANALYSIS OF CATEGORICAL DATA (3)
Prerequisites, BIOS 545, 550, and 662. Permission of the instructor for students lacking the prerequisites. Introduction to the analysis of categorized data: rates, ratios, and proportions; relative risk and odds ratio; Cochran-Mantel-Haenszel procedure; survivorship and life table methods; linear models for categorical data. Applications in demography, epidemiology, and medicine.
BIOS 735: STATISTICAL COMPUTING (3)
Prerequisite, BIOS 661. Required preparation, familiarity with one computer system and either a computer language or computer package. Basic theory and application of computing as a tool in statistical research and practice. Topics include algorithms and data structures, linear and nonlinear systems, function approximation, numerical integration, the EM algorithm, simulation, and document preparation.
PLCY 801: DESIGN OF POLICY-ORIENTED RESEARCH (3)*
PLCY 802: ADVANCED RESEARCH DESIGN (3)

Three main objectives: to deepen students' understanding of important issues and topics in the design of empirical research, to further develop students' ability to critically evaluate research designs and policy-related products and to aid in developing a research paper, dissertation, or other product.
PSYC 853: ANALYSIS OF FREQUENCY TABLES IN BEHAVIORAL RESEARCH (3)
Prerequisite, PSYC 831. Permission of the instructor for students lacking the prerequisite. An introduction to the analysis of frequency data (including measures of association) and the use of log-linear models and logit models in the behavioral sciences.
PSYC 843: FACTOR ANALYSIS (3)
Prerequisite, PSYC 831. Permission of the instructor for students lacking the prerequisite. Advanced topics in factor analytic models, multivariate correlational models and analysis of covariance structures as applied in behavioral research.
PSYC 835/PSYC 854: META-ANALYSIS (3)
Prerequisite, PSYC 831. Permission of the instructor for students lacking the prerequisite. Survey of research synthesis including history, problem formulation, statistical concerns, describing and combining studies, combining p-values, testing for heterogeneity, accounting for moderator variables, fixed, mixed, and random effects models, publication bias.
PSYC 834: DATA ANALYSIS AND VISUALIZATION*
PSYC 836: ANALYSIS OF COVARIANCE STRUCTURES*
PSYC 838: COMPUTER SIMULATION METHODS*
PSYC 846: MULTILEVEL MODELS (3)
Prerequisites, PSYC 830 and 831. This course demonstrates how multilevel models (or hierarchical linear models) can be used to appropriately analyze clustered data (i.e. persons within groups) and/or repeated measures data in psychological research.
SOCI 718: LONGITUDINAL AND MULTILEVEL DATA ANALYSIS (3)
Prerequisite, SOCI 709 or 711. This course provides an introduction to event history analysis or survival analysis, random effects and fixed effects models for longitudinal data, multilevel models for linear and discrete multilevel data and growth curve models.
SOCI 711: ANALYSIS OF CATEGORICAL DATA (3)
Permission of the instructor. Introduction to techniques and programs for analyzing categorical variables and nonlinear models. Special attention is given to decomposition of complex contingency tables, discriminant function analysis, Markov chains, and nonmetric multidimensional scaling.
SOCI 760: DATA COLLECTION METHODS IN SURVEY RESEARCH (3)
Reviews alternative data collection techniques used in surveys, concentrating on the impact these techniques have on the quality of survey data. Topics covered include errors associated with nonresponse, interviewing, and data processing.
SOCI 763: INTRODUCTION TO SURVEY COMPUTING (1)
Introduces basic statistical concepts and practices emphasizing the analysis of real data. Provides training in the use of the SAS statistical analysis system and the practical problems of stratification, clustering, and weighting in survey analysis.
SOWO 911: INTRO TO SOCIAL STATISTICS & DATA ANALYSIS (3)
Prerequisite, SOWO 510. Designed to explore basic principles and to provide advanced instruction in data analysis, including the construction and analysis of tables, statistical tests and an introduction to the use of computer programs.
SOWO 917: LONGITUDINAL AND MULTILEVEL ANALYSIS (3)
This course introduces statistical frameworks, analytical tools, and social behavioral applications of three types of models: event history analysis, hierarchical linear modeling (HLM), and growth curve analysis.
EDUC 783: APPLIED MEASUREMENT THEORY FOR EDUCATION (3)
An examination of the logic and theory of educational measurement. Practical applications of measurement theory to the construction and use of a variety of educational measurement devices.
PSYC 859 (OR EQUIVALENT): SEMINAR IN QUANTITATIVE PSYCHOLOGY (IRT) (3)

Lectures, discussions, and seminar presentations on current topics in quantitative psychology.
EDUC 787: Problems in Educational Measurement (3)
Prerequisites, EDUC 710 and 783. Permission of the instructor. Provides an opportunity for advanced doctoral students to study a particular problem area in educational measurement under the supervision of a faculty mentor. May be repeated for credit.
BIOS 664: Sample Survey Methodology (4)
Prerequisite, BIOS 550. Permission of the instructor for students lacking the prerequisite. Fundamental principles and methods of sampling populations, with emphasis on simple, random, stratified, and cluster sampling. Sample weights, nonsampling error, and analysis of data from complex designs are covered. Practical experience through participation in the design, execution, and analysis of a sampling project.
SOCI 754: Survey Sampling (3)
Permission of the instructor. The different sampling techniques are discussed. Major emphasis on planning of large-scale sample surveys rather than on statistical theory.
SOCI 761: Questionnaire Design (3)
Examines the stages of questionnaire design including developmental interviewing, question writing, question evaluation, pretesting, questionnaire ordering, and formatting. Reviews the literature on questionnaire construction. Provides hands-on experience in developing questionnaires.
HBHE 852: Scale Development (3)
Prerequisite, HBEH 750. Permission of the instructor. Covers theory and application of scale development techniques for measuring latent constructs in health research; classical measurement theory and factor analytic methods are emphasized. Three seminar hours per week.
PSYC 839: Test Theory*
PSYC 842: Test Theory and Analysis (3)
Prerequisite, PSYC 831. Survey of classical test theory and more recent developments in item analysis and test construction.
PSYC 851: Multidimensional Scaling (3)
Prerequisites, PSYC 831 and 854. Survey, with application to dissimilarity data, of the algebraic, geometric, and computational bases of multidimensional scaling methods, with emphasis on individual differences models and nonlinear transformation.
EDUC 785: Program Evaluation (3)
Prerequisites, EDUC 710 and 871. An examination of major approaches to program evaluation with emphasis on differences between evaluation and research.
SOWO 810: Evaluation of Social Work Interventions (1.5)
Prerequisite, SOWO 510. Students apply knowledge of evidence-based practice to evaluation of social work interventions, including development of a detailed proposal to conduct evaluation of specific social work organization and client or service population.
EDUC 781: Theory and Research in Human Development (3)
Permission of the instructor. Covers the basic theories and the research bases for instructional decisions. This is an advanced-level course in human development.
EDUC 786: Problems in Educational Psychology (3)
Permission of the instructor. Study and development of original investigations in the area of educational psychology.
EDUC 788: Instructional Theories (3)
Prerequisite, EDUC 744. Examines the nature and application of various theories of instruction to instructional goals, individual differences, teaching strategies, sequencing, motivation, and assessment.
EDUC 881: Seminar in Human Development (3)
Required preparation, at least one course in human development at the graduate level or permission of the instructor. Analyzes research data and theoretical positions pertaining to individual differences in human development in the educational setting.
EDUC 782: Psychology of Learning in the Schools (3)

Studies learning in the school setting, with emphasis on fundamental concepts, issues, and evaluation of materials and experiences.
EDUC 882: SEMINAR IN HUMAN LEARNING AND COGNITION (3)
Required preparation, one or two courses in educational and developmental psychology. Studies theoretical aspects and practical implications of psychologies of learning.
PSYC 730: HISTORY OF COGNITIVE PSYCHOLOGY*
PSYC 731: SEMINAR IN COGNITIVE PSYCHOLOGY: LEARNING AND MEMORY*
PSYC 735: SEMINAR IN COGNITIVE PSYCHOLOGY: METHODS AND MODELS*
EDUC 994: DOCTORAL DISSERTATION RESEARCH (3)*

Source: The University of North Carolina at Chapel Hill[93]
*Course description not available.

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[93] "2013-2014 Graduate Record." The University of North Carolina at Chapel Hill. "2013-2014 Graduate Record."

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LONG FORM
COURSE AND CURRICULUM PROPOSAL

*To: Graduate Council Chair

From: College of Education Graduate Council

Date: April 7, 2015

Re: Establishment of a PhD in Educational Research, Measurement, and Evaluation (ERME)

The Long Form is used for major curriculum changes. Examples of major changes can include:

Undergraduate: Major changes include new undergraduate degrees, minors, concentrations, certificates, and changes to more than 50% of an existing program (Note: changing the name of an academic department does not automatically change the name(s) of the degree(s). The requests must be approved separately by the Board of Governors.)

Graduate: Major changes include new graduate courses, major changes to an existing graduate course or major changes to an existing graduate program

Submission of this Long Form indicates review and assessment of the proposed curriculum changes at the department and collegiate level either separately or as part of ongoing assessment efforts.

***Proposals for undergraduate courses and programs should be sent to the Undergraduate Course and Curriculum Committee Chair. Proposals related to both undergraduate and graduate courses, (e.g., courses co-listed at both levels) must be sent to both the Undergraduate Course and Curriculum Committee and the Graduate Council.

University of North Carolina at Charlotte

New Graduate Program Proposal for PH.D. in Educational Research, Measurement, and Evaluation

Course and Curriculum Proposal from: Department of Educational Leadership in the College of Education

Title: Establishment of a Ph.D. in Educational Research, Measurement, and Evaluation (ERME)

II. CONTENT OF PROPOSALS

A. PROPOSAL SUMMARY.
  1. SUMMARY.

  The Educational Leadership Department (EDLD) in the College of Education proposes a new Ph.D. program in Educational Research, Measurement, and Evaluation (ERME). The ERME program will prepare professionals who seek advanced research, statistical, and evaluation skills for positions in a wide variety of educational institutions including higher education, K-12 school systems, for-profit companies, nonprofit agencies, community colleges, think tanks, government organizations, and other institutions concerned with solving problems in education. The new program will require minimal changes in the current doctoral curriculum that is being offered in the College of Education, and no new faculty members are needed to implement the new program.

B. JUSTIFICATION.
  1. Identify the need addressed by the proposal and explain how the proposed action meets the need.

  The UNC Charlotte's Ph.D. in ERME will be a state-of-the-art program based on the recent scholarship on doctoral education. The work of educating doctoral students took a turn a decade ago when the Carnegie Foundation for the Advancement of Teaching published two books that set about changes in many institutions of higher education, *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline* (Golde & Walker, 2006) and *The Formation of Scholars: Rethinking Doctoral Education in the Twenty-First Century* (Walker, Golde, Jones, Bueschel, & Hutchings, 2008). These were followed by numerous articles, critiques, and other books, including the many works by Susan K. Gardner, such as *On Becoming a Scholar: Socialization and Development in Doctoral Education* (2010). This scholarship came about in response to criticism of Ph.D. programs in all disciplines.

  The need for more education researchers prepared in programs like this one is known nationally. The deans of colleges and schools of education from peer institutions have written in support of our program and were asked to specifically address whether the proposal: (a) is well-conceived and provides a solid curricular foundation to future

education researchers, (b) provides the opportunity for intellectual and programmatic collaboration across the Charlotte region, and (c) addresses a compelling need within the field.

In December 2013, UNC Charlotte commissioned Hanover Research to conduct an assessment of the market for the proposed Ph.D. program in ERME. Hanover Research reviewed the student demand and distinctiveness of the proposed program by comparing it to similar programs in the state and region. Hanover Research was able to estimate the potential student demand for Ph.D. programs in ERME based on growth in current programs. Hanover found a trend of modest growth overall of students completing ERME-like programs in the state of North Carolina. When examining the labor market, it also found that "data indicate that employment in ERME-related occupations will grow across the region" (p. 10) and "ERME-related occupations will grow in the state of North Carolina" (p. 18). Growth in the labor market combined with modest growth in graduates of similar programs indicate a need for a new program in a region of the state with a large growing city that still has no program of its kind.

2. Discuss prerequisites/co-requisites for course(s) including class-standing, admission to the major, GPA, or other factors that would affect a student's ability to register.

Applicants must meet the following criteria for admission: (a) a master's degree in education or related field, such as statistics, with a cumulative GPA of 3.5 or higher (on a 4.0 scale); (b) a satisfactory score on the GRE or MAT that indicates strong analytical and writing skills; (c) a high level of professionalism and potential for success in the program as indicated in letters of reference; (d) strong writing skills as shown in a writing sample; (e) clear objectives related to obtaining a Ph.D. as evidenced in an interview; (f) appropriate interpersonal skills as determined in an interview with program faculty; (g) experience in an educational setting, which may include government or non-profit agencies with education missions; and (h) a minimum TOEFL score of 220 (computer-based), 557 (paper-based), or 83 (internet based) or a minimum IELTS band score of 6.5 is required for any applicant whose native language is not English.

3. Demonstrate that course numbering is consistent with the level of academic advancement of students for whom it is intended.

Only 8000-level courses will be included in the course requirements for the Ph.D. in ERME. The following four new courses have been proposed:

RSCH 8410 Internship in Educational Research: Students conduct research in a field setting and receive individual supervision of their work. [Syllabus included]

RSCH 8411 Internship in Teaching Educational Research: Students will co-teach a research course with a research faculty member. [Syllabus included]

RSCH 8699 Dissertation Proposal Design: Identification and definition of a research area and development of a proposal draft for an original research study appropriate for the dissertation requirement. [Syllabus included]

RSCH 8999 Doctoral Dissertation Research: Each student will initiate and conduct an individual investigation culminating in the preparation and presentation of a doctoral dissertation. [No syllabus created for this course]

4. In general, how will this proposal improve the scope, quality and/or efficiency of programs and/or instruction?

The proposed Ph.D. program will draw from the literature on doctoral education, with specific attention to the education of researchers, in that it will be designed and implemented as a high-quality, state-of-the-art model program. For instance, the faculty who teach in the Ph.D. in Educational Research, Measurement, and Evaluation will:
- Communicate the purpose of the program to students from Day 1 of enrollment;
- Design a signature pedagogy that distinguishes the program from others in the region and state;
- Communicate to students in a consistent and clear manner from recruitment through orientation and progression through the program;
- Cultivate a scholarly culture among faculty and students;
- Provide mentoring strategies and activities that meet the needs of all students (e.g., full- and part-time students, students struggling to finish, ethnic and racially diverse students, or those excelling in all areas);
- Develop assessment standards and measures collectively; from the beginning, students will participate in designing student learning outcomes and assessments of their student progress;
- Design interdisciplinary experiences through coursework and field-based apprenticeship;
- Ensure all students have meaningful experiences that result in the connection of theory and practice in advancing the field; and
- Create culminating exams and dissertations to examine important questions in the education field.

The students in the program will:
- Take responsibility for their learning in coursework, internships, and dissertation research;
- Work on research studies that answer important questions in the field;
- Regularly meet with multiple mentors;
- Collaborate with faculty, other students, and agency/community partners on research and projects; and
- Become engaged with the academic community through professional publications and presentations.

The College of Education at UNC Charlotte is positioned to offer an exceptional program that includes these features. The College is listed by *US News and World Report* as one of America's best graduate schools in education and has moved in their rankings from 103 in 2013, 86 in 2014, and 76 in 2015. The College has also been selected by the American Educational Research Association for its inclusion in a national study of research doctorates in education and by the Carnegie Project for the Education Doctorate for its inclusion in the redesign of the Ed.D. The new ERME program will nurture and reinforce a scientific culture for promoting better research. The faculty in UNC Charlotte's College of Education have the credentials and expertise to implement this new program.

5. If course(s) has been offered previously under special topics numbers, give details of experience including number of times taught and enrollment figures.
N/A

C. IMPACT.
Changes to courses and curricula often have impacts both within the proposing department as well as campus-wide. What effect will this proposal have on existing courses and curricula, students, and other departments/units? Submit an Impact Statement that fully addresses how you have assessed potential impacts and what the impacts of this proposal might be. Consider the following:

1. What group(s) of students will be served by this proposal? (Undergraduate and/or graduate; majors and/or non-majors, others? Explain). Describe how you determine which students will be served.

Graduate students, both full- and part-time, who are seeking knowledge and skills in educational research, measurement, and evaluation will be served by this proposal. We will accommodate working graduate students by offering the opportunity for students to take up to 50% of courses online. The decision to provide access through online tools is intended to provide the flexibility prospective students may need while reaching a population not easily served by our sister institutions. Importantly, though, even the online classes will be "hybrid" in that each course will have some on-campus, face-to-face time. This will ensure that students are regionally-based and that relationships among students and faculty flourish.

2. What effect will this proposal have on existing courses and curricula?
a. When and how often will added course(s) be taught?

Most of the courses are currently being taught, and it is anticipated that the enrollment within courses will increase. The addition of the internship requirement (RSCH 8410 and RSCH 8411) and doctoral dissertation research (RSCH 8699 and RSCH 8999) will require additional courses.

b. How will the content and/or frequency of offering of other courses be affected?

We do not anticipate a change in content or frequency of current courses.

c. What is the anticipated enrollment in course(s) added (for credit and auditors)?

We anticipate admitting 8-10 students annually to the program. The number of students enrolled in the content area courses will increase, and the current course offerings will support the increase. The research faculty typically serve as methodologist on dissertation committees, and the new program will offer additional desired opportunities for faculty to chair dissertation committees in their area of expertise.

d. How will enrollment in other courses be affected? How did you determine this?

The number of students enrolled in courses will increase due to students enrolled in the new Ph.D. program. The cap for doctoral level courses is presently 25 students. A review of the current enrollment indicates that all courses, even the secondary area concentration, can accommodate up to 10 additional students.

e. Identify other areas of catalog copy that would be affected, including within other departments and colleges (e.g., curriculum outlines, requirements for the degree, prerequisites, articulation agreements, etc.)

A new catalog copy will need to be developed. The proposed catalog copy is presented in Appendix C.

III. RESOURCES REQUIRED TO SUPPORT PROPOSAL.

When added resources are not required, indicate "none". For items which require "none" explain how this determination was made.

A. **PERSONNEL**. Specify requirements for new faculty, part-time teaching, student assistants and/or increased load on present faculty. List by name qualified faculty members interested in teaching the course(s).

The current faculty at the University has the expertise needed to teach the courses and supervise internships and research activities. No new faculty will be hired. Below is a list of qualified full-time faculty members who will teach research courses in the program.

Name	Academic Degree and Coursework	Other Qualifications
Lynn Ahlgrim-Delzell	PhD (Educational Research, Measurement, & Evaluation) University of North Carolina at Greensboro	20+ years of experience in educational research and evaluation Author or co-author of 24 peer-reviewed journal articles Served on 9 dissertation committees (chaired 1)
Bob Algozzine	PhD (Special Education Research) Pennsylvania State University	40+ years of experience in educational research and evaluation Author or co-author of over 300 peer-reviewed journal articles Served on over 100 dissertation committees
Sandra Dika	PhD (Educational Research & Evaluation) Virginia Tech	15+ years of experience in educational research and evaluation Author or co-author of 16 peer-reviewed journal articles Served on 9 dissertation committees (chaired 1)
Claudia Flowers	PhD (Research, Measurement, & Evaluation) Georgia State University	25+ years of educational research experience Author or co-author of 95 peer-reviewed journal articles Served on 87 dissertation committees (chaired 12)

Name	Academic Degree and Coursework	Other Qualifications
Dawson Hancock	PhD (Language and Literacy Education – Research Cognate) Fordham University	21 years of educational research and evaluation experience Author or co-author of 58 peer-reviewed journal articles Served on 28 dissertation committees (chaired 10)
Do-Hong Kim	PhD (Educational Psychology & Research) University of South Carolina	10+ years of experience in educational research and evaluation Author or co-author of 26 peer-reviewed journal articles Served on 11 dissertation committees (chaired 1)
Rich Lambert	PhD (Research, Measurement, & Evaluation) Georgia State University	27 years of educational research experience Author or co-author of 2 books and 71 peer-reviewed journal articles Served on 55 dissertation committees (chaired 7)
Jae Hoon Lim	PhD (Elementary Education w/ Qualitative Research Certificate) University of Georgia	13 years of qualitative research/evaluation experience Author or co-author of 17 peer-reviewed journal articles Served on 44 (chaired 1) dissertation committees Qualitative evaluator for Federal grants (NSF, ONR)

Name	Academic Degree and Coursework	Other Qualifications
Chuang Wang	PhD (Educational Research), The Ohio State University	25+ years of educational teaching and research experience Author or co-author of 62 peer-reviewed journal articles. Served on 55 dissertation committees (chaired 8).

B. **PHYSICAL FACILITY.** Is adequate space available for this course?

The existing facilities, classrooms, and computer labs in the College of Education will be adequate to support the new program. The new program will not negatively affect existing program space.

C. **EQUIPMENT AND SUPPLIES:** Has funding been allocated for any special equipment or supplies needed?

No special equipment or supplies are needed.

D. **COMPUTER.** Specify any computer usage (beyond Moodle) required by students and/or faculty, and include an assessment of the adequacy of software/computing resources by available for the course(s).

We anticipate that existing offices, data analyses software, and computer resources are adequate for student and faculty needed.

E. **AUDIO-VISUAL**. If there are requirements for audio-visual facilities beyond the standard classroom podiums, please list those here.

No new audio-visual resources will be required.

F. **OTHER RESOURCES**. Specify and estimate cost of other new/added resources required, e.g., travel, communication, printing and binding.

A research faculty member will be appointed as the program director, which will require a summer stipend. We will need minimal funds for recruiting students and advertising the new program, as most of this will be done electronically and through direct contact with potential candidates in school systems and at research conferences.

G. **SOURCE OF FUNDING**. Indicate source(s) of funding for new/additional resources required to support this proposal.

The Dean of College of Education will provide the funds needed to pay the program director stipend. The College of Education has committed one research assistant to the program for the first two years.

IV. CONSULTATION WITH THE LIBRARY AND OTHER DEPARTMENTS OR UNITS

A. **LIBRARY CONSULTATION**. Indicate written consultation with the Library Reference Staff at the departmental level to ensure that library holdings are adequate to support the proposal prior to its leaving the department. (Attach copy of ***Consultation on Library Holdings***).

A copy of the ERME program proposal was shared with Abigail Moore and Judy Walker, Education Librarians, for consultation. The report is included in Appendix A.

B. **CONSULTATION WITH OTHER DEPARTMENTS OR UNITS**. List departments/units consulted in writing regarding all elements outlined in IIC: Impact Statement, including dates consulted. Summarize results of consultation and attach correspondence. Provide information on voting and dissenting opinions (if applicable).

The proposed ERME program will operate out of the College of Education in the Educational Leadership Department (EDLD). All departments in the College of Education were consulted. Their letters of support are included in Appendix A.

C. **HONORS COUNCIL CONSULTATION**. In the case of Honors courses or Honors programs indicate written consultation with the Honors Council (if applicable).
NA

V. INITIATION, ATTACHMENTS AND CONSIDERATION OF THE PROPOSAL

A. **ORIGINATING UNIT**. Briefly summarize action on the proposal in the originating unit including information on voting and dissenting opinions.

The proposal was unanimously approved by the Department of Educational Leadership on March 17, 2015.

B. **CREDIT HOUR**. **(Mandatory if new and/or revised course in proposal)**
Review statement and check box once completed:
☒ The appropriate faculty committee has reviewed the course outline/syllabus and has determined that the assignments are sufficient to meet the University definition of a credit hour.

C. **ATTACHMENTS**.
1.CONSULTATION: Attach relevant documentation of consultations with other units.

Consultation with the Atkins Library and College of Education Department Chairs are in Appendix A.

2.COURSE OUTLINE/SYLLABUS: For undergraduate courses attach course outline(s) including basic topics to be covered and suggested textbooks and reference materials with dates of publication. For Graduate Courses attach a course syllabus. Please see Boiler Plate for Syllabi for New/Revised Graduate Courses.

The new syllabi for RSCH 8699, RSCH 8410, and RSCH 8411 are attached in Appendix B. There is not a course outline for RSCH 8999 (Doctoral Dissertation Research).

3.PROPOSED CATALOG COPY: Copy should be provided for all courses in the proposal. Include current subject prefixes and course numbers, full titles, credit hours, prerequisites and/or corequisites, concise descriptions, and an indication of when the courses are to be offered as to semesters and day/evening/weekend. Copy and paste the current catalog copy and use the Microsoft Word "track changes" feature (or use red text with "strikethrough" formatting for text to be deleted, and adding blue text with "underline" formatting for text to be added).

> *a.* For a new course or revisions to an existing course, check all the statements that apply:
> ____ This course will be cross listed with another course.
> ____ There are prerequisites for this course.
> ____ There are corequisites for this course.
> _✓_ This course is repeatable for credit.
> ____ This course will increase/decrease the number of credits hours currently offered by its program.
> ____This proposal results in the deletion of an existing course(s) from the degree program and/or catalog.
> For all items checked above, applicable statements and content must be reflected in the proposed catalog copy.

> *b.* If overall proposal is for a new degree program that requires approval from General Administration, please contact the facultygovernance@uncc.edu for consultation on catalog copy.

4.   ACADEMIC PLAN OF STUDY **(UNDERGRADUATE ONLY)**: Does the proposed change impact an existing Academic Plan of Study?
☐ Yes. If yes, please provide updated Academic Plan of Study in template format.
☒ No.

5. S<small>TUDENT</small> L<small>EARNING</small> O<small>UTCOMES</small> (U<small>NDERGRADUATE</small> & G<small>RADUATE</small>):
Does this course or curricular change require a change in Student Learning Outcomes (SLOs) or assessment for the degree program?
☒ Yes. If yes, please provide updated SLOs in template format. – Appendix D
☐ No.

6. T<small>EXTBOOK COSTS</small>: It is the policy of the Board of Governors to reduce textbook costs for students whenever possible. Have electronic textbooks, textbook rentals, or the buyback program been considered and adopted?
☒ Yes. Briefly explain below.
☐ No. Briefly explain below.

Most of the courses are already developed and methods of reducing cost to students have been developed. For example, many electronic library articles and online resources, which are free to students, are used in courses instead of requiring multiple textbooks.

IMPORTANT NOTE: A Microsoft Word version of the final course and curriculum proposal should be sent to facultygovernance@uncc.edu upon approval by the Undergraduate Course and Curriculum Committee and/or Graduate Council chair.

Appendix A

Consultation Letters

Library Consultation
Department of Reading and Elementary Education Letter of Support
Department of Counseling Letter of Support
Department of Middle, Secondary, & K-12 Letter of Support
Department of Special Education and Child Development Letter of Support

To: Claudia Flowers
Evaluation of Education and Library Resources, Atkins Library
Prepared by: Abby Moore & Judy Walker
March 10, 2015

In order to analyze the Atkins Library's holdings to determine if our collection and our services support a Doctoral program in Educational Evaluation and Research, I looked at variety of resources in our collection. Below is a narrative of my analysis.

The College of Education already has four Doctoral programs and the library has worked diligently to acquire materials to support these programs. Additionally, almost all of the course requirements for the Educational Evaluation and Research program area already offered by the College of Education, therefore, the library has taken strides to add materials to its collection that support these specific classes.

Print Resources:
With the help of our AUL of Technical Services, Michael Winecoff, I searched for titles in the LB1028 classification, defined by the Library of Congress as General Works in Educational Research. Our total holdings in LB1028 are 1100 titles, 376 titles were published in the last ten years. In order to take a closer look at titles that will support the program, I chose several search terms, including "educational research" and "educational assessment" (see table 1) and found total holdings that correspond with the searches terms. Each search yielded hundreds of titles that have been assigned subject terms related to the topic. The only concern I have about the Educational Research collection is its age. Adding the newest and best titles about educational research and assessment will be a priority for Atkins Library.

Because education is grounded in the social sciences, I thought it best to do a general analysis of print resources in the social science research classification. The excel spreadsheet attached shows the size and currency of our H60s collection in which Social Science Research is cataloged. According to the spreadsheet we have 1448 titles in the H60s. Of the 1448, over 250 are under 10 years old. Using our online catalog I did a keyword search for "social science research," limited it the last ten years. The results listed 2582 titles including 1930 ebooks.

Journals:
While print resources are important, PhD students will need access to a wide range of current information that can only be found in journals. To get a sense of our journal holdings, I again used our online catalog and limited the search to journals of "educational research" and found that UNC Charlotte students have access to full text articles from 275 educational research journals. Additionally, UNC Charlotte offers full text access to many (see Table 2) of the top journals in the field (based on Impact Factor).

Databases:
Knowing that the library has sufficient resources is one thing, having the most effective tools to access those resources is another. The Library's on-line catalog is the main research tool for

identifying what the library provides access to electronically or in print format including journals.

Not only do we have several multi-subject databases, we provide access to the most reliable education database, ERIC to all of our students. The ERIC database is available through EbscoHost. In addition to ERIC, the library subscribes to several education specific databases as well as social science databases. A list Education databases can be found here: http://guides.library.uncc.edu/database_education. A complete list of all our databases can be found here: http://guides.library.uncc.edu/az.php.

Library Services:
In addition to our print and online resources, I must mention several of the library services we offer that will support the students in the Education Evaluation and Research Program. The services listed below are available to all UNCC students.

Interlibrary Loan/Document Delivery Program:
UNC Charlotte students can obtain books and articles whenever they are unavailable on campus via the interlibrary loan program.

Digital Scholarship Lab:
Partners with faculty and graduate students in the use of digital and networked research tools to create, disseminate, and store new knowledge. The DSL can support the research process and projects through advising, digital tools, and services that include: copyright, data support, digitization, publication, and usability.

Subject Librarians:
Subject librarians provide research support to students and faculty to help them achieve their educational and academic goals. Subject specialists assist students at all levels with curriculum and research assignments. They are available in person, online and by phone for consultation on how to find and use the best information for research projects and academic assignments. Students and faculty can arrange to meet with a subject specialist to assist with research. Atkins Library employs 2 education librarians: Judy Walker (jwalker@uncc.edu) and Abby Moore (amoor164@uncc.edu).

Digital Initiatives:
The Atkins Library assists faculty and graduate students with locating and accessing numeric, geospatial, and statistical data, and with managing and preparing those data for analysis. We also provide data management support, including curation and archiving research data. Reese Manceaux (ramancea@uncc.edu) is our Data Services Librarian.

Collection Development Plan:
The library has an extensive collection development plan found here: http://library.uncc.edu/collectiondevelopment. Below are the main points of our collection development plan as it applies to the development of this PhD program:
- *Collection development is the provision of access to information in all formats through acquisition, borrowing, electronic connections, document delivery, and consortial arrangements. Collection*

> *development planning/policy is the identification of institutional needs, obligations, and limitations for collection development and the establishment of priorities and practices relative to these factors.*
> * *The Library encourages faculty participation in collection development. At present, each academic department assigns a member of its faculty to serve as library representative. This individual authorizes and maintains records of departmental library materials requests, encourages faculty review and participation in selection of approval titles, and coordinates the distribution of information to and from the Library.*

The Education Librarian will work diligently with the professors in the new PhD program in Education Evaluation and Research to assure doctoral students have access to new, innovative and seminal works in the topics of educational research and assessment. Since many of the classes required for the doctorate, the library already has an excellent core collection to support the program.

Summary:
The library resources at Atkins Library will absolutely support the new program in Education Evaluation and Research.

	TABLE 1	
Subject	**Print Titles**	**Last 5 Years**
Education Research	1891	274
Educational problems	505	51
Education policy	1183	402
Education evaluation	1920	1253
Educational assessment	581	93
Educational measurement	1380	167

Table 2			
Journal Title	**Rank**	**Impact Factor**	**UNCC Access**
Review of Educational Research	1	5.000	Yes
Educational Psychologist	2	4.844	Yes
Journal of Research on Educational Effectiveness	3	3.154	Yes
Educational Research Review	4	3.107	Yes
Learning and Instruction	5	3.079	Yes

Journal of Research in Science Teaching	6	3.020	Yes
Educational Researcher	7	2.705	Yes
Science Education	8	2.921	Yes
Journal of the Learning Sciences	9	2.862	Yes
Journal of Engineering Education	10	2.717	Yes

UNC CHARLOTTE
College of Education

Department of Reading and Elementary Education
9201 University City Boulevard, Charlotte, NC 28223-0001
t/ 704-687-8889 f/ 704-687-3749

MEMORANDUM

TO: Dr. Dawson R. Hancock
             Associate Dean for Research and Graduate Studies, College of Education

FROM: Dr. Michael Putman
             Interim Chair, Department of Reading and Elementary Education

DATE: February 24, 2015

RE: Letter of Support for Establishment of Ph.D. in Educational Research,
             Measurement, and Evaluation

I offer my support for the establishment of a Ph.D. in Educational Research, Measurement, and Evaluation.

The need for a Ph.D. in Educational Research, Measurement, and Evaluation is well documented, locally and nationally. This is especially notable in the greater Charlotte region as there is no program that is specific to preparing future educational researchers.

Led by an experienced faculty of educational researchers, the program will be linked to and supported by other Ph.D. programs in the College of Education and across the university. As a result, graduates will develop the foundational knowledge and skills necessary to engage pursuing opportunities in a wide range of educational institutions as well as those in the private sector.

In conclusion, the Ph.D. in Educational Research, Measurement, and Evaluation will fulfill a distinct need and will offer unique benefits to the UNC Charlotte campus and beyond. Please contact me if you have any questions regarding this letter of support.

UNC CHARLOTTE

College of Education
Department of Counseling
9201 University City Blvd., Charlotte, NC 28223-0001
t/ 704.687.8960 f 704.687.1033

MEMORANDUM

TO: Dawson R. Hancock, Ph.D.
            Associate Dean for Research and Graduate Studies
            College of Education

FROM: Henry L. Harris, Ph.D., LPC
            Chair, Department of Counseling

DATE: March 3, 2015

RE: Ph.D. program in Educational Research, Measurement, and Evaluation (ERME)

I offer this letter in support of the Educational Leadership Department (EDLD) in the College of Education to establish a new Ph.D. program in Educational Research, Measurement, and Evaluation (ERME). Given the current and future educational climate, creating a program to prepare highly qualified professionals with in cutting-edge statistical skills in research, measurement, and evaluation is timely and warranted.

We have a number of active doctoral programs in the College of Education, and I believe the ERME program will promote a standard of excellence that will be embraced by these programs. Within the Department of Counseling, one of our immediate goals in the doctoral program is to establish comprehensive research based teams led by doctoral students and ERME is the ideal program to provide some of the needed support. When doctoral students, regardless of program area, have the opportunity to receive the level of training offered by ERME, they may likely increase their employment opportunities in public schools, institutions of higher education, and in other professional settings.

In summary, the proposed program has my full support and if you have questions, please do not hesitate to contact me at your earliest convenience.

UNC CHARLOTTE

College of Education

Department of Middle, Secondary and K-12 Education

9201 University City Blvd, Charlotte, NC 28223-0001
t/ 704 602 0895 f/ 704 097.0300 www.uncc.edu

MEMORANDUM

TO: Dr. Dawson R. Hancock
          Associate Dean for Research and Graduate Studies, College of Education
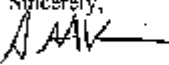
FROM: Dr. Scott Kissau
          Interim Chair, Department of Middle, Secondary, & K-12 Education

DATE: February 20, 2015

RE: Letter of Support for Establishment of a PhD in Educational Research,
          Measurement, and Evaluation (ERME)

The Ph.D. in Educational Research, Measurement, and Evaluation in the Educational
Leadership Department (EDLD) in the College of Education at UNC Charlotte will serve to
prepare professionals who seek advanced research, statistical, and evaluation skills for positions
in a wide variety of educational institutions including higher education, K-12 school districts,
for-profit companies, nonprofit agencies, community colleges, think tanks, government
organizations, and other institutions concerned with solving problems in education.

On behalf of the Department of Middle, Secondary, & K-12 Education, I fully support the
proposal. Please let me know if I can be of further assistance.

Sincerely,

Scott Kissau

Middle Grades Education • Secondary Education • Teaching English as a Second Language
Foreign Languages Education • Arts Education • PhD in Curriculum and Instruction

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College of Education

Special Education and Child Development

9201 University City Blvd, Charlotte, NC 28223-0001
t/ 704.687.8828 f/ 704.687.1625 http://education.uncc.edu/spcd

March 10, 2015

Dawson Hancock, Associate Dean
Claudia Flowers, Professor
UNC at Charlotte
College of Education
Charlotte, NC 28262

Dear Drs. Hancock and Flowers

This letter is written to support a Ph.D. in Educational Research, Measurement, and
Evaluation in the College of Education at UNC at Charlotte. This is an area of study that
should be of benefit to future faculty researchers in education, as well as in other
disciplines. In addition, the courses would be suitable electives for graduate students
pursuing other areas of study. With today's focus on implementing evidence-based
practices in educational settings, it is important to have personnel with the expertise to
evaluate large bodies of data to make decisions and to add to the research-based strategies
to the professional literature. Rather than detract from the doctoral program in our
department, I see this degree as a series of courses that could enhance our program.
Therefore, I give my full support. In addition, students in the new program may elect to
add coursework taught in our department as electives (e.g., single subject research
design). If I can provide more information, please feel free to contact me
(Belva.Collins@uncc.edu).

Sincerely,

Belva C. Collins, Ed.D.
Professor and Chair

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Appendix B

New Syllabi

RSCH 8699
Dissertation Proposal Design

COURSE OUTLINE

1. COURSE NUMBER AND TITLE: RSCH 8699 Dissertation Proposal Design

2. CATALOG DESCRIPTION

Identification and definition of a research area and development of a proposal draft for an original research study appropriate for the dissertation requirement. (Fall, Spring)

CREDIT HOURS: 3

3. COURSE PREREQUISITES   18 Hours of Research Coursework, Successful Completion of Benchmark #1 and #2 Activities

COURSE COREQUISITES   Admission to Candidacy

[It is strongly recommended that you have all coursework completed before you take this course. If you are taking an additional class that is needed to complete your coursework at the same time as RSCH 8699, it is assumed that (1) it is absolutely necessary and appropriate for your program *and* (2) you have the permission of your advisor.]

4. COURSE OBJECTIVES

A dissertation proposal is used to justify and gain approval for research to be completed as a final requirement in the doctoral program. The proposal typically does four things: (1) establishes the context for the study; (2) demonstrates a need for it; (3) illustrates that the study will address the need using appropriate research methods; and (4) provides assurances that the study will not harm participants.

The dissertation proposal typically contains three sections and appendices. The first section presents the research problem and purpose of the study, identifies the variables under investigation, provides a brief overview of the need and background for the study and how it will contribute to the advancement of knowledge, defines the research hypotheses, objectives, and/or questions, and describes limitations and delimitations of the research. The second section restates the research problem and need for the study and provides literature to justify systematic investigation. The final section presents a clear description of the method being proposed to address the research problem. Human subjects' assurances, data collection instruments, and other ancillary materials are included in appendices.

The dissertation proposal workshop involves independent research and writing by students coupled with corrective and supportive feedback and guidance from the instructor. Preparing a dissertation proposal is difficult for many students because they do not think about their culminating project until they have completed all coursework and passed their comprehensive examinations. At that time, motivation for completing a complex, formidable writing task is sometimes less than optimal. This workshop provides necessary guidance and support at a critical time for an important requirement of the doctoral program.

This course is related to the *College of Education's Conceptual Framework* in that it is designed to develop highly professional educators with the potential to impact student performance by fostering the effectiveness of aspiring educational researchers who will be knowledgeable, effective, and committed.

Professional Educators Transforming Lives, the Conceptual Framework for Professional Education Programs at UNC Charlotte, identifies the proficiencies that our graduates will demonstrate. During coursework, internship, and co-teaching experiences candidates have multiple opportunities to develop the **knowledge, effectiveness,** and **commitment** necessary to transform the lives of the learners with whom they work.

> **Core Proficiency: Knowledge.** Candidates will demonstrate the **Knowledge** that provides the foundation for transforming the lives of the children, youth, and families with whom they work. This knowledge includes elements such as:
> K1: Knowledge relevant to life in the 21st century
> **K2: Specialty area knowledge**
> **K3: Pedagogical knowledge**
> **K4: Knowledge of learners and their contexts**
> **K5: Self-awareness**
> K6: Knowledge of policies, laws, standards, and issues

> **Core Proficiency: Effectiveness.** Candidates will demonstrate **Effectiveness** in their work with children, youth, and families by applying knowledge and developing effective skills in areas such as:
> E1: 21st century skills
> **E2: Planning, implementation, and evaluation**
> **E3: Research-based practice**
> **E4: Research skills**
> **E5: Culturally competent practice**
> **E6: Response to diverse learners**
> **E7: Reflective practice**

> **Core Proficiency: Commitment.** Candidates will demonstrate their **Commitment** to transforming the lives of others through their actions in areas such as:
> **C1: Positive impact on learners**
> C2: Ethics
> C3: Leadership
> C4: Collaboration
> C5: Advocacy
> **C6: Professional identity and continuous growth**

The core proficiencies of **knowledge, effectiveness,** and **commitment** are fully aligned with the North Carolina standards for teachers, school executives, and counselors.

North Carolina Professional Teaching Standards (2007): 1) Demonstrate leadership, 2) Establish a respectful environment for a diverse population of students, 3) Know the content they teach, 4) Facilitate learning for their students, 5) Reflect on their practice.

North Carolina Standards for School Executives (2013): 1) Strategic leadership, 2) Instructional leadership, 3) Cultural leadership, 4) Human resource leadership, 5) Managerial leadership, 6)

External development leadership, 7) Micro-political leadership, and 8) Academic Achievement Leadership.

Course Objectives

1.   To describe key aspects of dissertation process.

2.   To identify research topics of interest to broad groups of individuals.

3.   To develop introductory material suitable for inclusion in a dissertation proposal.

4.   To develop a comprehensive review of literature supporting research topic.

5.   To develop a comprehensive method for dissertation research.

6.   To prepare a dissertation proposal suitable for submission to doctoral committee.

7.   To present a dissertation proposal for peer review and feedback.

Illustrative Course Activities

Illustrative course activities include:

1.   Review and evaluate at least 3 dissertation research proposals.

2.   Prepare list of 5 potential research topics for dissertation research.

3.   Prepare literature review summaries for at least 15 articles.

4.   Prepare 10-15 page introduction for dissertation research proposal.

5.   Prepare 10-15 page literature review for dissertation research proposal.

6.   Prepare 10-15 page method for dissertation research proposal.

7.   Prepare and deliver oral presentation of proposal for small group of peers.

5. INSTRUCTIONAL METHOD

This course will use a blended method, where students meet face-to-face to discuss components and criteria of the proposal and meet one-on-one to develop their proposal for defense.

TOPICAL OUTLINE OF COURSE CONTENT

1.   Overview of Dissertation Research
        1.1.   Purpose and Structure of the Course
        1.2.   Purpose and Structure of the Proposal
        1.3.   Ethical and Legal Considerations in Research
                1.3.1. Concern for ethical behavior
                1.3.2. Basic concepts for applied research conducted in learning environments
                1.3.3. Courteous research behavior
                1.3.4. Ethical and legal considerations for the classroom teacher
2.   Overview of Professional Writing
        2.1.   Making General Points

2.2. Discussing Research of Others
2.3. Describing Studies in Detail
2.4. Referring to Authors
2.5. Writing it Right
    2.5.1. Verb tense
    2.5.2. Wording
    2.5.3. Transitions
    2.5.4. APA guidelines
3. Identifying Research Topics and Conducting Research
    3.1. Identifying a Problem
        3.1.1. Describing a theory
        3.1.2. Testing a theory
        3.1.3. Replicating the work of others
        3.1.4. Solving an educational problem
        3.1.5. Demonstrating effectiveness of a program
    3.2 Reviewing the Literature
        3.2.1. Documenting sources
        3.2.2. Making a case
        3.2.3. Developing a purpose
    3.3 Preparing the Method
        3.3.1. Describing research questions
        3.3.2. Describing hypotheses
        3.3.3. Describing participants
        3.3.4. Describing procedures
        3.3.5. Describing instrumentation
        3.3.6. Describing design and data analysis
        3.3.7. Describing expected outcomes
4. Developing an Introduction
    4.1. Overview of Problem and Statement of Purpose
    4.2. Objectives, Hypotheses, and Research Questions
    4.3. Delimitations
    4.4. Limitations
    4.5. Assumptions
    4.6. Operational Definitions
    4.7. Summary and Perspective
5. Developing a Literature Review
    5.1. Knowledge Base
    5.2. Review of Literature
    5.3. Statement of Purpose
6. Developing a Method
    6.1. Overview
    6.2. Participants and Setting
    6.3. Procedures
        6.3.1. Data collection
        6.3.2. Instrumentation
        6.3.3. Data processing

6. EVALUATING STUDENT PERFORMANCE

The following is an example of methods to evaluate student performance:

(20%)   1.   Preliminary research topic evaluated using rubric approved by department

(60%)   2.   Written proposal evaluated using rubric approved by department

(20%)   3.   Oral presentation of proposal evaluated using rubric approved by department

Weighted Average of Products

90-100% A

80-89%   B

70-79%   C

Less than 70% U

7. SPECIFIC POLICIES THAT APPLY TO THIS COURSE

Specify policies that apply to this course:

a. University Integrity

Code of Student Academic Integrity
All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at: http://www.legal.uncc.edu/policies/ps-105.html.

Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

b.   Attendance

Students are expected to attend and be punctual to all seminar and co-teaching sessions. Absences from class *may* be excused by the instructor for such reasons as personal illness, religious holidays, or participating as an authorized University representative in an out-of-

town event or program-related activity such as attending a professional conference. Whenever possible, students are expected to seek the permission of the instructor prior to absences. If an assignment is due on the day of the absence, a new due date must be approved by the course instructor.

    c.   Grading policy (A, B, C, Unsatisfactory and what are the requirements for these as number grades) See #6 for grade criteria.

Grade of "I"
The grade of I is assigned at the discretion of the instructor when a student who is otherwise passing has not, due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed by the deadline specified by the instructor, and no later than 12 months. If the I is not removed during the specified time, a grade of U is automatically assigned. The grade of I cannot be removed by enrolling again in the same course, and students should not re-enroll in a course in which they have been assigned the grade of I. *For this course a written contract for an Incomplete must be developed with the instructor prior to the deadline for final grades and will only be awarded in strict compliance with University policy.*

    d.   Additional requirements such as CPR, liability insurance, no phones or beepers in class (whatever are the requirements for that course).

The College of Education Commitment to Diversity
The vision for the College of Education at UNC Charlotte is to be a leader in educational equality through excellence and engagement. The College of Education is committed to social justice and respect for all individuals, and it seeks to create a culture of inclusion that actively supports all who live, work, and serve in a diverse nation and world. Attaining justice and respect involves all members of our community in recognizing that multi-dimensional diversity contributes to the College's learning environments, thereby enriching the community and improving opportunities for human understanding. While the term "diversity" is often used to refer to differences, the College's intention is for inclusiveness, an inclusiveness of individuals who are diverse in ability/disability, age, economic status, ethnicity, gender, language, national origin, race, religion, and sexual orientation. Therefore, the College aspires to become a more diverse community in order to extend its enriching benefits to all participants. An essential feature of our community is an environment that supports exploration, learning, and work free from bias and harassment, thereby improving the growth and development of each member of the community.

College of Education Technology Statement
Professional education programs at UNC Charlotte are committed to preparing candidates for success in the 21st century through an emphasis on knowledge, effectiveness and commitment to technology integration and application. Preparation in the integration and application of technology to enhance student learning is essential for all candidates. Programs across the professional education unit, including the College of Arts + Architecture, College of Education, and College of Liberal Arts and Sciences, reflect this

commitment in coursework, early field experiences, and clinical practice which includes student teaching and/or the capstone/internship phase of the respective programs.

Religious Accommodations
UNC Charlotte provides reasonable accommodations, including a minimum of two excused absences each academic year, for religious observances required by a student's religious practice or belief. Such reasonable accommodations must be requested in accordance with the procedures in this Policy, and include the opportunity for the student to make up any tests or other work missed due to an excused absence for a religious observance. Students wishing to request a religious accommodation may refer to the information found at http://legal.uncc.edu/policies/ps-134.html. It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester (typically the 10th day of enrollment).

Disability Accommodations
If you have a disability that qualifies you for academic accommodations, contact the Office of Disability Services in Fretwell 230 or call 704-687-4355 at the beginning of the semester. Some requests for accommodations cannot be honored without supporting documentation from the Office of Disability Services. All information shared with the instructor concerning a disability will remain strictly confidential unless otherwise specified by the instructor.

Online Student Course Evaluation Process and Confidentiality
Courses in the College of Education will are evaluated through an online evaluation survey process. Student course evaluations provide an important source of feedback for faculty regarding course design and instructional effectiveness. The online course evaluations will be administered at the end of the term, during the final two week (prior to final exams). You will receive an email announcement alerting you when the survey period opens. Periodic reminders will be sent during the time the survey is open. Please be advised that this process will be secure and confidential. The technology used will ensure anonymity of participants as well as confidentiality. The College of Education is committed to excellent instruction and student support. Please help in continuing this commitment by participating in the course evaluation process.

Credit Hour Statement
This 3-credit course requires 3 hours of classroom or direct faculty co-teaching instruction and six hours of out-of-class student work each week for approximately 15 weeks. Out-of-class work may include but is not limited to: syllabi development, course/presentation development, web-based course development, grading, or course evaluation.

Professional Dispositions for Professional Education Programs
Dispositions include the values, commitments, and ethics expected of professional educators and will be evaluated throughout your academic and professional preparation. (These may be found online at https://education.uncc.edu/resources/professional-dispositions-plan-and-information). Education is a demanding profession that requires candidates to act in a professional manner at all times, be collegial with peers and supervisors, and conscientiously attend to job-related details. Showing proper initiative and following through on tasks in a

timely manner are also critical. Establishing habits supportive of these dispositions is an important part of each candidate's career preparation and as such will be emphasized throughout this course and the program.

Inclement Weather Policy

The University is rarely closed because of bad weather. When such a closing occurs, it will be announced on the University website and over local television and radio stations. Since this class is online and travel is not required, attendance is not affected unless there is a widespread power outage. If such an outage occurs, reasonable accommodations depending upon the circumstances to the course schedule will be made. This policy does not cover individual student computer issues. Students are expected to have dependable internet access in order to attend this course.

8. PROBABLE TEXTBOOKS/RESOURCES

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Berliner, D. C. (2002). Educational research: The hardest science of all. *Educational Researcher*, *31*(8), 18-20.

Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, *34*(6), 3-15.

Cone, J. D., & Foster, S. L. (2006). *Dissertations and theses from start to finish: Psychology and related fields* (2nd ed.). Washington, DC: American Psychological Association.

Eisenhart, M., & Towne, L. (2003). Contestation and change in national policy on "scientifically-based" education research. *Educational Researcher*, *32*(7), 31-38.

Feuer, M. J., & Guiterrez, K. (2002). Culture, rigor, and science in educational research. *Educational Researcher*, *31*(8), 21-24.

Feuer, M. J., Towne, L., & Shavelson, R. J. (2002). Scientific culture and educational research. *Educational Researcher*, *31*(8), 4-14.

Galvan, J. L. (2004). *Writing literature reviews: A guide for students of the social and behavioral sciences*. Los Angeles: Pyrczak.

Joyner, R. L., Rouse, W. A., & Glatthorn, A. A. (2013). *Writing the winning thesis or dissertation* (3rd ed.). Thousand Oaks, CA: Corwin.

Miech, E. J., Nave, B., &Mosteller, F., (2005). The 20,000 article problem: How a structure abstract can help practitioners sort out educational research. *Phi Delta Kappan*, *86*, 396-400.

Paltridge, B. (2002). Thesis and dissertation writing: An examination of published advice and actual practice. *English for Specific Purposes*, *21*, 125-143.

Pan, M. L. (2003). *Preparing literature reviews: Qualitative and quantitative approaches*. Los Angeles: Pyrczak.

Spooner, F., Algozzine, B., Karvonen, M., & Lo, Y. (2011). *How to prepare a research article in APA style*. Arlington, VA: Council for Exceptional Children.

Turnbull, H. R. III (Ed.). (1977). *Consent handbook*. Washington, DC: American Association on Mental Retardation.

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FACULTY RESPONSIBLE FOR DEVELOPING THIS COURSE OUTLINE
(List the names of the faculty members who have developed this basic course outline.)

Bob Algozzine

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<tr><td>

APPROVAL BY THE APPROPRIATE COLLEGE OF EDUCATION CURRICULUM COMMITTEE:

</td></tr>
<tr><td>

Approved by the College of Education *Undergraduate* Curriculum Committee

Chair: **Date:**

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<tr><td>

Approved by the College of Education *Graduate* Curriculum Committee

Chair: **Date:**

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RSCH 8410
Internship in Educational Research

COURSE OUTLINE

COURSE NUMBER: RSCH 8410
COURSE TITLE: Internship in Educational Research

1. Course Number and Title: RSCH 8410 Internship in Educational Research

2. Course Description (Catalog Description) to include graduate credit and how often course is to be offered.

    CREDIT HOURS: 3 (Can be repeated for credit up to 6 hrs.)

    Issues and concepts in statistical consulting, educational research design, and educational measurement are applied to practical problems in the field. This course supports the professional development of doctoral students as they gain experience applying educational research methods to research projects for school systems and related agencies. *(Fall, Spring)*

3. Pre- or Co-requisites

    COURSE PREREQUISITE: RSCH 8140 Multivariate Statistics

    COURSE COREQUISITES: None

4. Objectives of the course:

    Effective consultation skills are critical components of a successful career for persons in educational research and evaluation. These skills require up-to-date knowledge of the disciplines of educational research, measurement, evaluation, and statistics. In addition, they require the ability to communicate effectively with stakeholders and consumers of educational research findings. Students will learn to effectively understand the needs of consultation clients in school systems and related agencies. They will learn to diagnose the relevant contextual features and unique design challenges of real world applications of educational research methods. This course is related to the *College of Education's Conceptual Framework* in that it is designed to develop highly professional educators with the potential to impact student performance by fostering the effectiveness of aspiring educational researchers who will be knowledgeable, effective, and committed.

    Professional Educators Transforming Lives, the Conceptual Framework for Professional Education Programs at UNC Charlotte, identifies the proficiencies that our graduates will demonstrate. During coursework, internship, and co-teaching experiences candidates have multiple opportunities to develop the **knowledge, effectiveness,** and **commitment** necessary to transform the lives of the learners with whom they work. This course seeks to develop the proficiencies that are in bold/underlined below.

Core Proficiency: Knowledge. Candidates will demonstrate the **Knowledge** that provides the foundation for transforming the lives of the children, youth, and families with whom they work. This knowledge includes elements such as:

      K1: Knowledge relevant to life in the 21st century
      K2: Specialty area knowledge
      K4: Knowledge of learners and their contexts
      K5: Self-awareness
      K6: Knowledge of policies, laws, standards, and issues

Core Proficiency: Effectiveness. Candidates will demonstrate **Effectiveness** in their work with children, youth, and families by applying knowledge and developing effective skills in areas such as:

      E1: 21st century skills
      E2: Planning, implementation, and evaluation
      E3: Research-based practice
      E4: Research skills
      E7: Reflective practice

Core Proficiency: Commitment. Candidates will demonstrate their **Commitment** to transforming the lives of others through their actions in areas such as:

      C6: Professional identity and continuous growth

The core proficiencies of **knowledge, effectiveness,** and **commitment** are fully aligned with the North Carolina standards for teachers, school executives, and counselors.

North Carolina Professional Teaching Standards (2007): 1) Demonstrate leadership, 2) Establish a respectful environment for a diverse population of students, 3) Know the content they teach, 4) Facilitate learning for their students, 5) Reflect on their practice.

North Carolina Standards for School Executives (2006): 1) Strategic leadership, 2) Instructional leadership, 3) Cultural leadership, 4) Human resource leadership, 5) Managerial leadership, 6) External development leadership, 7) Micro-political leadership.

COURSE OBJECTIVES

Upon completion this course, the successful student will be able to:

- Communicate effectively with consulting clients in order to understand their needs
- Plan and implement successful educational evaluation studies
- Plan and implement successful educational measurement projects
- Plan and implement successful educational research studies
- Create comprehensive reports at the conclusion of a successful educational research, measurement, of evaluation project

5.   Instructional Method:

This is an internship course in which the student will be placed in a field setting such as a school system, school building, related agency setting, or a research center within UNC Charlotte that serves external agencies (e.g., Center for Educational Measurement and Evaluation and Institution for Social Capital). Students will receive supervision from both sponsoring personnel at the field placement site and from the instructor of the course at UNC Charlotte. Students will attend seminar sessions as a group and will work on site for their sponsoring agency.

COURSE CONTENT OF THE SEMINAR SESSIONS

- Design and implement a research study that
  - poses significant questions;
  - aligns research to relevant theory;
  - uses research methodologies that answer these questions;
  - provides a coherent and explicit chain of reasoning;
  - replicates and generalize across studies; and
  - discloses finding to encourage professional scrutiny and critique.
- Present findings to agency
  - Verbal and written communication of results
  - Plan for dissemination of findings

Course activities include:

- Attend seminars with instructor and peers to share experiences and develop skills
- Design an educational research project that will benefit their host agency
- Develop a final report from one educational research field-based project

6.   Means of student evaluation:

A grade for the course will be assigned using the following criteria:

- Professional conduct and participation as outlined in the *Professional Dispositions for Professional Education Programs* (20%)
- Report of research design for the educational research project (40%)
- Development of the final report for the educational research project (40%)

Weighted Average of Products

90-100% A

80-89%   B

70-79%   C

Less than 70% U

7.   Specify policies that apply to this course:
   a.   University Integrity

Code of Student Academic Integrity
All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at: http://www.legal.uncc.edu/policies/ps-105.html.

Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

   b.   Attendance

Students are expected to attend and be punctual to all seminar sessions. Absences from class *may* be excused by the instructor for such reasons as personal illness, religious holidays, or participating as an authorized University representative in an out-of-town event or program-related activity such as attending a professional conference. Whenever possible, students are expected to seek the permission of the instructor prior to absences. If an assignment is due on the day of the absence, a new due date must be approved by the course instructor.

   c.   Grading policy (A, B, C, Unsatisfactory and what are the requirements for
            these as number grades) (see item 6 for grading criteria)

Grade of "I"
The grade of I is assigned at the discretion of the instructor when a student who is otherwise passing has not, due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed by the deadline specified by the instructor, and no later than 12 months. If the I is not removed during the specified time, a grade of U is automatically assigned. The grade of I cannot be removed by enrolling again in the same course, and students should not re-enroll in a course in which they have been assigned the grade of I. *For this course a written contract for an Incomplete must be developed with the instructor prior to the deadline for final grades and will only be awarded in strict compliance with University policy.*

   d.   Additional requirements such as CPR, liability insurance, no phones or beepers
            in class (whatever are the requirements for that course).

The College of Education Commitment to Diversity
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differences, the College's intention is for inclusiveness, an inclusiveness of individuals who are diverse in ability/disability, age, economic status, ethnicity, gender, language, national origin, race, religion, and sexual orientation. Therefore, the College aspires to become a more diverse community in order to extend its enriching benefits to all participants. An essential feature of our community is an environment that supports exploration, learning, and work free from bias and harassment, thereby improving the growth and development of each member of the community.

College of Education Technology Statement
Professional education programs at UNC Charlotte are committed to preparing candidates for success in the 21st century through an emphasis on knowledge, effectiveness and commitment to technology integration and application. Preparation in the integration and application of technology to enhance student learning is essential for all candidates. Programs across the professional education unit, including the College of Arts + Architecture, College of Education, and College of Liberal Arts and Sciences, reflect this commitment in coursework, early field experiences, and clinical practice which includes student teaching and/or the capstone/internship phase of the respective programs.

Religious Accommodations
UNC Charlotte provides reasonable accommodations, including a minimum of two excused absences each academic year, for religious observances required by a student's religious practice or belief. Such reasonable accommodations must be requested in accordance with the procedures in this Policy, and include the opportunity for the student to make up any tests or other work missed due to an excused absence for a religious observance. Students wishing to request a religious accommodation may refer to the information found at http://legal.uncc.edu/policies/ps-134.html. It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester (typically the 10th day of enrollment).

Disability Accommodations
If you have a disability that qualifies you for academic accommodations, contact the Office of Disability Services in Fretwell 230 or call 704-687-4355 at the beginning of the semester. Some requests for accommodations cannot be honored without supporting documentation from the Office of Disability Services. All information shared with the instructor concerning a disability will remain strictly confidential unless otherwise specified by the instructor.

Online Student Course Evaluation Process and Confidentiality
Courses in the College of Education will are evaluated through an online evaluation survey process. Student course evaluations provide an important source of feedback for faculty regarding course design and instructional effectiveness. The online course evaluations will be administered at the end of the term, during the final two week (prior to final exams). You will receive an email announcement alerting you when the survey period opens. Periodic reminders will be sent during the time the survey is open. Please be advised that this process will be secure and confidential. The technology used will ensure anonymity of participants as well as confidentiality. The College of Education is committed to excellent instruction and

student support. Please help in continuing this commitment by participating in the course evaluation process.

Credit Hour Statement
This 3 credit course requires 3 hours of classroom or direct faculty instruction and six hours of out-of-class student work each week for approximately 15 weeks. Out-of-class work may include but is not limited to: syllabi development, course/presentation development, web-based course development, grading, or course evaluation.

Professional Dispositions for Professional Education Programs
Dispositions include the values, commitments, and ethics expected of professional educators and will be evaluated throughout your academic and professional preparation. (These may be found online at https://education.uncc.edu/resources/professional-dispositions-plan-and-information). Education is a demanding profession that requires candidates to act in a professional manner at all times, be collegial with peers and supervisors, and conscientiously attend to job-related details. Showing proper initiative and following through on tasks in a timely manner are also critical. Establishing habits supportive of these dispositions is an important part of each candidate's career preparation and as such will be emphasized throughout this course and the program.

Inclement Weather Policy
The University is rarely closed because of bad weather. When such a closing occurs, it will be announced on the University website and over local television and radio stations. Since this class is online and travel is not required, attendance is not affected unless there is a widespread power outage. If such an outage occurs, reasonable accommodations depending upon the circumstances to the course schedule will be made. This policy does not cover individual student computer issues. Students are expected to have dependable internet access in order to attend this course.

8. Probable textbooks or resources

Shadish, W., Cook, T., & Campbell, D. (2001). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Independence, KY: Cengage Learning.

Cabrera, J, & McDougall, A. (2010). *Statistical Consulting.* New York: Springer.

9. Topical outline of course content

It is expected that the internship students attend monthly seminar sessions and prepare for these sessions by reading all related assigned materials. They will also complete a contract with their sponsoring agency that outlines the educational research project they will be designing and completing during the placement, the deliverables for that project, and the hours they are expected to spend at the site. Below is a schedule of monthly seminar session topics.

Month	Topic
August/January	Introduction to statistical consulting
September/February	Design of educational research projects
October/March	Design of educational evaluation projects
November/April	Design of educational measurement projects
December/May	Writing the final report

FACULTY RESPONSIBLE FOR DEVELOPING THIS COURSE OUTLINE
(List the names of the faculty members who have developed this basic course outline.)

Rich Lambert

APPROVAL BY THE APPROPRIATE COLLEGE OF EDUCATION CURRICULUM COMMITTEE:

Approved by the College of Education *Undergraduate* Curriculum Committee

Chair: **Date:**

Approved by the College of Education *Graduate* Curriculum Committee

Chair: **Date:**

RSCH 8411
Internship in Teaching Educational Research

Course Outline
RSCH 8411 College Teaching in Educational Research

1.   Course Number and Title: RSCH 8411 Internship in Teaching Educational Research

2.   Course Description (Catalog Description) to include graduate credit and how often course is to be offered.

CREDIT HOURS: 3 (Limited to 3 credit hrs. and cannot be repeated)

Issues and concepts in teaching adults and preparing educational researchers are applied in the college teaching experience. This course supports doctoral students as they experience a graduated co-teaching process ultimately resulting in assumption of full college teaching responsibilities for university courses in educational research topics. *(Fall, Spring, Summer)*

3.   Pre- or Co-requisites

COURSE PREREQUISITES: ADMN 8695 Advanced Seminar in Teaching and Learning and RSCH 8210 Applied Research Methods

COURSE COREQUISITES: None

4.   Objectives of the course:

Effective university teaching is a critical component of a successful career for persons in higher education. It is also requires up-to-date knowledge of the discipline including both depth and breadth of knowledge of current research issues and instructional strategies. The College Teaching in Educational Research course is designed to (a) support students in their initial college co-teaching experience, (b) provide students with an opportunity to update their knowledge in a specific content area by teaching courses in the area of specialty, and (c) facilitate advanced training in higher education classroom instructional, management, and assessment practices. The first time that this course is taken, the student must co-teach with a faculty member. After that, the student and their advisor can decide whether to co-teach or teach independently. Thus, College Teaching in Educational Research supports both co-teaching and independent teaching experience where the doctoral student has responsibility for the course. Conducting the course in this manner allows for collaboration and mentoring between doctoral students who are in their first university teaching experience and those who have some experience in college teaching. In addition, students will use this course to apply the knowledge gained in their seminar in teaching (**ADMN 8695**). Course topics will address college teaching practices supported in the literature including planning, development of presentation, professionalism, and evaluation. This course is related to the *College of Education's Conceptual Framework* in that it is designed to develop highly professional educators with the potential to impact student performance by fostering the effectiveness of aspiring educational researchers who will be knowledgeable, effective, and committed.

Professional Educators Transforming Lives, the Conceptual Framework for Professional Education Programs at UNC Charlotte, identifies the proficiencies that our graduates will demonstrate. During coursework, internship, and co-teaching experiences candidates have multiple opportunities to develop the **knowledge, effectiveness,** and **commitment** necessary to transform the lives of the learners with whom they work. This course seeks to develop the proficiencies that are in <u>bold/underlined</u> below.

Core Proficiency: Knowledge. Candidates will demonstrate the **Knowledge** that provides the foundation for transforming the lives of the children, youth, and families with whom they work. This knowledge includes elements such as:

> K1: Knowledge relevant to life in the 21st century
> **K2: Specialty area knowledge**
> **K3: Pedagogical knowledge**
> **K4: Knowledge of learners and their contexts**
> **K5: Self-awareness**
> K6: Knowledge of policies, laws, standards, and issues

Core Proficiency: Effectiveness. Candidates will demonstrate **Effectiveness** in their work with children, youth, and families by applying knowledge and developing effective skills in areas such as:

> E1: 21st century skills
> **E2: Planning, implementation, and evaluation**
> **E3: Research-based practice**
> **E4: Research skills**
> **E5: Culturally competent practice**
> **E6: Response to diverse learners**
> **E7: Reflective practice**

Core Proficiency: Commitment. Candidates will demonstrate their **Commitment** to transforming the lives of others through their actions in areas such as:

> **C1: Positive impact on learners**
> C2: Ethics
> C3: Leadership
> C4: Collaboration
> C5: Advocacy
> **C6: Professional identity and continuous growth**

The core proficiencies of **knowledge, effectiveness,** and **commitment** are fully aligned with the North Carolina standards for teachers, school executives, and counselors. This course seeks to develop the North Carolina standards that are in <u>bold/underlined</u> below.

North Carolina Professional Teaching Standards (2007): 1) Demonstrate leadership, 2) Establish a respectful environment for a diverse population of students, 3) Know the content they teach, 4) Facilitate learning for their students, 5) Reflect on their practice.

COURSE OBJECTIVES

Upon completion of this course, the successful student will be able to:

- Develop effective course planning skills
- Plan and implement a college/university level course
- Develop and evaluate a course syllabus
- Collaborate with peers in course development
- Examine issues in college teaching
- Develop appropriate course evaluation measures
- Apply published teacher education research

5. Instructional Method:

This is an internship course in which the student co-teaches an existing course with a faculty member using whatever method of instruction applies to the co-taught course (e.g., on line, lecture, discussion).

COURSE CONTENT OF THE SEMINAR

- Introduction to the course planning process
  - Syllabus development
  - Selection of course objectives
  - Selection of text and resources
  - Development of student evaluation
  - Development of content
- Presentation development
  - Selection of goals
  - Selection of content
  - Selection of activities
  - Time management
  - Planning purposeful interactions
  - Development of evaluation measures
- Web-based Course Development
  - Asynchronous course content and design
  - Synchronous delivery
  - Instructional design in online courses
- Issues of professionalism
  - Development of timelines
  - Development of policies
  - Student behavior
  - Unusual circumstances
- Course evaluation
  - Self-reflection
  - Peer evaluations
  - Student evaluations

      o   Using evaluation to improve teaching practices

REQUIRED COURSE ACTIVITIES IN THE CONTEXT OF THE COURSE BEING CO-TAUGHT

Course activities include:

- Co-teach and/or take primary teaching responsibility for a course
- Attend seminars with instructor and peers to share experiences and develop skills
- Develop and/or revise the course syllabus to be used
- Be observed using *College of Education's Peer Observation* process

6.   Means of student evaluation:

A co-teaching contract will be signed by the co-teaching student and course instructor each semester. See Attachment A in item 10 of this document. A grade for the course will be assigned using the following criteria:

- Professional conduct and participation as outlined in the *Professional Dispositions for Professional Education Programs* (20%)
- Development of course syllabi, content, activities   (40%)
- Evaluation and feedback from supervising faculty   (40%)

In addition, an evaluation of the co-teaching student's strengths and areas for improvement is completed by the course instructor and submitted to the student's advisor. See Attachment B in item 10 of this document.

7.   Specify policies that apply to this course:
    a.   University
    integrity

<u>Code of Student Academic Integrity</u>
All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at: http://www.legal.uncc.edu/policies/ps-105.html.

Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

    b.   Attendance

Students are expected to attend and be punctual to all seminar and co-teaching sessions. Absences from class *may* be excused by the instructor for such reasons as personal illness, religious holidays, or participating as an authorized University representative in an out-of-town event or program-related activity such as attending a professional conference. Whenever possible, students are expected to seek the permission of the instructor prior to absences. If an assignment is due on the day of the absence, a new due date must be approved by the course instructor.

c.   Grading policy (A, B, C, Unsatisfactory and what are the requirements for these   as number grades)

Weighted Average of Products

90-100% A

80-89%   B

70-79%   C

Less than 70% U

Grade of "I"
The grade of I is assigned at the discretion of the instructor when a student who is otherwise passing has not, due to circumstances beyond his/her control, completed all the work in the course. The missing work must be completed by the deadline specified by the instructor, and no later than 12 months. If the I is not removed during the specified time, a grade of U is automatically assigned. The grade of I cannot be removed by enrolling again in the same course, and students should not re-enroll in a course in which they have been assigned the grade of I. *For this course a written contract for an Incomplete must be developed with the instructor prior to the deadline for final grades and will only be awarded in strict compliance with University policy.*

d.   Additional requirements such as CPR, liability insurance, no phones or beepers in class (whatever are the requirements for that course).

The College of Education Commitment to Diversity
The College of Education at UNC Charlotte is committed to social justice and respect for all individuals, and it seeks to create a culture of inclusion that actively supports all who live, work, and serve in a diverse nation and world. Attaining justice and respect involves all members of our community in recognizing that multi-dimensional diversity contributes to the College's learning environments, thereby enriching the community and improving opportunities for human understanding. While the term "diversity" is often used to refer to differences, the College's intention is for inclusiveness, an inclusiveness of individuals who are diverse in ability/disability, age, economic status, ethnicity, gender, language, national origin, race, religion, and sexual orientation. Therefore, the College aspires to become a more diverse community in order to extend its enriching benefits to all participants. An essential feature of our community is an environment that supports exploration, learning, and

work free from bias and harassment, thereby improving the growth and development of each member of the community.

College of Education Technology Statement
Professional education programs at UNC Charlotte are committed to preparing candidates for success in the 21st century through an emphasis on knowledge, effectiveness and commitment to technology integration and application. Preparation in the integration and application of technology to enhance student learning is essential for all candidates. Programs across the professional education unit, including the College of Arts + Architecture, College of Education, and College of Liberal Arts and Sciences, reflect this commitment in coursework, early field experiences, and clinical practice which includes student teaching and/or the capstone/internship phase of the respective programs.

Religious Accommodations
UNC Charlotte provides reasonable accommodations, including a minimum of two excused absences each academic year, for religious observances required by a student's religious practice or belief. Such reasonable accommodations must be requested in accordance with the procedures in this Policy, and include the opportunity for the student to make up any tests or other work missed due to an excused absence for a religious observance. Students wishing to request a religious accommodation may refer to the information found at http://legal.uncc.edu/policies/ps-134.html. It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation Form to their instructor prior to the census date for enrollment for a given semester (typically the 10th day of enrollment).

Disability Accommodations
If you have a disability that qualifies you for academic accommodations, contact the Office of Disability Services in Fretwell 230 or call 704-687-4355 at the beginning of the semester. Some requests for accommodations cannot be honored without supporting documentation from the Office of Disability Services. All information shared with the instructor concerning a disability will remain strictly confidential unless otherwise specified by the instructor.

Online Student Course Evaluation Process and Confidentiality
Courses in the College of Education will are evaluated through an online evaluation survey process. Student course evaluations provide an important source of feedback for faculty regarding course design and instructional effectiveness. The online course evaluations will be administered at the end of the term, during the final two week (prior to final exams). You will receive an email announcement alerting you when the survey period opens. Periodic reminders will be sent during the time the survey is open. Please be advised that this process will be secure and confidential. The technology used will ensure anonymity of participants as well as confidentiality. The College of Education is committed to excellent instruction and student support. Please help in continuing this commitment by participating in the course evaluation process.

Credit Hour Statement
This 3 credit course requires 3 hours of classroom or direct faculty co-teaching instruction and six hours of out-of-class student work each week for approximately 15 weeks. Out-of-

class work may include but is not limited to: syllabi development, course/presentation development, web-based course development, grading, or course evaluation.

<u>Professional Dispositions for Professional Education Programs</u>
Dispositions include the values, commitments, and ethics expected of professional educators and will be evaluated throughout your academic and professional preparation. (These may be found online at https://education.uncc.edu/resources/professional-dispositions-plan-and-information). Education is a demanding profession that requires candidates to act in a professional manner at all times, be collegial with peers and supervisors, and conscientiously attend to job-related details. Showing proper initiative and following through on tasks in a timely manner are also critical. Establishing habits supportive of these dispositions is an important part of each candidate's career preparation and as such will be emphasized throughout this course and the program.

<u>Inclement Weather Policy</u>
The University is rarely closed because of bad weather. When such a closing occurs, it will be announced on the University website and over local television and radio stations. Since this class is online and travel is not required, attendance is not affected unless there is a widespread power outage. If such an outage occurs, reasonable accommodations depending upon the circumstances to the course schedule will be made. This policy does not cover individual student computer issues. Students are expected to have dependable internet access in order to attend this course.

8.   Probable textbooks or resources

Badger, R. L. (2007). *Ideas that work in college teaching*. New York: SUNY Press.

Barkley, E. (2009). *Student engagement techniques: A handbook for college faculty*. San Francisco, CA: John Wiley & Sons.

Case, K. (2013. Teaching strengths, attitudes, and behaviors of professors that contribute to the learning of African-American and Latino/a college students. *Journal on Excellence in College Teaching*, 24, 129-154.

Faculty Focus. *Higher ed teaching strategies*. Available from http://www.facultyfocus.com/.

Feden, P. (2012). Teaching without telling: Contemporary theory put into practice. *Journal on Excellence in College Teaching*, 23, 5-23.

Lieberg, C. (2008). *Teaching your first college class: A practical guide for new faculty and graduate student instructors*. Sterling, VA: Stylus Publishing.

Nilson, L. (2010). *Teaching at its best: A research-based resource for college instructors*. San Francisco, CA: John Wiley & Sons.

9.   Topical outline of course content

It is expected that the co-teaching students will read materials related to the course that they are co-teaching in addition to the materials for the seminar outlined below. The co-teaching seminar will meet once per month to address topics of interest to all co-teaching student regardless of content area being co-taught.

Month	Topic
August/January	Introduction to the course planning process
September/February	Presentation development
October/March	Web-based Course Development
November/April	Issues of professionalism
December/May	Course evaluation

10.   Attachments - Attach course materials following the format presented above (items 1-9). If both graduate and undergraduate versions of this course are to be offered, evidence of the differences required for graduate students and undergraduate students must be submitted to both the Undergraduate Course & Curriculum Committee and the Graduate Council.

FACULTY RESPONSIBLE FOR DEVELOPING THIS COURSE OUTLINE
(List the names of the faculty members who have developed this basic course outline.)

Lynn Ahlgrim-Delzell

APPROVAL BY THE APPROPRIATE COLLEGE OF EDUCATION CURRICULUM COMMITTEE:

Approved by the College of Education *Undergraduate* Curriculum Committee

Chair: **Date:**

Approved by the College of Education *Graduate* Curriculum Committee

Chair: **Date:**

RSCH 8411
Attachment A

COTEACHING BY DOCTORAL STUDENTS IN EDUCATIONAL RESEARCH
Contract with Supervising Faculty

Purposes of co-teaching are:

1. To gain additional knowledge to build an area of specialty as a doctoral student.
2. To gain expertise and experience in college teaching.

Course:_____   Semester:_____
_____

Faculty Member:_____   Student:_____
_____

Activity	Specifics for Course	Due Date	Date Completed	Points Possible/ Earned
Attend every class and meet/communicate with INSTRUCTOR prior to the start of classes and during exam week.	Dates missed:			Possible: 160 pts (10 per week)
Attend monthly co-teaching seminar	Dates missed:			Possible: 50 pts (10 per month)
Attend 2 CTL workshops during the semester as agreed upon with the course instructor.	List workshops attended: 1. _____ 2. _____	1. _____ 2. _____	1. _____ 2. _____	Possible: 20 pts (10 per workshop)
Support instruction with the following tasks: 1. Lead activity planned by instructor 2. Develop online content or activity (e.g., Moodle content, grade book, etc.) 3. Teach 1 hr. using instructor's notes 4. Teach 1 hr. using original	Specify topic or session for each: 1. _____ 2. _____ 3. _____ 4. _____	1. _____ 2. _____ 3. _____ 4. _____	1. _____ 2. _____ 3. _____ 4. _____	Total Possible: 200 1. _____ (10 pts.) 2. _____ (10 pts) 3. _____ (20 pts) 4. _____ (30 pts)

notes	5. _____	5. _____	5. _____	5. _____ (40 pts)
5. Lead an original activity	6. _____	6. _____	6. _____	6. _____ (40 pts)
6. Teach full class with instructor's notes	7. _____	7. _____	7. _____	7. _____ (50 pts)
7. Teach full class with original notes				
Grade 2 sets of papers, projects, or exams. Faculty co-grades at least one-third to check for agreement in use of grading code.	Items to be graded: 1. _____ 2. _____	1. _____ 2. _____	1. _____ 2. _____	Possible: 50 pts (25 per set) 1. _____ 2. _____
				Total Points:

We agree to the above expectations for co-teaching in this course.

_____   _____

Faculty   Student

Attachment B:

Course Instructor Evaluation of Co-Teacher

I.   Mastery of course content

II.   Strengths in course instruction and grading

III.   Areas for further improvement

Date _____   Faculty Signature _____

Student's signature indicates that you have read this evaluation.

Date _____   Student Signature _____

Appendix C

Catalog Copy

Catalog Description

The doctoral program at UNC Charlotte prepares professionals who seek advanced research, statistical, and evaluation skills for positions in a wide variety of educational institutions including higher education, K-12 school districts, for-profit companies, nonprofit agencies, community colleges, think tanks, government organizations, and other institutions concerned with solving problems in education.

The program builds on the Master of Education or a comparable program. The 60-credit Ph.D. program includes 9 credits in foundations, 21 credits in research methodology and data analyses, 6 credits in internship, 6 credits of an individually designed specialty, and 9 credits in dissertation design and study. Additional coursework may be required for students who do not have a foundation in research.

The program will accept up to two courses as transfer from a regionally accredited doctoral granting institution, providing the Education Research Doctoral Committee determines that the course or courses to be transferred are equivalent to similar courses required in the UNC Charlotte Ph.D. program or fit the specialty area. The grade in these transfer courses must be an A or B. All of the dissertation work must be completed at UNC Charlotte.

Timelines

Students are admitted for either full-time study or intensive part-time study and begin in the fall or spring semester. Students must complete their degree, including the dissertation, within 8 years. The minimum time for completion for a full-time student is 3 years.

Additional Admission Requirements

Applications for admission will be accepted twice a year to begin doctoral studies in the fall or spring semester.

The following documents/activities must be submitted in support of the application:

1. Official transcript(s) of all academic work attempted since high school indicating a GPA of 3.5 (on a scale of 4.0) in a graduate degree program*
2. Official report of score on the GRE or MAT that is no more than 5 years old*
3. At least three references* of someone who knows the applicant's current work and/or academic achievements in previous degree work
4. A two page essay describing prior educational and research experiences and objectives for pursuing doctoral studies*
5. A current resume or vita
6. A professional writing sample (e.g., published article, manuscript submitted for publication, term paper submitted in prior coursework, abstract of thesis, teaching manual)

7. International students must submit official and acceptable English language proficiency test scores on the Test of English as a Foreign Language (TOEFL), the Michigan English Language Assessment Battery (MELAB), or the International English Language Testing System (IELTS). All tests must have been taken within the past two years**

These items are required of applicants to any of UNC Charlotte' s doctoral programs.

**See the Graduate School's website for minimum acceptable scores.*

Core Courses (9 credits)

- EDCI 8180 (Critical Issues and Perspectives in Urban Education)
- ADMN 8695 (Advanced Seminar in Teaching and Learning)
- RSCH 8210 (Applied Research Methods)

Research Methods and Advanced Content (21 credits)

- RSCH 8110 (Descriptive and Inferential Statistics)
- RSCH 8120 (Advanced Statistics)
- RSCH 8140 (Multivariate Statistics)
- RSCH 8111 (Qualitative Research Methods)
- RSCH 8121 (Qualitative Data Collection and Analysis)
- RSCH 8196 (Program Evaluation Methods)
- RSCH 8220 (Advanced Measurement)

Research Specialization (select 9 credits)

- RSCH 8112 (Survey Research Methods)
- RSCH 8130 (Presentation and Computer Analysis of Data)
- RSCH 8113 (Single-Case Research)
- RSCH 8150 (Structural Equation Modeling Methods)
- RSCH 8230 (Classical and Modern Test Theory)
- RSCH 8890 (Hierarchical Linear Modeling)
- *8000 level research courses from other doctoral program across the university may be considered*

Secondary Area of Concentration (6 credit hours)

- Students will be required to complete a secondary concentration of their choice, with the approval of their doctoral advisor/committee. Areas may include elective courses from: (a) educational leadership; (b) curriculum and instruction; (c) statistics; (d) counseling; (e) early childhood; (f) special education; (g) instructional systems technology; and (h) higher education.

Internship (6 credit hours)

- RSCH 8410 (Internship in Educational Research)
- RSCH 8411 (Internship in Teaching Educational Research)

Proposal Design (3 credit hours)

- RSCH 8699 (Dissertation Proposal Design)

Dissertation (a minimum of 6 credit hours)

- RSCH 8999 (Doctoral Dissertation Research)

Additional Degree Requirements

In addition to coursework and the dissertation, students must complete a portfolio of achievements related to the three focus areas of research, collaboration, and teaching. This portfolio must receive satisfactory ratings from the Portfolio Review Committee at two critical junctures known as Benchmark One and Benchmark Two. The first benchmark serves as a Qualifying Examination and includes demonstration of writing, collaboration, and research skills. The second benchmark is comparable to the comprehensive exams required by some Ph.D. programs. Students receive opportunities to build this portfolio through the Research and Practice coursework. The following are some examples of possible products in the portfolio: research based paper, journal article review, conference presentation, evaluation project, team study, and research report.

Admission to Candidacy

Once the student has an approved dissertation proposal, an *Application for Candidacy* should be submitted first to the advisor, then the doctoral director. The application for candidacy must be submitted at least 4 weeks before the semester in which the student graduates. It is recommended that this application be made as soon as the proposal has been approved.

Dissertation Requirements

The purpose of the dissertation is for doctoral students to demonstrate their ability to synthesize the professional literature and generate new knowledge for the profession through using well-established research tools. For the Ph.D. in Education Research, Measurement, and Evaluation Education, the dissertation may be quantitative, qualitative, or mixed methods. Whatever type of design, it must adhere to current standards for quality as reflected in professional writing on the chosen method of research design and reflected in the current literature. Students must be continuously enrolled for dissertation research credits through and including the semester of graduation. Defense of the dissertation is conducted in a final oral examination that is open to the University community.

Application for Degree

Students must submit an Application for Degree during the semester in which they successfully defend their dissertation proposal. Adherence to Graduate School deadlines is expected. Degree requirements are completed when students successfully defend their dissertation and file the final copy of the dissertation in the Graduate School.

Appendix D

Student Learning Outcomes Plan

UNC CHARLOTTE

Student Learning Outcomes Assessment Plan

College: College of Education

Department: Department of Educational Leadership

Degree Program: PhD in Educational Research, Measurement, and Evaluation (ERME)

Student Learning Outcome 1 (knowledge, skill or ability to be assessed)
ERME PhD candidates will demonstrate strong knowledge and skills in (a) statistics (regression, general linear models, multivariate statistics, and statistical computer programs) and (b) research design (e.g., correlational, experimental, quasi-experimental design, and qualitative design).

Effectiveness Measure: Identify the data collection instrument, e.g., exam, project, paper, etc. that will be used to gauge acquisition of this student learning outcome and explain how it assesses the desired knowledge, skill or ability. <u>A copy of the data collection instrument and all scoring rubrics associated with this student learning outcome are to be attached to the plan.</u>
After completing 9 credit hours (Phase One), all candidates submit a Research Proposal on a topic selected in consultation with the advisor. The paper is scored on a rubric that has six criteria: (1) the introduction establishes purpose of the paper; (2) the literature review is comprehensive and provides a strong and synthesized rationale for the study; (3) the research questions are important and will advance the selected field; (4) the methodology section indicates advanced knowledge of educational research design, program evaluation, measurement and statistical issues needed to conduct the study and to address the research questions; (5) the style follows APA guidelines; and (6) the writing is clear and professional. Each item is scored as Inadequate (0), Minimally Adequate (1), Meets Expectation (2), or Exceeds Expectation (3) for a total score possible of 0-18. Candidates are required to demonstrate not only advanced writing skills, but also the skill of synthesizing research literature. Please see Appendix A: Grading Rubric for ERME PhD Research Proposal. In Phase Two of the PhD program (after 18 credit hours), all candidates submit an Advanced Statistical Analysis Paper on a topic selected in consultation with the advisor. The paper is scored on a four-point rubric (see Appendix B): Inadequate (0), Minimally Adequate (1); Meets Expectations (2); and Exceeds Expectations (3). Please see Appendix B: Grading Rubric for Advanced Statistical Analysis Paper.

Method: Describe when, where and how the assessment of this student learning outcome will be administered and evaluated. Describe the process the department will use to collect, analyze and disseminate the assessment data to program faculty and to decide the changes/improvements to make on the basis of the assessment data.

Student learning outcomes for the ERME PhD program are assessed using portfolios submitted at two time points – after the completion of 9 credit hours (Phase One/Portfolio One) and after the completion of 18 credit hours (Phase Two/Portfolio Two). Portfolios are prepared independently of the candidate's coursework although the candidate learns how to complete each portfolio in courses preceding its submission.

SLO 1 is assessed with the Research Proposal submitted with Portfolio One, and the Advanced Statistical Analysis Paper submitted with Portfolio Two.

The administration and evaluation process is consistent across products:

- Submission timing: Portfolios and portfolio resubmissions can be submitted annually on April 1st (full-time students) or November 1st (part-time students). Resubmissions of portfolios that do not meet expectations at first submission will be due at the next portfolio submission date (April or November).

- Submission mode: Products for Portfolios One and Two are submitted through a Moodle Project site that is secured by the College of Education's Instructional Technology staff.

- Evaluation procedures: Each candidate has a doctoral committee of three faculty members who review products as part of the portfolios. The committee members review and score the products independently and then meet to discuss their scores. Using the consensus scoring method typical of federal grant panels, committee members can change their scores subsequent to this discussion. The scores are then averaged. For both the Research Proposal and Advanced Statistical Analysis Paper, the products must have no "inadequate" items and all "meet" or "exceed" expectations with an average score of at least 12 points to pass. The doctoral Program Director meets with the advisor (who is assigned at the beginning of the program) of each candidate to review all scoring for fairness, accuracy, and consistency with program guidelines

Unless a candidate has committed plagiarism or received a total score of 0 on the product, the candidate has the opportunity to resubmit the product at the second review date (to be determined by the advisor). In the timeframe between first and second submission, the candidate works with the advisor to remediate deficiencies noted by the committee (e.g., by searching the literature; remediating writing errors.) If the candidate fails the second submission, the doctoral Program Director recommends discontinuation from doctoral studies to the Dean of the Graduate School who has the authority to make the final decision on this recommendation.

The doctoral Program Director meets with the candidate and advisor mid-May (after April submission) or mid-December (after November submission) to convey the outcome and any recommendations for improvement. The number of candidates who pass each phase is summarized and housed in a secure website accessible to all faculty in the College of Education.

This pass rate is also described during a program faculty meeting once a year. No names are used in these summary statistics. Any individual failures are discussed in confidence with the doctoral committee to consider whether any program changes are needed.

Performance Outcome: Identify the percentage of students assessed that should be able to demonstrate proficiency in this student learning outcome and the level of proficiency expected. *Example: 80% of the students assessed will achieve a score of "acceptable" or higher on the Oral Presentation Scoring Rubric*

Phase One: At least 80% of candidates "meets expectation" on the Research Proposal (minimum score of 12).
Phase Two: At least 80% of candidates "meets expectation" on the Advanced Statistical Analysis Paper (minimum score of 12).

Student Learning Outcome 2
(knowledge, skill or ability to be assessed)

Students should be able to write research-based papers and disseminate their findings to the field via conference presentations or publications.

Effectiveness Measure: Identify the data collection instrument, e.g., exam, project, paper, etc. that will be used to gauge acquisition of this student learning outcome and explain how it assesses the desired knowledge, skill or ability. A copy of the data collection instrument and all scoring rubrics associated with this student learning outcome are to be attached to the plan.

Students complete research internships that result in the completion of research-based paper under the supervision of a faculty member during Phase Two of the program. The research-based paper must be presented at a national/regional conference or published in a peer-reviewed journal or an edited book.

All candidates submit: (a) a research-based paper for the research internship on a topic selected in consultation with the advisor. The paper is scored on a rubric that has six criteria: (1) establishes purpose of the paper, (2) uses advanced statistics, (3) backs up all interpretation with valid results, (4) draws conclusions and makes recommendations and summarizes, (5) writes in APA style, and (6) writes clearly and professionally. Each item is scored as Inadequate (0), Minimally Adequate (1), Meets Expectations (2), and Exceeds Expectations (3). Candidates are required to convey not only advanced writing skills, but also the skill of synthesizing research literature. These papers are focused on educational research, advanced statistics, program evaluation, or measurement. Please see Appendix C for Grading Rubric for Research-Based Paper and Appendix D for Grading Rubric for Research Internship.

Method: Describe when, where and how the assessment of this student learning outcome will be administered and evaluated. Describe the process the department will use to collect, analyze and disseminate the assessment data to program faculty and to decide the changes/improvements to make on the basis of the assessment data.

Student learning outcomes for the ERME PhD program are assessed using portfolios submitted at two time points – after the completion of 9 credit hours (Phase One/Portfolio One) and after the completion of 18 credit hours (Phase Two/Portfolio Two). Portfolios are prepared independently of the candidate's coursework although the candidate learns how to complete each portfolio in courses preceding its submission.

SLO 2 is assessed with the evaluation of the research intern by his/her onsite cooperating mentor, and with the research-based paper, both submitted after the completion of the research internship with Portfolio Two.

The administration and evaluation process is as follows:

- Submission timing: Portfolios and portfolio resubmissions can be submitted annually on April 1st (full-time students) or November 1st (part-time students). Resubmissions of portfolios that do not meet expectations at first submission will be due at the next portfolio submission date (April or November).

- Submission mode: Products for Portfolio Two are submitted through a Moodle Project site that is secured by the College of Education's Instructional Technology staff.

- Evaluation procedures: Each candidate has a Graduate School appointed doctoral committee of three faculty members who review the portfolio. The evaluation by the onsite cooperating mentor must have no "inadequate" items and all "meet" or "exceed" expectations with a score of at least 15 to pass this product. The committee members review and score the research-based papers independently and then meet to discuss their scores. Using the consensus scoring method typical of federal grant panels, committee members can change their scores subsequent to this discussion. The scores are then averaged. The research-based paper must have no "inadequate" items and all "meet" or "exceed" expectations with an average score of at least 12 points to pass. The doctoral Program Director meets with the advisor (who is assigned at the beginning of the program) of each candidate to review all scoring for fairness, accuracy, and consistency with program guidelines

Unless a candidate has committed plagiarism or received a score of less than 15 (evaluation by onsite cooperating mentor) or total score of 0 (research-based paper), the candidate has the opportunity to resubmit the product at the second review date (to be determined by the advisor). In the timeframe between first and second submission, the candidate works with the advisor to remediate deficiencies noted by the committee (e.g., by searching the literature; remediating writing errors.) If the candidate fails the second submission, the doctoral Program Director recommends discontinuation from doctoral studies to the Dean of the Graduate School who has the authority to make the final decision on this recommendation.

The doctoral Program Director meets with the candidate and advisor mid-May (after April submission) or mid-December (after November submission) to convey the outcome and any recommendations for improvement. The number of candidates who pass each phase is summarized and housed in a secure website accessible to all faculty in the College of Education. This pass rate is also described during a program faculty meeting once a year. No names are used in these summary statistics. Any individual failures are discussed in confidence with the doctoral committee to consider whether any program changes are needed.

Performance Outcome: Identify the percentage of students assessed that should be able to demonstrate proficiency in this student learning outcome and the level of proficiency expected. *Example: 80% of the students assessed will achieve a score of "acceptable" or higher on the Oral Presentation Scoring Rubric.*

Research-Based Paper: At least 80% of candidates "meets expectation" on the Research-Based Paper (minimum score of 12).
Research Internship: At least 80% of candidates "meets expectation" on the Research Internship (minimum score of 16).

Student Learning Outcome 3
(knowledge, skill or ability to be assessed)

ERME PhD candidates will demonstrate professional behaviors consistent with fairness and the belief that all students can learn, including creating caring, supportive learning environments, encouraging candidate-directed learning, and making adjustments to their own professional dispositions when necessary.

Effectiveness Measure: Identify the data collection instrument, e.g., exam, project, paper, etc. that will be used to gauge acquisition of this student learning outcome and explain how it assesses the desired knowledge, skill or ability. A copy of the data collection instrument and all scoring rubrics associated with this student learning outcome are to be attached to the plan.

In Phase One of the PhD program, all candidates submit a sample teaching session. All of our candidates learn teaching through co-teaching our Master's level course (RSCH6101). With Portfolio One, the candidate submits evidence of effective preparation of a teaching session including their lecture notes, handouts, electronic presentation, and the faculty member's written observation. This written observation uses the College of Education Observation Instrument: Direct Instruction (See Appendix E). Candidates must receive a total score of 80% or better for the checklist items "included in the lesson."

In Phase Two of the PhD program, all candidates submit a synthesis of co-teaching of all of the courses they have co-taught with a sample college teaching session. The products submitted include a description of all classes taught, a sample session, and all faculty observations (using the College of Education Observation Instrument: Direct Instruction) for the sample session submitted. Candidates must receive a total score of 80% or better for the checklist items "included in the lesson.

Method: Describe when, where and how the assessment of this student learning outcome will be administered and evaluated. Describe the process the department will use to collect, analyze and disseminate the assessment data to program faculty and to decide the changes/improvements to make on the basis of the assessment data.

Student learning outcomes for the ERME PhD program are assessed using portfolios submitted at two time points – after the completion of 9 credit hours (Phase One/Portfolio One) and after the completion of 18 credit hours (Phase Two/Portfolio Two). Portfolios are prepared independently of the candidate's coursework although the candidate learns how to complete each portfolio in courses preceding its submission.

SLO 3 is assessed with the sample teaching lesson in Portfolio One, and with the synthesis of all co-teaching completed (description of all classes taught, a sample session, and all faculty observations) in Portfolio Two.

The administration and evaluation process is consistent across both portfolios:

- Submission timing: Portfolios and portfolio resubmissions can be submitted annually on April 1st (full-time students) or November 1st (part-time students); that is, portfolio must be submitted on the closest date after which the candidate completes the required credit hours (9 hours for Phase One; 18 hours for Phase Two). Resubmissions of portfolios that do not meet expectations at first submission will also be due on these dates, as applicable.

- Submission mode: Products for Portfolios One and Two are submitted through a Moodle Project site that is secured by the College of Education's Instructional Technology staff.

- Evaluation procedures: Each candidate has a Graduate School appointed doctoral committee of three faculty members who review both portfolios. In Phase One, the evaluation for the sample teaching session must have 80% or greater items included in lesson from the College of Education Observation Instrument: Direct Instruction to pass. In Phase Two, the committee members review and score the synthesis of co-teaching independently and then meet to discuss their scores. Using the consensus scoring method typical of federal grant panels, committee members can change their scores subsequent to this discussion. The scores are then averaged. The candidate must have no "inadequate" items and all "meet" or "exceed" expectations with an average score of at least # points to pass. The doctoral Program Director meets with the advisor (who is assigned at the beginning of the program) of each candidate to review all scoring for fairness, accuracy, and consistency with program guidelines

  Unless a candidate has committed plagiarism or received a total score of 0 on the product, the candidate has the opportunity to resubmit the product at the second review date (to be determined by the advisor). In the timeframe between first and second submission, the candidate works with the advisor to remediate deficiencies noted by the committee (e.g., by searching the literature; remediating writing errors.) If the candidate fails the second submission, the doctoral Program Director recommends discontinuation from doctoral studies to the Dean of the Graduate School who has the authority to make

the final decision on this recommendation.

The doctoral Program Director meets with the candidate and advisor mid-May (after April submission) or mid-December (after November submission) to convey the outcome and any recommendations for improvement. The number of candidates who pass each phase is summarized and housed in a secure website accessible to all faculty in the College of Education. This pass rate is also described during a program faculty meeting once a year. No names are used in these summary statistics. Any individual failures are discussed in confidence with the doctoral committee to consider whether any program changes are needed.

Performance Outcome: Identify the percentage of students assessed that should be able to demonstrate proficiency in this student learning outcome and the level of proficiency expected. *Example: 80% of the students assessed will achieve a score of "acceptable" or higher on the Oral Presentation Scoring Rubric*

At least 80% of candidates "meets expectation" on the Research-Based Paper (minimum score of 12).

Appendix A: Grading Rubric for ERME PH.D Research Proposal

Student's Name: _____   Evaluator: _____   Date: _____

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
1. **Purpose of the Proposal**	• Little or no discussion of research focus/purpose of research • Significance of the research is not identified (how it adds to previous research)	• Minimal discussion of research focus/purpose of research • Significance of the research is not clearly identified (how it adds to previous research)	• Research focus/purpose of research are described but not as well articulated • Significance of the research is defined (how it adds to previous research) but more could have been done	• Research focus/purpose of research is clearly identified and discussed • Significance of the research is clearly identified (how it adds to previous research)	
2. **Literature Review**	• Research focus not grounded in previous research/theoretically relevant literature	• Research focus is not well-grounded in previous research/theoretically relevant literature	• Research focus is less well-grounded in previous research/theoretically relevant literature	• Research focus is clearly grounded in previous research/theoretically relevant literature	
3. **Research Questions**	• The research questions are not important and the study may not advance the field • Hypotheses are poorly articulated or are absent altogether	• The research questions may not be important and the study may not advance the field • Hypotheses are not well articulated	• The research questions are important and the study will advance the field. • Hypotheses are described but not as well articulated	• The research questions are very important and the study will advance the field • Hypotheses are clearly articulated	
4. **Method**	• The method section indicates lack of knowledge of educational research design, program evaluation, measurement and statistical issues	• The method section indicates some knowledge of educational research design, program evaluation, measurement and statistical issues needed	• The method section indicates sufficient knowledge educational research design, program evaluation, measurement and statistical issues	• The method section indicates advanced knowledge of educational research design, program evaluation, measurement and statistical issues needed	

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
	needed to conduct the study • Variables are not operationally defined	to conduct the study, but there are errors and/or omissions • Variables are not well operationally defined	needed to conduct the study and address the research questions • Variables are described but not as well operationally defined	to conduct the study and to address the research questions • Variables are well operationally defined	
5. APA Style	Numerous errors or used outdated APA style	Has some APA errors	Few typos, proofed; follows conventions of current APA style with minimal error	Flawless- no APA errors found; no typos.	
6. Writing	Unclear, rambles, grammatical errors, unprofessional, lacks depth, skims surface, light weight	Overall paper lacks coherence, organization, and clarity of writing	Clear, fluent, grammar correct, professional, tone, intelligent writing	Superbly written overall	
Explanation: Each member of the portfolio committee scores each of the above criteria after reading the completed paper by circling the applicable descriptor for each criterion. Students are expected to score at least "2" on each of the above. The committee members then total the points and average their results to determine the Final Score.					**Total:**

FINAL SCORE

❑ **Rubric score range from 0-4** (0) **Missing Large Sections or Containing Inappropriate Information**	❑ **Rubric score range from 5-9** (1) **Does Not Meet Expectations**	❑ **Rubric score ranges from 10-14** (2) **Meets Expectations**	❑ **Rubric score ranges from 15-18** (3) **Exceeds Expectations**

Appendix B: Grading Rubric for Advanced Statistical Analysis Paper

Student's Name: _____   Evaluator:_____   Date: _____

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
1. Establishes purpose of the paper	• Little or no discussion of research focus/purpose of research • Research focus not grounded in previous research/theoretically relevant literature • Significance of the research is not identified (how it adds to previous research) • Hypotheses are poorly articulated or are absent altogether • Variables are not defined	• Minimal discussion of research focus/purpose of research • Research focus is not well-grounded in previous research /theoretically relevant literature • Significance of the research is not clearly identified (how it adds to previous research) • Hypotheses are not well articulated • Variables are not well defined	• Research focus/purpose of research are described but not as well articulated • Research focus is less well-grounded in previous research/theoretically relevant literature • Significance of the research is defined (how it adds to previous research) but more could have been done • Hypotheses are described but not as well articulated • Variables are described but not as well defined	• Research focus/purpose of research is clearly identified and discussed • Research focus is clearly grounded in previous research/theoretically relevant literature • Significance of the research is clearly identified (how it adds to previous research) • Hypotheses are clearly articulated. • Variables are well defined	
2. Uses advanced statistics (e.g., one-way and n-way analysis of variance and covariance, advanced ANOVA designs, regression)	• Description of how the data were collected, what/how many data sources were analyzed, plan of analysis or measurement instrument, research context is very confusing/not articulated sufficiently • Units of measurements	• Description of how the data was collected, what/how many data sources were analyzed, plan of analysis or measurement instrument, research context is somewhat confusing/not clearly articulated • Some units of	• Description of how the data was collected, what/how many data sources were analyzed, plan of analysis or measurement instrument, research context is adequate but limited • All units of measurements are	• Provides accurate, thorough description of how the data was collected, what/how many data sources were analyzed, plan of analysis or measurement instrument, research context • All units of	

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
	are invalid or inappropriate for the purpose of the data analysis • No advanced statistical analysis or use of inappropriate statistical tools • Demonstrate very poor understanding of statistical foundation	measurements are valid and appropriate for the purpose of the experiment but do not sufficiently address a broad range of situations • Attempts made to perform such analyses as one-way and n-way analysis of variance and covariance, advanced ANOVA designs and/or regression but additional analysis could have been done related to the research questions • There are a few serious flaws in the choice of the statistical procedures to analyze the problem • Demonstrate only modest understanding of advanced statistical foundation	valid and appropriate for the purpose of the experiment but are presented in an incomplete or inaccurate manner • Attempts made to perform such analyses as one-way and n-way analysis of variance and covariance, advanced ANOVA designs and/or regression but analyses are still incomplete. • Data are statistically analyzed in a valid manner consistent with the stated purpose of the experiment but analysis contains a few minor errors • Demonstrate good understanding of advanced statistical foundation	measurements are valid and appropriate for the purpose of the experiment • Complete attempts made to perform such analyses as one-way and n-way analysis of variance and covariance, advanced ANOVA designs, and/or regression • Data is statistically analyzed in a valid manner consistent with the stated purpose of the experiment • Demonstrate excellent understanding of advanced statistical foundation	
3. Backs up all interpretation with valid results	• Cannot back up all interpretation with valid results; claims findings that are not evident from the data • Results are not clearly explained, level of detail is severely	• Can back up most interpretation with valid results but some interpretations speculative; does not claim findings that are not evident from the data	• Can back up most interpretation with valid results; does not claim findings that are not evident from the data • Results are explained but not as clearly, level	• Can back up all interpretation with valid results; does not claim findings that are not evident from the data • Results are clearly explained in a	

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
	insufficient, and there are serious organizational issues • Tables/figures are not clear/concise in conveying the data	• Results are not very clearly explained, level of detail is insufficient, and there are more organizational issues • Tables/figures are not clear/concise in conveying the data	of detail is not as sufficient, and there are some organizational issues • Tables/figures are not as clear/concise in conveying the data	comprehensive level of detail and are well organized • Tables/figures clearly and concisely convey the data	
4. **Draws conclusions and makes recommendations and summarizes.**	• Interpretations/analysis of results severely lacking in thoughtfulness and insight, are not informed by the study's results, and do not address how they supported, refuted, and/or informed the hypotheses • Discussion of how the study relates to and/or enhances the present scholarship in this area is severely limited and/or absent altogether. • Suggestions for further research in this area are severely limited and/or absent altogether	• Interpretations/analysis of results lacking in thoughtfulness and insight, are not clearly informed by the study's results, and do not adequately address how they supported, refuted, and/or informed the hypotheses • Discussion of how the study relates to and/or enhances the present scholarship in this area is limited • Suggestions for further research in this area are limited	• Interpretations/analysis of results are sufficient but somewhat lacking in thoughtfulness and insight, are not as clearly informed by the study's results, and do not as thoroughly address how they supported, refuted, and/or informed the hypotheses • Discussion of how the study relates to and/or enhances the present scholarship in this area is adequate. • Suggestions for further research in this area are adequate	• Interpretations/analysis of results are thoughtful and insightful, are clearly informed by the study's results, and thoroughly address how they supported, refuted, and/or informed the hypotheses • Insightful discussion of how the study relates to and/or enhances the present scholarship in this area • Suggestions for further research in this area are insightful and thoughtful	
5. **Writes in APA Style**	Numerous errors or used old style APA	Has some APA errors	Few typos, proofed; follows conventions of current APA style with minimal error	Flawless- no APA errors found; no typos	
6. **Writes clearly and**	Unclear, rambles, grammatical errors,	Overall paper lacks coherence, organization,	Clear, fluent, grammar correct, professional, tone,	Superbly written overall	

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	Level Met
professionally	unprofessional, lacks depth, skims surface, light weight	and clarity of writing	intelligent writing		
Explanation: Each member of the portfolio committee scores each of the above criteria after reading the completed paper by circling the applicable descriptor for each criterion. Students are expected to score "2" on each of the above. The committee members then total the points and average their results to determine the Final Score.					**Total:**

FINAL SCORE

❑ **Rubric score ranges from 0-4** **(0)** **Missing Large Sections or Inappropriate Information**	❑ **Rubric score range from 5-9** **(1)** **Does Not Meet Expectations**	❑ **Rubric score ranges from 10-14** **(2)** **Meets Expectations**	❑ **Rubric score ranges from 15-18** **(3)** **Exceeds Expectations**

Appendix C: Grading Rubric for Research-Based Papers

Student's Name:_____   Evaluator_____   Date: _____

CRITERIA	Level Zero Inadequate	Level One Minimally Adequate	Level Two Meets Expectations	Level Three Exceeds Expectations	LEVEL MET
1. **Establishes purpose of paper**	No clear purpose	Some purpose statement but vague or unclear	Clear logic. Uses foundation of professional literature	Superbly written introduction	
2. **Uses data-based studies as reflected in reference list**	Secondary sources, texts, articles from obscure/ questionable sources, testimonials	Insufficient data-based articles; overuse of opinion papers	Current & based on high quality research in major journals Reflects use of authorities	Superb selection of studies	
3. **Writes paper using major themes derived from data based studies.**	Disjointed, writes "abstracts" with/no synthesis, vague or unsupported themes	Follows a general outline but themes are not well developed	Clear & logical support for themes; good transitions; studies well synthesized, data supports themes	Superbly written body of paper	
4. **Draws conclusions and makes recommendations & summarizes.**	Few to no conclusions or not logically supported by rest of paper	Provides conclusions but they are underdeveloped	Conclusions logically derived from themes, clear and concise.	Superbly written closing section	
5. **Writes in APA Style**	Numerous errors or used old style APA	Has some APA errors	Few typos, proofed; follows conventions of current APA style with minimal error	Flawless- no APA errors found; no typos	
6. **Writes clearly and professionally**	Unclear, rambles, grammatical errors, unprofessional, lacks depth, skims surface, light weight	Overall paper lacks coherence, organization, and clarity of writing	Clear, fluent, grammar correct, professional, tone, intelligent writing	Superbly written overall	
Explanation: Each member of the portfolio committee scores each of the above criteria after reading the completed paper by circling the applicable descriptor for each criterion. Students are expected to score "2" on each of the above. The committee members then total the points and average their results to determine the Final Score.				**TOTAL:**	

FINAL SCORE

❑ **Rubric score ranges from 0-4** (0) **Missing Large Sections or Inappropriate Information**	❑ **Rubric score range from 5-9** (1) **Does Not Meet Expectations**	❑ **Rubric score ranges from 10-14** (2) **Meets Expectations**	❑ **Rubric score ranges from 15-18** (3) **Exceeds Expectations**

Appendix D: Grading Rubric for Research Internship

Student's Name: _____   Evaluator: _____   Date: _____

The on-site Cooperating Mentor needs to perform the following tasks:
1. Review the interns' performance.
2. Read the student's self-evaluation of his/her work.
3. Assess the quality of the student's work by completing the score sheet.
4. Tally up the points awarded and enter the students total score for the 16 dimensions.
5. Sign the score sheet.
6. Give the completed score sheet to the university's supervising professor to fulfill NCATE and SACS data collection requirements.

Score Sheet
Professional Behavior Scoring Rubric

Scoring Dimension	Level Zero Inadequate	Level One Meets Expectations	Level Two Exceeds Expectations
1. Communication			
Oral Communications Skills	*Serious weakness in the ability to express oneself clearly and effectively.*	*Expresses self clearly and effectively.*	*Has an engaging expressive quality which articulates purpose and instills confidence in others.*
Written Communication Skills	*Serious weakness in the ability to express oneself clearly and effectively.*	*Expresses self clearly and effectively in written communication and directives.*	*Has an engaging expressive quality which articulates purpose and instills confidence in others in writing.*
Effectiveness of Making Suggestions and Expressing Ideas	*Does not understand nor demonstrate initiative.*	*Displays an understanding and enacts proactive stances when appropriate.*	*Is articulate and visionary.*
2. Leadership Potential			
Effectiveness as Facilitator	*Does not instill nor encourage*	*Displays the ability to guide the*	*Knows the strengths and*

Scoring Dimension	Level Zero Inadequate	Level One Meets Expectations	Level Two Exceeds Expectations
	teamwork.	*work of others.*	*interests of co-workers and assigns duties accordingly.*
General Knowledge of Administrative Areas	*Does not have a comprehensive understanding nor the inter-relationships/interdependencies of administrative units.*	*Does have a comprehensive understanding of the inter-relationships/interdependencies of administrative units.*	*Does have a comprehensive understanding of the inter-relationships/interdependencies of administrative units and effectively uses that knowledge to produce effective outcomes.*
Ability to See Beyond the Symptom and Identify the Real Problem	*Does not have good problem-solving skills and is constantly working on putting out fires.*	*Has the ability to prioritize and apply resources to solve problems.*	*Has the ability to prioritize and apply resources to solve problems. Sees problems as opportunities and effectively and efficiently resolves issues.*
Ability to Relate to Peers	*Has serious interpersonal issues with peers.*	*Has the ability to interact effectively and efficiently with peers.*	*Is adept at team work with peers.*
Effectiveness in Interacting with Individuals and Groups	*Lacks social skills necessary to be effective in working with individuals and groups.*	*Has the social skill necessary to be effective in working with individuals and groups.*	*Is adept at working effectively and efficiently with individuals and groups.*
3. **Organizational Effectiveness**			
Sensitivity to the Needs of the Organization in Relationship to the Needs of Individuals	*Does not reconcile the interdependencies of the organization and its workers.*	*Understands the interdependency of the organization and its individual.*	*Effectively takes advantage of the interdependency of the organization and its individual.*
Understanding of Systemic Relationships	*Does not understand the inter-relatedness of parts in the whole.*	*Understands the inter-relatedness of parts in the whole.*	*Effectively takes advantage of the interdependency of the parts in the whole.*
Flexibility	*Is rigid and unwilling to change.*	*Is open to change.*	*Has the ability to meld into different personas without losing integrity or authenticity.*
4. **Work Ethic**			

Scoring Dimension	Level Zero Inadequate	Level One Meets Expectations	Level Two Exceeds Expectations
Regard for Protection of Confidentiality	*Has displayed evidence of not being able to conduct himself or herself in areas of confidentiality.*	*Understands the necessary boundaries of confidentiality.*	*Is steadfast in maintaining appropriate boundaries in regard to confidential matters.*
Promptness in Responding in Requests and Assignments	*Has missed several important deadlines which have hindered the success of others.*	*Is punctual and dependable.*	*Is punctual, dependable and instills these qualities in others.*
Ability to Plan, Organize and Implement Assigned Tasks	*Has not displayed the ability to independently plan or organize the implementation of assigned tasks.*	*Has displayed the ability to independently plan and organize the implementation of assigned tasks.*	*Has displayed the ability to independently plan and organize the implementation of assigned tasks and instills such behavior in others as well.*
Motivation to Perform Well	*Does not have a discernable will to succeed.*	*Displays a clear will to succeed.*	*Displays a clear will to succeed and instills the same drive to success in others.*

Number of 1-point scores: _____ X 1 = _____

Number of 2-point scores: _____X 2 = _____

Total number of points: _____

Name of On-Site Mentor: _____

Signature of On-Site Mentor: _____

Name of Supervising Professor: _____

Signature of Supervising Professor: _____

Appendix E: Grading Rubric for Internship for Co-Teaching

Student's Name: _____   Evaluator: _____   Date: _____

Area	Score				
	0	1	2	3	Other
Co-Teaching Lecture	❑ Is missing **OR** ❑ Does not include PowerPoint slides **OR** ❑ Is not a full lecture (at least 50 min)	❑ Lecture objectives are unclear **OR** ❑ Activities do not match objectives **OR** ❑ Does not vary teaching strategies **OR** ❑ Does not include handouts **OR** ❑ Handouts do not enhance the content **OR** ❑ Does not include notes or talking points	❑ Instruction linked to explicitly stated objectives **AND** ❑ Includes PowerPoint presentation of full lecture accompanied by notes/talking points **AND** ❑ Includes appropriate variety of teaching strategies (e.g., lecture is "punctuated" with discussion or small-group activities) **AND** ❑ Includes handouts that enhance the content and encourage student participation, if appropriate **AND** ❑ Professor's evaluation shows lecture was adequate	❑ Meets all expectations for a "2" **AND** ❑ Shows advanced teaching skills (e.g., connections to "big ideas") **AND** ❑ Professor's evaluation shows the lecture was excellent	❑ Copy of PowerPoint presentation ❑ Copy of notes ❑ Copy of handouts ❑ Professor's evaluation of full lecture

Area	Score				
	0	1	2	3	Other
Co-Teaching Synthesis	❑ Missing summary of experiences OR ❑ Missing sample lectures with feedback OR ❑ Missing module summary	❑ Supervisors' feedback notes ongoing weakness in co-teaching OR ❑ Sample session plans weak in content or plan for delivery OR ❑ Not all modules completed	❑ Supervisors' feedback notes having met expectations for co-teaching AND ❑ Sample session plans have well developed content and effective plans for delivery AND ❑ All modules completed	❑ Supervisors' feedback and self-evaluation support excellence in co-teaching AND ❑ Sample session plans have outstanding content and variety of delivery AND ❑ All modules complete; some outstanding	❑ Summary of co-teaching experiences ❑ Sample session plan with PowerPoints & activities ❑ Feedback from supervisors ❑ Module checklist

SUMMARY OF ESTIMATED ADDITIONAL COSTS FOR PROPOSED PROGRAM

INSTITUTION	UNC Charlotte 13.0601	DATE	28-Jul-15
Program (CIP, Name, Level)	13.0601: Educational Evaluation and Research: Doctoral		
Degree(s) to be Granted	Ph.D.	Program Year	Year 1 (2015-2016)
Differential tuition requested per student per academic yr			
Projected annual FTE students	8		
Projected annual differential tuition	$0		
Percent differential tuition for financial aid			
Differential tuition remainder	0		

ADDITIONAL FUNDS REQUIRED - BY SOURCE

	Reallocation of Present Institutional Resources	Projected Differential Tuition	Enrollment Increase Funds	Other New Allocations (Identify)	Total
EPA/SPA Regular Salaries/Stipends					
Program Director Stipend	$ -	$ -	$ 3,000.00	$ -	$ 3,000.00
EPA Academic Salaries					
	$ -	$ -	$ -	$ -	$ -
Social Security	$ -	$ -	$ -	$ -	$ -
State Retirement	$ -	$ -	$ -	$ -	$ -
Medical Insurance	$ -	$ -	$ -	$ -	$ -
Graduate Stipends					
2 Graduate Research Assistants $13,500 each plus Medical	$ -	$ -	$ 30,208.00	$ -	$ 30,208.00
Supplies and Materials					
Office supplies, laptops, wireless printers with laser pointer, projectors, etc.	$ -	$ -	$ 10,000.00	$ -	$ 10,000.00
Current Services					
(Identify)	$ -	$ -	$ -	$ -	$ -
Travel	$ -	$ -	$ 10,000.00	$ -	$ 10,000.00
Communications	$ -	$ -	$ 6,000.00	$ -	$ 6,000.00
Printing and Binding	$ -	$ -	$ 4,000.00	$ -	$ 4,000.00
Advertising	$ -	$ -	$ 3,000.00	$ -	$ 3,000.00
Fixed Charges					
Data Analysis Software: IRT Pro &Mplus	$ -	$ -	$ 23,817.80	$ -	$ 23,817.80
Capital Outlay (Equipment)					
(Identify)	$ -	$ -	$ -	$ -	$ -
Libraries	$ -	$ -	$ 7,546.31	$ -	$ 7,546.31
TOTAL ADDITIONAL COSTS	**$ -**	**$ -**	**$ 97,572.11**	**$ -**	**$ 97,572.11**

Year 1:

Narrative:

EPA/SPA Regular Salaries/Stipends:
The Ph.D. in Educational Leadership Research, Measurement, and Evaluation program will be operated and centrally administered in the Educational Leadership Department, and lead by a Program Director, who would receive an annual stipend of $3,000, which is consistent with the College's current compensation plan. Faculty members are paid this additional $3,000 annual stipend for performing program duties.

EPA Academic Salaries:
The program will require a New Research Associate Professor to assist with the teaching requirements and dissertation needs of as many as 18-24 students in the program, to begin in the 3rd year of the program.

Graduate Stipends:
Funding for two Doctoral Graduate Assistants is needed to conduct research and assist faculty and fellow students with their research needs. Pay is comparable with other Graduate Research Assistants within the Department of Educational Leadership performing similar duties.

Student Supplies and Materials:
Supplies and Materials are expected to increase as the number of student enrollment increases. We anticipate admitting 6-8 new students per year. Some examples of items in this category include laptops, wireless printers with laser pointer, projectors, etc.

Travel:
Funding is needed for travel to support faculty professional development, recruitment activities, and student educational travel awards.

Communication, Printing & Binding, and Advertising:
The program will require money with which to purchase specialized data analysis software (i.e., IRT Pro) to allow students to conduct advanced level data analysis. We expect this cost to increase as the number of student enrollment increases. We own Mplus with 10 concurrent licenses; however, the cost will increase as student enrollment increases. Funding is also needed to pay for specialized advertising/marketing efforts through trade publications, mass media and booths at conferences. Further, there will be increased cost incurred by the Department of Educational Leadership for the new program's portion of "sunk costs" (e.g. printing, communication, etc). We expect to have one-time program costs during Year 1.

SUMMARY OF ESTIMATED ADDITIONAL COSTS FOR PROPOSED PROGRAM

INSTITUTION	UNC Charlotte 13.0601	DATE	28-Jul-15
Program (CIP, Name, Level)	13.0601: Educational Evaluation and Research: Doctoral		
Degree(s) to be Granted	Ph.D.	Program Year	Year 2 (2016-2017)
Differential tuition requested per student per academic yr			
Projected annual FTE students	16		
Projected annual differential tuition	$0		
Percent differential tuition for financial aid			
Differential tuition remainder	0		

ADDITIONAL FUNDS REQUIRED - BY SOURCE

	Reallocation of Present Institutional Resources	Projected Differential Tuition	Enrollment Increase Funds	Other New Allocations (Identify)	Total
EPA/SPA Regular Salaries/Stipend					
Program Director Stipend	$ -	$ -	$ 3,000.00	$ -	$ 3,000.00
EPA Academic Salaries					
	$ -	$ -	$ -	$ -	$ -
Social Security	$ -	$ -	$ -	$ -	$ -
State Retirement	$ -	$ -	$ -	$ -	$ -
Medical Insurance	$ -	$ -	$ -	$ -	$ -
Graduate Stipends					
2 Graduate Research Assistants $13,500 each plus Medical		$ -	$ 30,208.00	$ -	$ 30,208.00
Supplies and Materials					
Office supplies, laptops, wireless printers with laser pointer, projectors, etc.	$ -	$ -	$ 13,000.00	$ -	$ 13,000.00
Current Services					
(Identify)	$ -	$ -	$ -	$ -	$ -
Travel	$ -	$ -	$ 10,000.00	$ -	$ 10,000.00
Communications	$ -	$ -	$ 4,000.00	$ -	$ 4,000.00
Printing and Binding	$ -	$ -	$ 5,000.00	$ -	$ 5,000.00
Advertising	$ -	$ -	$ 1,500.00	$ -	$ 1,500.00
Fixed Charges					
Data Analysis Software: IRT Pro &Mplus	$ -	$ -	$ 23,817.80	$ -	$ 23,817.80
Capital Outlay (Equipment)					
(Identify)	$ -	$ -	$ -	$ -	$ -
Libraries	$ -	$ -	$ 8,522.51	$ -	$ 8,522.51
TOTAL ADDITIONAL COSTS	**$ -**	**$ -**	**$ 99,048.31**	**$ -**	**$ 99,048.31**

Year 2:

Narrative:

EPA/SPA Regular Salaries/Stipends:
As described in Year 1, the Ph.D. in Educational Leadership Research, Measurement, and Evaluation program will be operated and centrally administered in the Educational Leadership Department, and lead by a Program Director, who would receive an annual stipend of $3,000, which is consistent with the College's current compensation plan. Faculty members are paid this additional $3,000 annual stipend for performing program duties.

Graduate Stipends:
Continued funding for two Doctoral Graduate Assistants to conduct research and assist faculty and fellow students with their research needs.

Student Supplies and Materials:
As described in Year 1, supplies and materials are expected to increase as the number of student enrollment increases. By Year 2, we expect an additional (6-8 new students), with a total of up to 16 for Year 2.

Travel:
Continued funding is needed for travel to support faculty professional development, recruitment activities, and student educational travel awards.

Communication, Printing & Binding, and Advertising:
Continued funding is needed for maintenance of specialized data analysis software (i.e., IRT Pro) to allow students to conduct advanced

SUMMARY OF ESTIMATED ADDITIONAL COSTS FOR PROPOSED PROGRAM

INSTITUTION	UNC Charlotte 13.0601	DATE	28-Jul-15
Program (CIP, Name, Level)	13.0601: Educational Evaluation and Research: Doctoral		
Degree(s) to be Granted	Ph.D.	Program Year	Year 3 (2017-2018)
Differential tuition requested per student per academic yr			
Projected annual FTE students	24		
Projected annual differential tuition	$0		
Percent differential tuition for financial aid			
Differential tuition remainder	0		

ADDITIONAL FUNDS REQUIRED - BY SOURCE

	Reallocation of Present Institutional Resources	Projected Differential Tuition	Enrollment Increase Funds	Other New Allocations (Identify)	Total
EPA/SPA Regular Salaries/Stipend					
Program Director Stipend	$ -	$ -	$ 3,000.00	$ -	$ 3,000.00
EPA Academic Salaries					
Associate Professor		$ -	$ 71,000.00	$ -	$ 71,000.00
Social Security	$ -	$ -	$ 5,431.50	$ -	$ 5,431.50
State Retirement	$ -	$ -	$ 9,045.40	$ -	$ 9,045.40
Medical Insurance	$ -	$ -	$ 5,378.00	$ -	$ 5,378.00
Graduate Stipends					
2 Graduate Research Assistants $13,500 each plus Medical	$ -	$ -	$ 30,208.00	$ -	$ 30,208.00
Supplies and Materials					
Office supplies, laptops, wireless printers with laser pointer, projectors, etc.	$ -	$ -	$ 16,000.00	$ -	$ 16,000.00
Current Services					
(Identify)	$ -	$ -	$ -	$ -	$ -
Travel	$ -	$ -	$ 17,000.00	$ -	$ 17,000.00
Communications	$ -	$ -	$ 4,000.00	$ -	$ 4,000.00
Printing and Binding	$ -	$ -	$ 5,000.00	$ -	$ 5,000.00
Advertising	$ -	$ -	$ 1,500.00	$ -	$ 1,500.00
Fixed Charges					
Data Analysis Software: IRT Pro &Mplus	$ -	$ -	$ 31,317.80	$ -	$ 31,317.80
Capital Outlay (Equipment)					
(Identify)	$ -	$ -	$ -	$ -	$ -
Libraries	$ -	$ -	$ 20,162.73	$ -	$ 20,162.73
TOTAL ADDITIONAL COSTS	**$ -**	**$ -**	**$ 219,043.43**	**$ -**	**$ 219,043.43**

Year 3:

Narrative:

EPA/SPA Regular Salaries/Stipends:
As described in Years 1 & 2, the Ph.D. in Educational Leadership Research, Measurement, and Evaluation program will be operated and centrally administered in the Educational Leadership Department, and lead by a Program Director, who would receive an annual stipend of $3,000, which is consistent with the College's current compensation plan. Faculty members are paid this additional $3,000 annual stipend for performing program duties.

EPA Academic Salaries:
As indicated in the Year 1 narrative, the program will require a New Research Associate Professor to assist with the teaching requirements and dissertation needs of as many as 6-8 additional students in the program, with a total of up to 18-24 for Year 3. Salary is internally equitable to other salaries within the Department of Educational Leadership.

Graduate Stipends:
Continued funding for two Doctoral Graduate Assistants to conduct research and assist faculty and fellow students with their research needs.

Student Supplies and Materials:
Supplies and materials are expected to increase as the number of student enrollment increases. By Year 3, we expect an additional (6-8 new students), with a total of up to 24 for Year 3.

Travel:
Continued funding is needed for travel to support faculty professional development, recruitment activities, and student educational travel awards.

Communication, Printing & Binding, and Advertising:
Continued funding is needed for maintenance of specialized data analysis software (i.e., IRT Pro) to allow students to conduct advanced level data analysis. We expect costs to increase as the number of student enrollment increases.

SUMMARY OF ESTIMATED ADDITIONAL COSTS FOR PROPOSED PROGRAM

INSTITUTION	UNC Charlotte 13.0601	DATE	28-Jul-15

Program (CIP, Name, Level)	13.0601: Educational Evaluation and Research: Doctoral		
Degree(s) to be Granted	Ph.D.	Program Year	Year 4 (2018-2019)
Differential tuition requested per student per academic yr			
Projected annual FTE students	30		
Projected annual differential tuition	$0		
Percent differential tuition for financial aid			
Differential tuition remainder	0		

ADDITIONAL FUNDS REQUIRED - BY SOURCE

	Reallocation of Present Institutional Resources	Projected Differential Tuition	Enrollment Increase Funds	Other New Allocations (Identify)	Total
EPA/SPA Regular Salaries/Stipend					
Program Director Stipend	$ -	$ -	$ 3,000.00	$ -	$ 3,000.00
EPA Academic Salaries					
Associate Professor	$ -	$ -	$ 71,000.00	$ -	$ 71,000.00
Social Security	$ -	$ -	$ 5,431.50	$ -	$ 5,431.50
State Retirement	$ -	$ -	$ 9,045.40	$ -	$ 9,045.40
Medical Insurance	$ -	$ -	$ 5,378.00	$ -	$ 5,378.00
Graduate Stipends					
2 Graduate Research Assistants $13,500 each plus Medical	$ -	$ -	$ 30,208.00	$ -	$ 30,208.00
Supplies and Materials					
Office supplies, laptops, wireless printers with laser pointer, projectors, etc.	$ -	$ -	$ 19,000.00	$ -	$ 19,000.00
Current Services					
(Identify)	$ -	$ -	$ -	$ -	$ -
Travel	$ -	$ -	$ 21,000.00	$ -	$ 21,000.00
Communications	$ -	$ -	$ 4,000.00	$ -	$ 4,000.00
Printing and Binding	$ -	$ -	$ 5,000.00	$ -	$ 5,000.00
Advertising	$ -	$ -	$ 1,500.00	$ -	$ 1,500.00
Fixed Charges					
Data Analysis Software: IRT Pro &Mplus	$ -	$ -	$ 31,317.50	$ -	$ 31,317.50
Capital Outlay (Equipment)					
(Identify)	$ -	$ -	$ -	$ -	$ -
Libraries	$ -	$ -	$ 20,507.27	$ -	$ 20,507.27
TOTAL ADDITIONAL COSTS	**$ -**	**$ -**	**$ 226,387.67**	**$ -**	**$ 226,387.67**

Year 4:

Narrative:

EPA Academic Salaries/Stipends:
As described in the previous years, the Ph.D. in Educational Leadership Research, Measurement, and Evaluation program will be operated and centrally administered in the Educational Leadership Department, and lead by a Program Director, who would receive an annual stipend of $3,000, which is consistent with the College's current compensation plan. Faculty members are paid this additional $3,000 annual stipend for performing program duties.

EPA Academic Salaries:
The program will require continued funding for the Research Associate Professor to assist with the teaching requirements and dissertation needs of as many as 22-30 students in the program by Year 4.

Graduate Stipends:
Continued funding for two Doctoral Graduate Assistants to conduct research and assist faculty and fellow students with their research needs.

Student Supplies and Materials:
Supplies and materials are expected to increase as the number of student enrollment increases. By Year 4, we expect an additional (6-8 new students), with a total of up to 30 for Year 4.

Travel:
Continued funding is needed for travel to support faculty professional development, recruitment activities, and student educational travel awards.

Communication, Printing & Binding, and Advertising:
Continued funding is needed for maintenance of specialized data analysis software (i.e., IRT Pro) to allow students to conduct advanced level data analysis. We expect costs to increase as the number of student enrollment increases.