

Assessment and Program Innovation for Quality Teacher Preparation

Institution

University of Northern Colorado
College of Education and Behavioral Sciences (CEBS)
Campus Box 106
McKee Hall
Greeley, CO 80639

Nominator

Eugene P. Sheehan, Ph.D.
Dean of the College of Education and Behavioral Sciences
Campus Box 106
McKee Hall
Greeley, CO 80639

(970) 351-2817 Phone
(970) 351-2312 Fax

Professional Education Leadership Team

Carolyn Edwards, Assistant Dean of CEBS
Karen Jennison, Assistant Dean of Humanities and Social Sciences (HSS)
Alexander Sidorkin, Director of School of Teacher Education (CEBS)
Matt Downey, Director of IDLA Major and Advising Center (Academic Affairs)
Jody Lawrence, Coordinator of Elementary Program (CEBS)
Val Middleton, Coordinator of Secondary Program (CEBS)
Rob Powers, Secondary Math Coordinator (NHS)

FINAL PROPOSAL FOR 2007 CHRISTA MCAULIFFE AWARD

Program Mission, Goals, Structures and Key Components

Founded in 1889, the University of Northern Colorado (UNC) was one of the earlier and most prominent teacher preparation schools in the United States. As the State Normal School, it met a vital need to prepare qualified teachers in the burgeoning state of Colorado. More than a century later, the institution has grown to become a comprehensive Carnegie Doctoral Intensive University. Teacher preparation remains at the heart of our university mission. Further, within the state of Colorado UNC has statewide authority to offer a comprehensive array of education programs from initial licensure to advanced graduate levels. The University enrolls approximately 12,000 undergraduate and graduate students, about 3,000 of whom are affiliated with the College of Education and Behavioral Sciences.

The College of Education and Behavioral Sciences is joined by the Colleges of Humanities and Social Sciences, Natural and Health Sciences and Performing and Visual Arts, along with partners from numerous surrounding school districts in the endeavor of preparing quality teachers. Collectively this Professional Education Unit (PEU) supports the belief that education is transformational: that candidates who successfully complete our professional education programs can make a difference in the lives of their students and clients. More specifically, it is the **mission** of the PEU to contribute to the betterment of society through research, professional service, and the preparation of individuals who are skilled, lifelong learners capable of working effectively with diverse populations in an evolving global community.

This proposal nominates the Elementary Professional Teacher Education Program and the Secondary Professional Teacher Education Program at UNC for the 2007 Christa McAuliffe Award. This application will demonstrate the innovative and exemplary manner in which elementary and secondary teacher education programs at UNC have designed and implemented a comprehensive assessment system that permits ongoing and continuous improvement of programs, high-quality feedback to teacher candidates, and excellent, technologically sophisticated role models of assessments for prospective classroom teachers.

A key component embraced by all members of the PEU is a **unit-wide assessment system** built on the belief that program quality is the outcome of continuous and collaborative program review and improvement. During the last few years the PEU has been recognized nationally for excellence in teacher education. The Unit received state authorization in 2002 following a major state-wide redesign involving performance-based assessment and extensive field experience hours (800 hours). Also in 2002, the PEU received reaccreditation by the National Council for Accreditation of Teacher Education (NCATE), continuing a more than 50-year tradition. The secondary program was recognized in 2002 as a distinguished program in teacher education by the Association of Teacher Educators. Most recently, the teacher education programs are honored to have been named one of three finalists in the

Christa McAuliffe Award for excellence. The University was reaccredited for ten years in 2003 by the Higher Learning Commission following an intensive self study. In addition to these external reviews, the University continues annual and 5-year self studies in order to ensure systematic evaluation and program improvement. Just this spring, the College of Education and Behavioral Sciences, in conjunction with the School of Teacher Education, won the Provost's Excellence through Performance Assessment Award for the quality of its assessment and evaluation system.

Engagement in the above review processes provides external validation of program quality, assures program excellence and provides ongoing rationale and impetus for innovation and change. The Elementary and Secondary Programs also have **unique programmatic assessment systems**. These assessments are largely performance-based, allow for the collection of multiple bodies of evidence over an extended period of time, and involve a diverse array of evaluative approaches including a new electronic portfolio assessment, self-reflective journals, performance checklists and rubrics, and initial and advanced teacher work sample assessments. In addition, assessments of candidates' performances are a responsibility shared by university faculty and partner teachers alike. Candidate exit and follow-up 1st and 2nd year teacher surveys allow us to study teacher performance following student teaching and during induction years. Data are aggregated across all of these key assessments and results are systematically analyzed to improve candidate learning and program quality.

The newly adopted **electronic portfolio** shown in the screen shot below is an innovative assessment tool that allows candidates and faculty to share evaluation of candidates' performance-based demonstrations. iWebfolio, developed by Nuventive, was selected because it is an internet-based product that allows faculty first to develop portfolio templates and rubrics that are specific and unique for their own programs, courses and standards. Once developed, faculty can quickly and efficiently distribute assignments and rubrics to students in electronic format through iWebfolio. Candidates are encouraged to use the electronic rubrics for self-assessment and to use the "written reflection" feature in iWebfolio to reflect on their learning process when submitting artifacts. Then the faculty electronically access, review, and provide feedback to candidates on their work. An important data analysis aspect of iWebfolio provides instructors and program coordinators with aggregated data across course rubrics, allowing important program decisions to be guided by summary data and analysis. This electronic portfolio is being implemented in both the elementary and secondary programs and permits candidates to demonstrate their technology skills while simultaneously providing evidence of their teaching competency.

Figure 1. Example of a Standard-Based Electronic Portfolio with Feedback Rubric

The Elementary and Secondary Programs use **teacher work sample methodology** to document that candidates can conduct and analyze formative and summative assessment data to inform their instructional practices. The core elements of the methodology include: rationale statement with regard to the teaching/learning context/setting, statement of relevance to students, alignment of P-12 content standards, instructional goals and objectives, pre-instruction assessment plans, lesson plans and instructional objectives based on pre-instruction assessment, post-instruction assessment plans,

analysis of student learning data disaggregated by individual students and groups, an evaluative essay, and a reflective essay. The completed work samples document candidates' impact on learning in terms of individual pupils and classes.

Another key component of all UNC Teacher Preparation Programs is a university-public school **partnership model**. A pilot partnership model originally implemented in 1991 was judged a resounding success on the basis of evaluative feedback from teacher candidates, partner teachers and administrators, and university faculty. Although several refinements were made as the model evolved, the vision for continued simultaneous renewal to prepare better teachers for better schools prompted university and school district administrators to expand the partnership model to seven school districts in northern Colorado and to approximately fifty partner and affiliate schools. Approximately 500 placements are made in the public school settings every semester. Elementary and secondary faculty have teaching time reassigned to supervise candidates along with partner teachers in schools. Site coordinators and/or principals at each school facilitate the collaborative efforts of these school partnerships.

The commitment of the PEU to collaboration among the Colleges of Education and Behavioral Sciences, Humanities and Social Sciences, Natural and Health Sciences, Performing and Visual Arts, and partners from numerous surrounding school districts is evident at all levels. Numerous school and university faculty and administrators serve on the teacher education faculty and as representatives to the **Professional Education Council (PEC)**. Faculty across the colleges share program coordination for the elementary and secondary programs and are actively involved in the school partnerships, curriculum development, fieldwork and supervision (including student teaching).

The innovative **Partner Teams in the Secondary Program** are central to the coordination of the program and are one of the program's strongest unifying components. University faculty from the Colleges of Education and Behavioral Sciences, Humanities and Social Sciences, Natural and Health Sciences and Performing and Visual Arts work together on content-pedagogy teams that are assigned to one or two of the twelve secondary partner schools. Each faculty team oversees the field experiences of the teacher candidates assigned to their team, inclusive of working with designated school site coordinators and the classroom teachers at their assigned school. The teams present seminars related to program issues and secondary school experiences. The teams meet monthly to ensure communication, review and analyze data, and discuss program coordination. The fact that the various Colleges assume the cost of having content faculty reassigned to the Partner Teams is sound evidence of the collaborative campus-wide commitment to teacher preparation

Examples of Evidence That Demonstrate the Programs' Positive Impact on Teacher Candidates' Learning

Multiple measures are used at our institution to document the positive impact programs have on candidates' learning. The high pass rates on the **State PLACE and National PRAXIS** examinations

represented in the following chart document that candidates have solid knowledge of content across all area in the elementary and secondary programs. In every category the UNC candidates exceeded the NCATE requirement for an 80% pass rate. All candidates must pass the appropriate content test prior to student teaching.

**UNC Annual Institution Report of State and National Examination Results
Program Year 2004-2005**

Number of Program Completers: 449

Test Field/ Category	Institution			Statewide	Institution		
	PLACE Results				Adjusted for PRAXIS Results		
	Number Tested	Number Passed	Pass Rate	Pass Rate	Number Tested	Number Passed	Pass Rate
Academic Content Areas							
Art	10	10	100%	99%	10	10	100%
Drama	6	--	--	100%	6	--	--
Elementary	56	47	84%	87%	278	270	97%
English	1	--	--	95%	18	18	100%
Mathematics	15	15	100%	98%	17	17	100%
Music	17	17	100%	96%	17	17	100%
Physical Ed.	38	38	100%	98%	38	38	100%
Science	1	--	--	87%	9	--	--
Social Studies	8	--	--	84%	47	46	98%
Spanish	5	--	--	98%	5	--	--
Speech	4	--	--	100%	4	--	--
Aggregate	161	148	92%	92%	449	438	98%

“--” indicates “Number Passed” and “Pass Rate” not shown because “Number Tested” is less than 10.

Figure 2. UNC Annual Institution Report of State and National Examination Results

The elementary program has conducted **exit surveys** of student teachers, their cooperating teachers and the university consultants since fall 2004. The purpose of the instrument is to gather data from the participants regarding their perceptions of preparedness in several important areas in teacher preparation. The results of five selected areas are represented in the chart below. High percentages of the student teachers (ST), cooperating teachers (CT), and the university consultants (UC) “agree and strongly agree” that candidates are well prepared, documenting candidate learning in their programs. Based on the results displayed in Figure 3, the program is considering ways to improve learning in classroom management and teaching English language learners.

Teaching Domain	Fall 05 % rated at “Agree and Strongly Agree”			Spring 06 % rated at “Agree and Strongly Agree”		
	(Number Response Rate)	ST N=69 42%	CT N=38 52%	UC N=7 50%	ST N=33 24%	CT N=77 53%
Knowledge of Content	88%	88%	92%	87%	85%	95%
Assessment	90%	80%	100%	88%	93%	100%
Classroom Management	83%	82%	71%	67%	82%	88%
Diversity - ELL	69%	73%	86%	61%	72%	88%
Professionalism	100%	98%	100%	98%	92%	88%

Figure 3. Exit Survey Results on Five Elementary Teaching Domains

Another measure used to document candidate learning is the **recruiter survey** conducted at the UNC Annual Teacher Employment Days held each year in the spring. Recruiters from 16 states attend the two-day event with over one hundred fifteen school districts represented from Colorado and over 800 individuals interviewing during the event. In 2005 and 2006 132 recruiters returned the 19-item survey that asked them to rate the preparation of UNC candidates/graduates as a group on several critical areas where competency indicates the ability to positively impact student learning. On 18 of 19 items graduates received ratings between 2.47-3.53 on a four-point Likert scale and 32% of the items were rated “above expectations. Candidates/graduates from both years received high marks for knowledge of appropriate practice in their areas of specialty, demonstrating an appropriate disposition regarding working effectively with others, and demonstrating a well-developed philosophy about working with children. The recruiters were also asked to respond to the question, “Was this candidate competitive for a position in your district?” The chart in figure 4 shows that 94% of the interviewers responded that the UNC candidates/graduates were competitive for positions in the recruiters’ districts.

2005 and 2006 Recruiter Survey Question

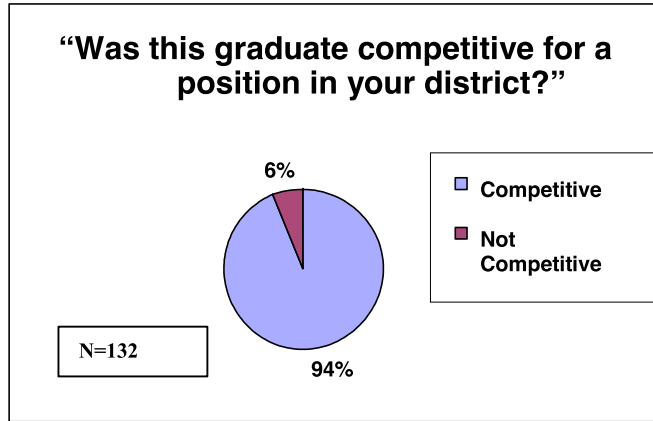


Figure 4. Recruiters' Responses to Survey Question

The College of Education and Behavioral Sciences also studies graduates' employment rates and satisfaction through **alumni surveys**. Each year UNC Career Services and the Office of Budgets and Institutional Analysis conduct a survey of Bachelor Degree recipients and Advanced Degree recipients from the previous year. Information is sought on employment rates, salary, use of Career Services and graduate school attendance. Data are collected through two mailings and phone contacts twelve months after graduation. Statistics are reported in an Alumni Survey Report by department and a summary is given for each college. The College of Education and Behavioral Sciences uses the survey results to assist currently enrolled and prospective students in selecting academic majors and in making career decisions and in assisting academic departments with their planning and evaluation activities.

The 2004-2005 Undergraduate Alumni Survey was sent to 1,930 graduates. The response rate was 60%. Among graduates in teaching, 96.9% were employed or attending graduate school and 77.4% were employed in their preferred field. Elementary licensure graduates reported that 97.6% were employed or attending graduate school and 77.4% were employed in their preferred field. Other highlights from the survey report include: 90.7% stated UNC program enhanced their ability to get/keep a job, 88.9% stated employment is related to major, and 96.3% stated that overall, their UNC instructional program met their educational goals.

Three Years of Undergraduate Alumni Survey Results for Education Graduates

Academic Program	Total Graduates	% Response Rate	% Employed Outside of Preferred Field	% Placed in Preferred Field	% Placed *
Liberal Arts Degrees and Secondary and Elementary Licensure	02-03 294	02-03 73.8	02-03 18.9	02-03 65.9	02-03 95.3
	03-04 339	03-04 69.0	03-04 10.7	03-04 78.2	03-04 96.5
	04-05 342	04-05 67.3	04-05 11.7	04-05 77.4	04-05 96.9

*Total of those employed in their preferred field, employed outside of preferred field, and those attending graduate school.

Figure 5. Undergraduate Alumni Survey Results for Education Graduates, 2002-2005

The alumni survey results over the last three years indicate approximately 75% of our graduates with liberal arts degrees and secondary and elementary licenses are hired in their preferred field of teaching. This high percentage of teacher employment indicates that UNC teacher graduates are selected because of the quality of their undergraduate preparation and their solid preparation as a teacher.

Examples (Including Graphics) of Evidence That Demonstrate the Programs' Positive Impact on Graduates' Ability to Improve P-12 Pupil Learning

Perhaps the single most important and direct measure of the impact our candidates have on their students' learning is documented in the **teacher work samples** employed during student teaching in both the elementary and secondary programs. Each teacher candidate must develop and deliver a series of lessons and determine the impact on pupil learning through pre- and post-assessments. Teacher candidates then reflect on their performance in light of their pupils' performance, noting how they will use assessment to further inform instruction.

Analysis of data from the **elementary program's** initial work sample demonstrates the reading achievement of the students taught by our candidates. The candidates conduct daily small group reading instruction for ten-weeks during their initial student teaching experience. Candidates are required to evaluate ongoing progress with one of the pupils in the small reading group identified by the classroom teacher as experiencing difficulty with reading. The candidate conducts a pretest on this one pupil by listening to the student read orally, completing a running record of student's miscues or errors, and determining the student's instructional reading level. Candidates use the Reading Recovery Reading Levels to determine the instructional level where a gain in 10-12 reading levels is equivalent to approximately one grade-level of reading growth. The candidate's small group reading instruction conducted during the next ten weeks focuses on the specific needs of the small group, especially on the student the candidate is monitoring. Candidates may include instruction in phonemic awareness, phonics, decoding strategies, vocabulary and/or comprehension. A post-test is administered to the assigned reader at the end of the ten weeks to determine the student's current instructional reading level and to establish the number of reading levels the student progressed during the focused small-group instruction.

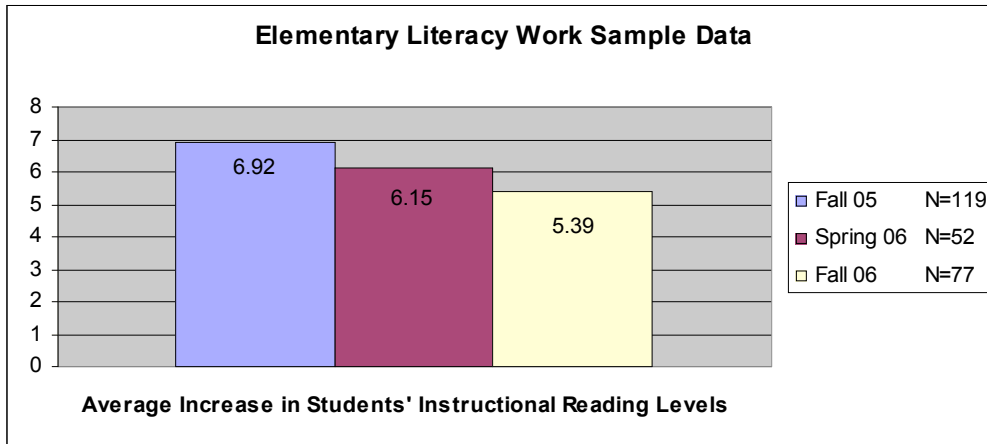


Figure 6. Increase of Elementary Students' Reading Levels in Teacher Work Samples

That candidates positively affect pupils' reading levels is documented in Figure 6. On average, students improved by 5.39-6.92 reading levels or one-half grade level of reading proficiency in the ten weeks of small group instruction. There are undoubtedly numerous factors in the school and home contributing to this reading achievement. Based on these unusually high growth rates, we strongly believe that the candidates' reading instruction during their student teaching contributed to this success. Although the increase in reading levels was lower in fall 06, the differences between the groups are not statistically significant. Faculty will continue to study the trends in the increase of reading levels over time.

In the **secondary program** the faculty members employ statistical measures of effect size to determine candidate effect on pupil learning in the advanced work sample. The effect size is the standard amount that scores change from the pre to post test. It tells us if the students did better on the post-test (a positive effect) and to what degree (how much better). According to Cohen, 0.2 is indicative of a small effect, 0.5 a medium, and 0.8 a large effect size. Secondary work samples grouped by content area document candidates' teaching had a large effect size (above 0.8) on student content learning. Figure 7 below summarizes the substantial effect sizes from the Secondary PTEP Advanced Work Samples across the content areas for the 2005-2006 and 2006-2007 academic years.

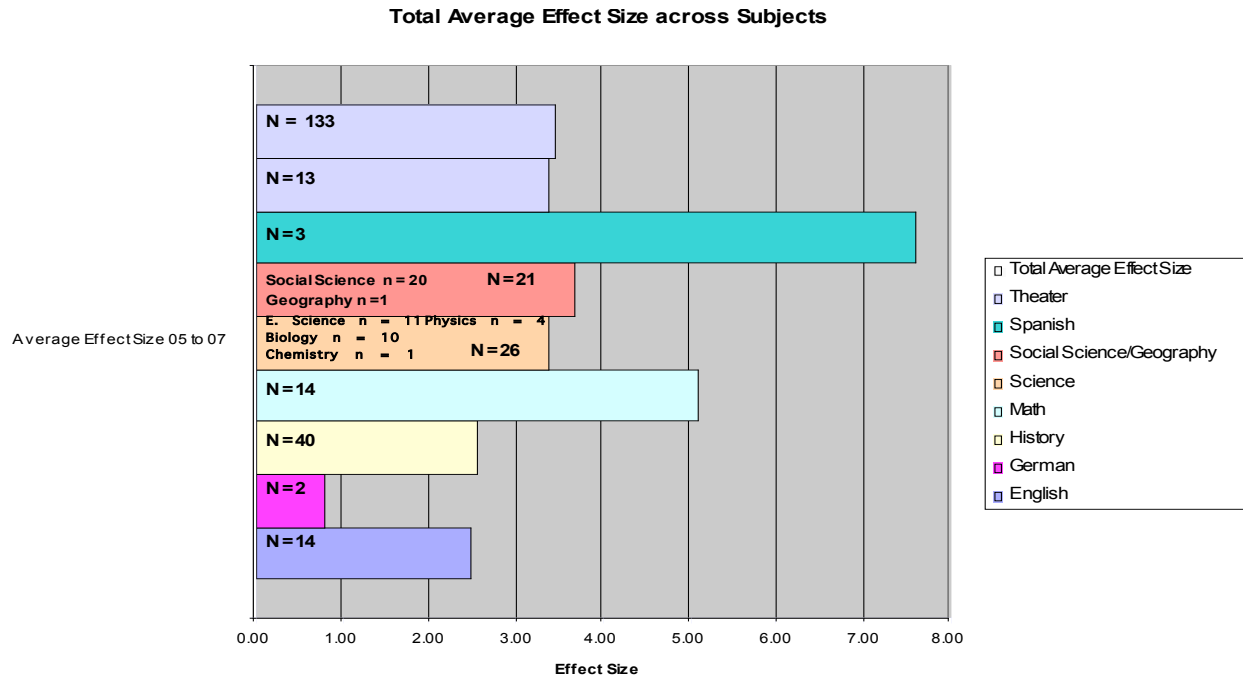


Figure 7. Average Effect Size of Student Learning Across Secondary Content Programs

Another measure indicating graduates’ ability to improve P-12 learning is a **first and second year teacher survey** administered for the first time in spring 2006. The UNC College of Education and Behavioral Sciences Dean’s Office conducted an evaluation of the preparation of teacher graduates from the elementary on-campus program and the elementary program delivered at the Center for Urban Education (CUE) in Denver. Graduating seniors were also included as a comparison group in the study to determine if the seniors’ perception of their preparation program differed from program graduates.

The survey, consisting of 100 items in electronic format, was sent to 606 first and second year teachers and on-campus seniors in the two programs. Teachers and graduating seniors were asked to rate their preparation in the following 10 domains: Literacy, Mathematics, Standards and Assessment, Content Preparation, Classroom Management and Instructional Management, Individualization of Instruction, Technology, Diversity, Professionalism, and General Program Quality. Participants rated their teacher preparation at UNC on a 4-point Likert scale (1=Not Well Prepared; 2=Somewhat Prepared; 3=Adequately Prepared; and 4=Very Well Prepared). There were 121 survey participants for a response rate of 20%.

The data reveal that first and second year teachers rate their teacher preparation as “adequately prepared” or better on most domains. The results displayed below (see Figure 8) show the graduates of the Center for Urban Education rated themselves significantly higher than the on-campus group in

classroom management, assessment and overall program quality. It is interesting to note the seniors rated themselves significantly higher than the on-campus graduates in diversity, standards, and assessment. This might suggest that the seniors' perceptions of their preparation need to be checked by the reality of first and second year teaching. The results of this survey show that UNC first and second year teachers report themselves as adequately prepared to impact their students' learning.

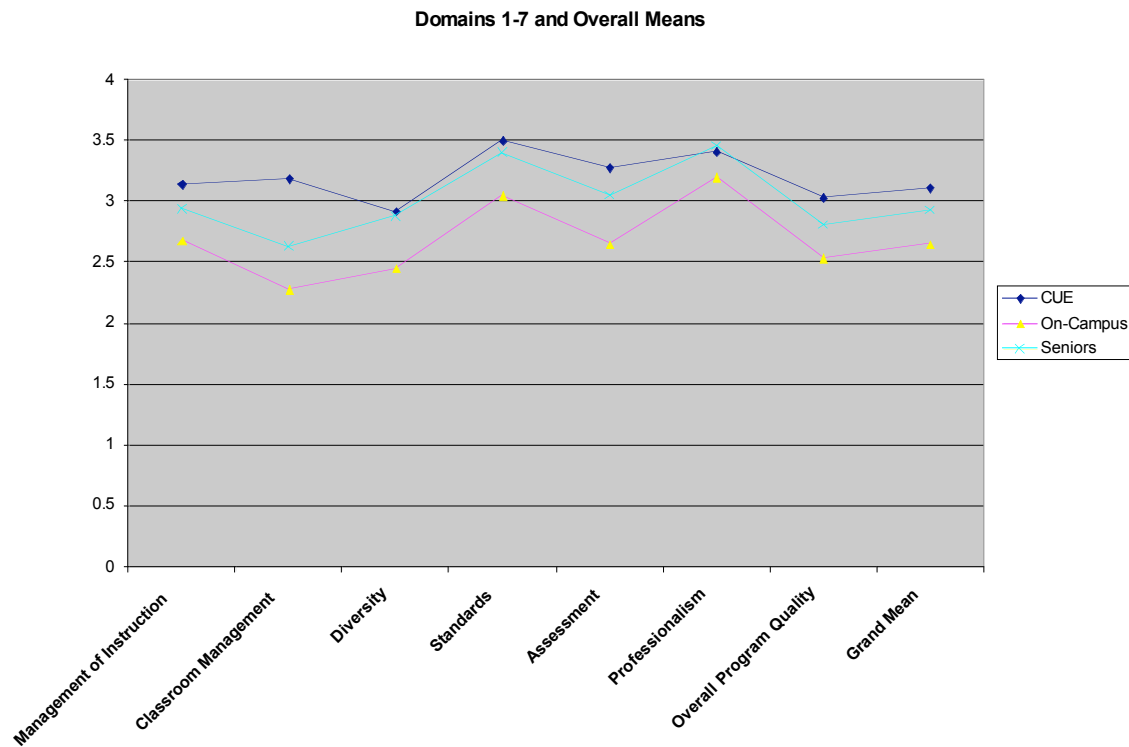


Figure 8. First- and Second-Year Teachers and Seniors Evaluation of UNC Teacher Preparation Program on Seven Domains.

The principals of the above-mentioned first and second-year teachers were also surveyed to determine how well they rated the UNC teachers in their effectiveness as teachers. Forty-nine principals were asked to evaluate UNC teachers on 24 areas of classroom teaching; 18 principals completed the electronic **principal survey** for a response rate of 37%. The lowest three ratings (with 73-75% ratings for “meets” or “above expectations”) were for classroom management skills, use of various forms of assessment to measure progress, and ability to modify instruction based on assessment. On the other 21 items, principals rated UNC graduates at “meets or above expectations” with ratings between 83-100%. On the following teaching domains all principals rated candidates at “above expectations”: demonstrates a caring disposition and maintains rapport with learners, develops instruction that integrates one or more content areas in an appropriate way, facilitates policies and practices that create and maintain a safe, supportive learning environment, and works effectively with educators and others in the community to promote the well-being of children and families (see Figure 9). The results of the principal survey corroborate the findings of the first- and second-year teacher survey that UNC elementary teachers are effective in their classrooms. These data are shared with program faculty who will make appropriate changes to the curriculum and field experiences.

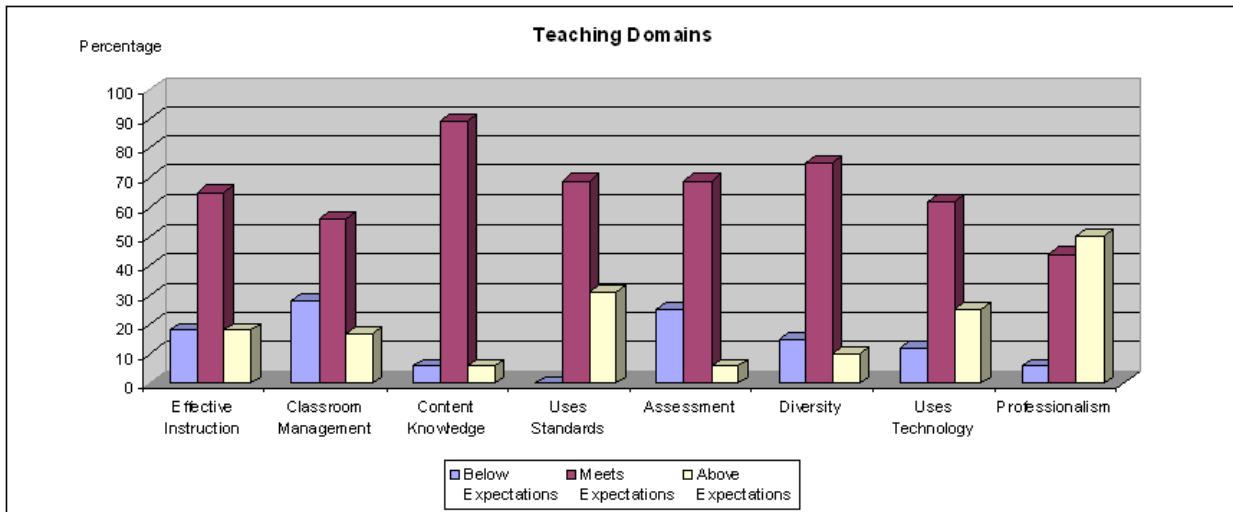


Figure 9. Principals' Evaluation of UNC Teachers on Eight Teaching Domains

Concluding Comments

The UNC teacher preparation programs use innovative assessment and evaluation measures to advance the mission of the programs and to ensure the preparation of high quality teachers. Information presented in this nomination demonstrates that the programs are engaged in systematic and continuous assessment of program and candidate quality. Faculty and administration collect data from several sources, analyze these data, communicate the data to appropriate constituents, and triangulate and combine the data to inform program improvement. The data presented in this nomination indicate the UNC Elementary and Secondary Programs are providing high quality teacher preparation.

All UNC teacher preparation programs are committed to the College mission of developing education professionals with the skills, knowledge and dispositions necessary to work effectively as teachers and leaders in the classroom and in a diverse society. In coursework and classroom experiences, teacher candidates benefit from clearly focused learning activities, targeted learning outcomes, and specific assessment feedback. Through the electronic portfolio and other innovative assessments, teacher candidates receive essential guidance about standards in the profession and their own personal progress toward these standards. Teacher candidates show just how useful these tools are in their own learning, and the assessments reveal that their own pupils are learning at exceptionally high rates as well.