Inquiry Brief Draft

Wells College Education Program

Approved: 2/22/2013
Authors: Susan Talbot (primary) Director, Childhood and Adolescence Education
Sara Levy Visiting Assistant Professor
Susan Wansor Lecturer and Field Experience Coordinator
Additional assistance was provided by Laurie Rocker, Education Program Administrative Assistant
Susan Talbot, Director of Childhood and Adolescence Education
Sara Levy, Visiting Assistant Professor
Susan Wansor, Lecturer and Field Experience Coordinator

Table of Contents TEAC Inquiry Brief

Author	S		Page 1
Section	1: Wells College Overview	w	Page 3
	Education Program Ov	erview	Page 3
Section	2: Claims		Page 14
Section	3: Description and Ration	nale of Assessments	Page 22
	Reliability and Validity	of Measures	Page 30
Section	A: Results Claim 1 Claim 2 Claim 3 Claim 4		Page 32 Page 33 Page 39 Page 45 Page 53
Section	5: Discussion and Plan		Page 61
Section	6: References		Page 67
Append	dices		
	Appendix A Appendix B Appendix C Appendix D Appendix E Appendix F Appendix G Appendix H	Internal Audit Evidence of Institutional Capacity of Program Quality Faculty Qualifications Program Requirements Inventory of Evidence Local Assessments Case Studies Miscellaneous	

TEAC

Wells College Inquiry Brief

Section 1: Program Overview

WELLS COLLEGE OVERVIEW

The Wells College Mission Statement

The mission of Wells College is to educate students to think critically, reason wisely, and act humanely as they cultivate meaningful lives. Through Wells' academic program, residential atmosphere, and community activities, students learn and practice the ideals of the liberal arts. The Wells experience prepares students to appreciate complexity and difference, to embrace new ways of knowing, to be creative, and to respond ethically to the interdependent worlds to which they belong. Committed to excellence in all areas of its reach, Wells College equips students for lifelong learning and for sharing the privileges of education with others.

Wells Course Catalog, 2012-2013,

http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf

Wells College is a nationally recognized private coeducational liberal arts college located in Aurora, New York, on the eastern shore of Cayuga Lake. It was established in 1868 by Henry Wells, founder of the Wells Fargo and American Express Companies and was chartered as a four-year college for women. Wells became a co-educational college in 2005 and today has a student population of 532 students, approximately 65% women and 35% men. With a faculty of around 80 (including those tenured or on tenure track, visiting faculty, and part-time faculty), Wells provides small classes and an academic program that allow students substantial freedom to create unique educational experiences, preparing them for leadership in their chosen fields and communities. In an age of increasing specialization and constant change, the College is committed to providing students a liberal education that allows them to construct broad knowledge, develop transferable skills, and learn to adapt.

EDUCATION PROGRAM OVERVIEW

The Wells College Education Program Mission Statement

The Wells College Teacher Education Program proceeds from the belief that classroom teaching done well is enormously complex. Mastery of subject matter is necessary but hardly sufficient; to help their students understand and embrace important knowledge and skills, teachers must understand learners as diverse, intellectual, emotional, and social beings. To help our students develop this understanding, we take advantage of and build upon the foundation laid by a Wells general education—the ability and inclination to engage with (rather than retreat from) complexity, to examine arguments critically but also to imagine constructively, and to exercise a strong ethical sense. We aim to graduate outstanding pre-service teachers who can model these liberal arts traits for their own students, who can draw upon a rich base of instructional principles and practices, and who collaborate with others in order to fulfill one of the major goals of Wells College: "sharing the privileges of education with others."

Wells Education Program Assessment Plan

Our Program

The Wells Secondary Education Certification Program was approved more than thirty years ago by the Wells College faculty (see Appendix A, Internal Audit, p. 25) for a complete description of the program approval process). The Elementary Education Certification Program followed in 1991. In 2011 the name of the programs were officially changed to the Wells College Childhood Certification Program and the Wells College Adolescence Education Program. A lot has changed over the years, but many of the original guiding principles have remained the same.

At Wells College the teacher preparation programs are completely integrated into the fabric of the liberal arts experience. As noted in the Wells catalog, "Each Wells student must . . . elect a major to assure exploration of an area of interest, in depth, and to develop the knowledge and skills involved in the mastery of a field." (Wells 2012-2013 Catalog, p.32) http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf

Students may also engage in additional in-depth explorations through the completion of minors. The 2012-2013 catalog notes 39 different minors from which students could choose (p. 34). Childhood Education and Adolescence Education are two of these minors.

Choosing a Childhood or Adolescence minor alone does not lead to certification. These minors must be paired with a relevant, approved major that provides the appropriate liberal arts

foundation. Those in the Adolescence Certification Program must major in the content they will be teaching. Social studies certification students major in history, math certification students major in math, etc. Those seeking Childhood Certification major in one of the content areas registered with and approved by the New York State Education Department: math, computer science, physics, English, psychology, history, economics, international studies, sociology & anthropology, women's and gender studies, or an individualized major. The Childhood Certification Program also requires that students complete an additional 30 semester hour multi-subject core that provides a breadth of learning across the key content areas of English, math, science, social studies and foreign language. Students are encouraged to plan early and use the courses from the liberal arts sequence and their projected major to meet as many of these requirements as possible. The courses that students take as part of the Childhood and Adolescence Certification Programs are developed by the faculty to meet NYS certification requirements. At Wells they may also be used to meet requirements of the Wells foundation sequence or, in some cases, the student's chosen major.

Table 1.1
Wells College Teacher Education Programs

Program	Certification
Childhood (grades 1 – 6)	Initial
Adolescence (grades 7-12)	Initial
Biology	
Chemistry	
English	
Math	
Physics	
Social Studies	
Spanish	

In addition to the Education core of courses packaged within the Childhood and Adolescence minors, the approved liberal arts major, and the Childhood multi-subject core, students must complete a full semester of student teaching in which they teach their content at two appropriate grade levels. This student teaching experience is in addition to the courses defined in the Childhood and Adolescence Education minors. Additional requirements for certification include EDUC 408: *Student Teaching Reflective* Seminar, a 2-3 semester hour internship (80-120 work hours), the completion of three workshops (*Violence and Prevention, Child Abuse*, and *Drug and Alcohol Awareness*) and the passing of all New York State Certification Exams. These additional requirements are for certification only. A student may complete the academic requirements of an Educational Studies Minor in Childhood or Adolescence Education (Wells 2012-2013 catalog, p. 68) http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf and graduate without a New York State teaching certification.

Another way that the Education Program is linked directly with the broader liberal arts program is through its participation in the liberal arts foundation sequence, Sustainable Community. All students entering Wells as first-year college students must complete this sequence of courses. Developed to explore what it means to be a member of interconnected communities, this sequence focuses on a range of learnings that lead to the development of communication skills, quantitative skills, scientific reasoning, an appreciation of languages and cultures and the skills that support the application of these learnings in authentic settings. This sequence includes 12 semester hours of themed seminars along with 25-32 semester hours in courses and experiential learning opportunities that address the learning noted above (see 2012-2013 Wells College Catalog, p. 30). http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf As part of their first year experience all students must complete a course designated as a "Crafting Meaningful Lives" course. As noted in the Wells 2012-2013 catalog, "These writing attentive seminars examine the way engagement in social issues, political action, creative work . . . and the pursuit of knowledge bring meaning and focus to individual lives" (p. 29). The Education course Teaching in a Diverse Society (EDUC 105) is currently identified as a "Crafting Meaningful Lives" course. This is a required course for all students completing the Childhood or Adolescence Education minors. As reference above, as part of their Sustainable Community Sequence students must also participate in experiential learning (3-8 semester hours). EDUC 290 and 390 (*Internships in Education*) and EDUC 410 (*Student Teaching*) may be used to fulfill this requirement.

The Wells Education Program is, and always has been, a field-based program. An important influence on prospective teachers' learning about curriculum development, instructional methodology and child development is linking that learning to experiences in real classrooms. Even more important is the building of understandings through the thoughtful creation of sequential experiences that are tied to course goals and outcomes (Darling-Hammond et. al, 2005). Wells remains committed to providing numerous, relevant experiences in the classroom that directly link theory to practice. Every education course has a field experience attached to it. The sociology and psychology courses that support the Education Program (Sociology of Education, Child Development etc.) have had, on occasion, field components, but these experiences are provided only rarely and are not included in the Education Program field hours. In their first education course (EDUC 105—Teaching in a Diverse Society) students observe in classrooms and interview teachers, principals and students as they look for practical applications of the theories and ideas they have been studying. In EDUC 315 (Inclusive Classroom) students complete a child-study project that involves working directly with a struggling student. In EDUC 302 (Literacy for Diverse Upper Elementary Classrooms) and 332 (Reading and Writing in the Content Areas II) students provide supportive instruction in classrooms as well as plan and implement literacy-based lessons. In their senior year students generally complete their final methods course (EDUC 405: Elementary Methods in Math and Science or EDUC 406: Instructional Strategies in the Secondary Classroom). In these courses students observe teaching/learning situations, analyze the teaching decision-making process, develop and teach model lessons, and develop an integrated curriculum unit. There is a focus throughout the methods courses on differentiating instruction and the curriculum development process is based on the Understanding by Design model (Tomlinson, 2001; Tomlinson & McTighe, 2006). In addition to the 106 hours of Field work spread out across the various courses prior to student teaching, students must also complete an Education Internship that is 2-3 semester hours (80-120 work hours). These internships are based on student need and

designed by students and faculty working together in order to supplement the field work imbedded in Education courses. Finally, in their semester-long student teaching experience (EDUC 410: *Student Teaching*), students apply the full range of teaching responsibilities including the development and implementation of an integrated curriculum unit.

Another unique aspect of the Wells Education Program is its size. Thirty-two students completed either the Wells Childhood or Adolescence Certification Program over the past five years. An additional 16 students completed one of the Education minors but did not complete a certification program. The average cohort group of the combined certification programs over the last five years was 6 students. The size of the Education Program has clearly provided us with some challenges. Given that it is not uncommon to have only one student from any specific content area in a cohort group, we have had to design courses to meet the needs of a range of content areas. On the positive side it has also provided us with a unique opportunity to model content integration and capitalize on our strong liberal arts structure. We have also developed authentic avenues for content specific learning. Students in our methods courses (EDUC 331: Reading and Writing in the Content Areas II, and EDUC 406: Instructional Strategies in the Secondary Classroom) spend a total of 60 hours in subject specific classrooms relevant to their certification area as they complete assignments designed to bridge theory to practice. Students analyze lessons, design lesson plans, develop curriculum units and reflect on their experiences.

The small size also provides the Wells Education Program with an opportunity to know our students well. Faculty act not only as instructors, but as mentors. The presence of strong mentors is an important element of successfully learning effective instructional practice and classroom management skills (LePage et. al, 2005; Feiman-Nemser, 1996). Although the students have numerous opportunities to be mentored by teachers in the field, the Wells Program provides the frame and context for mentoring to occur throughout the students' courses and campus experiences as well. If mentoring is to be truly effective it must be linked to a clear vision of good teaching, guided by an understanding of teacher learning, and

supported by a culture that encourages collaboration and inquiry (Feiman-Nemser, 1996). The Education Program is set up to provide just that. The structure of our program allows faculty to have multiple course contacts with students over the years. The instructor a student has in EDUC 105, *Teaching in a Diverse Society*, might also be the instructor a student has in EDUC 405, *Elementary Methods in Math and Science*. This same instructor could feasibly supervise the student in the student teaching experience. At Wells, full-time faculty share the responsibility of supervising student teachers and teaching their final education course, EDUC 408: *Student Teaching Reflective Seminar*. There is an academic and professional environment of mentoring throughout the Program. Students have frequent formal and informal contacts with the Education faculty. Faculty identify students' strengths and weaknesses, enabling them to scaffold learnings as they guide them to the program outcomes. Extended opportunities are provided for students to be successful on assigned tasks. These opportunities are linked to inquiry, faculty feedback and on-going consultation. Opportunities for field experiences are often tailored to students' needs and created to extend and refine learnings for individual students.

The goals and outcomes of the Education Program (Childhood and Adolescence) can be found in the Wells College Education Program Assessment Plan and in Appendix F.7, our in-progress assessment map. These were developed by the Education faculty (revised in 2011) and are based on New York State Teaching Standards and InTASC Model Core Teaching Standards (Interstate Teacher Assessment and Support Consortium). The domains and general goal areas are:

Planning and Preparation

Content Knowledge

Assessment

Instruction

Learning Environment

Professional Responsibilities

Professionalism and Collaboration

Program Completers and Faculty Demographics

Tables 1.2, 1.3, and 1.4 are presented below. Table 1.2 indicates the number of program completers in each program area and, for the adolescence program, each content area. Table 1.3 shows the number of full-time and part-time faculty currently teaching in the program. Table 1.3 indicates the gender and ethnicity of the program completers.

Table 1.2
Childhood and Adolescence Program Completers 2007-2012

Cimanooa	cinanou and Adolescence Frogram completers 2007 2012									
Program	Childhood	Adol.	Adol.	Adol.	Adol.	Adol.	Adol.	Adol.	Adol. &	
completion	Total	Total	Biology	English	French	Social	Math	Spanish	Childhood	
date						Studies			Total	
2007-2008	4	5	1	0	0	0	3	1	9	
2008-2009	3	0	0	0	0	0	0	0	3	
2009-2010	2	6	0	1	0	3	1	1	8	
2010-2011	3	5	1	2	0	1	0	1	8	
2011-2012	1	3	0	1	0	1	1	0	4	
2007-2012	13	19	2	4	0	5	5	3	32	
Total										

Table 1.3
Education Program Faculty by Ethnicity and Gender FT= Full-time PT= Part time

Year	Total		White	2	Black		Hispa	nic	Asian		Other	•	Fema	le	Male	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
2012-13	6		5				1						6			

Table 1.4
Program Completers 2008 to 2012
Student Demographics by Ethnicity & Gender

Area of Cert	Total	White	Black	Hispanic	Asian	Other	Female	Male
Childhood 1-6	13	12	0	0	1	0	13	0
Adolescence 7-12	19	18	0	0	0	1	16	3
Biology 7-12	2	2	0	0	0	0	2	0
English 7-12	4	4	0	0	0	0	4	0
History 7-12	5	5	0	0	0	0	3	2
Mathematics 7-12	5	4	0	0	0	1	4	1
Spanish 7-12	3	3	0	0	0	0	3	0
Childhood & Adolescence Total	32	30	0	0	1	1	29	3

The Education Program Admission Process

For a number of years, the Wells Education Program maintained an informal approach to the screening of certification candidates. Students planning to attend all four years at Wells were encouraged to complete EDUC 105, Introduction to Teaching in their freshman year. At the completion of this course students were polled as to their intentions. Were they interested in completing the certification program and receiving initial certification as part of their undergraduate program? Were they interesting in completing only a minor and perhaps seeking certification at the graduate level? Were they only interested in sampling additional courses within the Education Program? Students who expressed interest in completing the certification program were then told to set up an interview with the program director. Specific program requirements were also discussed in that conversation. These basically entailed maintaining a 2.8 overall GPA and a 2.8 GPA within the Education Program. No Education courses could be counted towards certification if the grade received in that course was below a "C." Students were provided with a checklist of the required courses and a tentative plan was made for when these would be completed.

Over time, even dealing with a small number of students, we found the process inefficient and limited. We also desired a protocol that would allow us to track students over time and provide checkpoints along the way.

In the 2009-2010 academic year the Education Program piloted a basic system for applying to, and monitoring progress through, the certification programs. Students now submit the Education Program Statement of Intention form at the completion of EDUC 105, *Teaching in a Diverse Society*. This form requires students to specify what they hope to accomplish through the Education Program over the course of their college career. At that point they are simply laying out their intention. Do they intend to complete the Childhood or Adolescence Certification Program, complete the Childhood or Adolescence Education Minor only or simply take an occasion Education course? This form is available on-site or upon request.

Once students have completed EDUC 105 and we have a record of their intentions, the Education faculty begins to monitor their progress through the program. Although students continue to work with the official advisor assigned to them upon entering Wells, the Education Program Director informally advises students who are moving towards certification and/or one of the Education minors. We work to stay connected and remind individuals to register for courses that are appropriate for their freshman and sophomore years. In the spring of their sophomore year we hold a meeting for any students interested in continuing on in the certification programs. Those students must then apply to the program, verifying that they have completed a minimum of 40 hours of coursework with a minimum GPA of 2.7 and earned a "B-" or higher in EDUC 105. Students are also required to provide the name of a college faculty member who could provide a recommendation on the student's ability to "think carefully, communicate clearly, and act responsibly and ethically." In addition students must write a statement describing why they would like to be in the certification program. Students who fail to meet one or more of the requirements may provide a written statement explaining why they did not meet the criteria and what their specific plan is for addressing deficiencies. This statement is taken into consideration when students are reviewed for admittance into the program. This form is available on-site or upon request.

Once students have been formally admitted into the Education Program they are assigned an official advisor. At Wells, students are also assigned advisors when they declare their minor. This may take place prior to acceptance into one of the certification programs since students at Wells may minor in Childhood or Adolescence Education without ever seeking certification. Students intending to seek certification frequently declare their minor prior to formal acceptance into one of the certification programs since they may intend to complete their minor in Education regardless of being accepted into the Program. In these cases students receive an advisor immediately upon declaring their minor. It is important to note that Education Program advisors are not the sole academic advisors for students in the Education Program. Students are also assigned a major advisor once that major has been declared.

Education advisors work closely with major advisors to make sure that all general, major and Education Program requirements are being met.

Students formally accepted into one of the certification programs may begin taking the designated "methods" courses for their certification area—EDUC 301, *Primary Literacy and Diverse Learners;* EDUC 302, *Literacy for Diverse Upper Elementary Classrooms;* EDUC 331, *Reading and Writing in the Content Areas I;* EDUC 332, *Reading and Writing in the Content Areas II;* EDUC 405, *Elementary Methods in Math and Science;* and EDUC 406, *Instructional Strategies for the Secondary Classroom.* Currently students who are have declared a minor in either Childhood or Adolescence Education may begin taking these "methods" course once they have achieved junior status. The Education Program faculty is currently reviewing the course requirements for the Childhood and Adolescence minors and some modifications to these minors may be made before the 2013-2014 academic year.

After the completion of the spring semester, junior year, students apply for student teaching. This application requires that student document a minimum 2.7 overall GPA and a B- or higher in all methods courses taken. Those seeking Childhood Certification must document a "multisubject" average of at least 2.7 while those seeking Adolescence Certification must document a content area GPA of 2.7 or better. Students must also verify that they have completed the three mandated workshops (the *Child Abuse, Alcohol and Drug Awareness,* and *Violence and Prevention* seminars) and have had a criminal background check. Again, students who fail to meet one or more of the requirements may provide a written statement to be reviewed by the Education Program, explaining why they did not meet the criteria and what their specific plan is for addressing deficiencies. This form is available on-site or upon request.

The changes in Program requirements that occurred in 2009-2010 came about with extensive discussion within the Education Program faculty. One important area of discussion was the GPA and course grade requirement. The original GPA requirement was 2.8. Upon review of the Wells College description of letter grades and their meaning, that requirement was reduced to

2.7. Grades at Wells College are recorded in terms of the letters A, B, C, D, F with additional gradation for the letters "A" through "D," indicated by plus or minus signs. The 2012-2013 Wells College Catalog notes that "Any grade in the 'B' range indicates work of good quality; such work will often show some of the qualities that characterize 'A' work" (p. 47). http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf

For computation of academic standing, a grade point system is also used. In this system a B-equals 2.7. The Education Program faculty therefore decided to accept the standard of "good quality" when reviewing students' GPA and course grades. And since any grade within the "B" range indicates work of good quality, the Program settled on B- or 2.7 as its requirement. That said, we are quick to encourage our students to go above and beyond that minimal requirement. Most of them, as noted in the Results section, do.

Section 2: Our Claims

This section presents the claims the faculty make about the program. Included is a description of the claim and the rationale for the claim. For each claim the sources of evidence are identified and related to the curriculum at Wells College.

The Wells College Education Program faculty makes four claims about our program:

Claim 1: Graduates of our program are proficient in subject matter knowledge and apply this knowledge in their teaching.

Claim 2: Graduates of our program understand and apply the necessary pedagogy and methodology to meet the diverse needs of students.

Claim 3: Graduates of our program are responsive, reflective professionals who have the knowledge and skills to serve their students.

Claim 4: Graduates of our program utilize relevant teaching technologies, their knowledge of students' individual and multi-cultural differences, and opportunities for continued growth in order to serve their students.

To develop these claims the faculty engaged, through a series of meetings, in an exploration of the Model Core Teaching Standards developed by the Interstate New Teacher Assessment and Support Consortium (InTASC) along with the New York State Teaching Standards (fall, 2010). This exploration led to the revision of our Education Program Goals and Outcomes noted above (spring, 2011). The claims were developed to clearly reflect the new program goals and focus on four major areas: Subject matter knowledge; pedagogical knowledge; caring, effective teaching skills; and the cross-cutting themes of teaching technologies, individual and multicultural differences and learning to learn.

Claim 1: Subject Matter Knowledge

Graduates of our program are proficient in subject matter knowledge and apply this knowledge in their teaching.

The purpose of a Wells College Education is "to think critically, to reason wisely, and act humanely . . ." (from the Wells College Mission Statement). All students participate in rich curricula supported by liberal arts majors that emphasize the importance of thinking deeply and critically about subject matter. The Wells College mission statement, institutional goals and academic program goals were developed by an ad hoc faculty committee and approved by the full faculty in 2001. They were revised and reapproved in 2003 using the same process. The current Wells College Academic Program Goals state that a Wells College education is designed to enable students to:

- Examine enduring and contemporary questions that shape human understanding.
- Use the scholarly and creative traditions of the liberal arts and contemporary technologies to locate and evaluate information.
- Communicate reasoned points of view to inform and persuade a variety of audiences.
- Incorporate an understanding of diversity in their academic work and as members of a learning community.

- Develop an appreciation of languages and cultures in a global context.
- Acquire knowledge based on scholarship and research about women.
- Engage in collaborative practices in the classroom, in campus life, and in the community at large.
- Develop through knowledge of basic principles, methods of inquiry and current issues in an academic Field of study.

Wells College 2012-2013 Catalog (p. 28)

http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf

It is important to note that the Educational Policy Committee is currently working to the revise the Academic Program Goals.

As noted earlier, the Wells College teacher preparation programs are integrated into the fabric of the liberal arts experience. The liberal arts major required for Adolescence Certification (biology, chemistry, English, history, math, physics or Spanish) and the thirty-hour multi-subject core required for Childhood Certification play important roles in the development of an indepth subject area background. As the Academic Program Goals above, and the Content Statements noted in the Internal Audit reflect, this background goes beyond the basic knowledge and skills of the discipline. Faculty in the liberal arts push students to question and analyze ideas from diverse perspectives so that they will understand the content deeply. They engage learners in applying these conceptual understandings and methods of inquiry in meaningful contexts relevant to the discipline. All students complete capstone experiences in their majors, providing them an opportunity to engage in an individual, in-depth exploration of their content through a variety of critical approaches. In addition the English, chemistry, biology, history and psychology majors all require students to pass comprehensive examinations in their major—a key element for ensuring subject-matter understanding. Some of these examinations are faculty created but both biology and psychology use ETS Major Field tests in their respective content areas.

In order to be admitted into the one of the Wells Certification Programs at the end of their sophomore year, students need to show a record of success in coursework by having a minimum GPA of 2.7. In order to be admitted into student teaching at the end of their junior

year, students need to have a 2.7 in their chosen content area (Adolescence Program) or multisubject core (Childhood Program). Transcripts are submitted by the applicant and evaluated by the Program Director.

Education courses provide students with opportunities to apply their subject-matter knowledge in a variety of pedagogical conversations and classroom situations. In EDUC 301, Balanced Literacy I, students in the Childhood Program engage in their Before, During and After Reading Project that integrates the content of social studies with language arts. The content of social studies is also the focus of the WebQuest Analysis Project in EDUC 301. EDUC 331, Reading and Writing Across the Content Areas, has a similar Before, During and After Reading project that integrates Adolescent level content (in all key content areas) with language arts. Their Trade Book Project focuses on the use of trade books within the content areas. Most assignments and assessments in EDUC 332, Reading and Writing in the Content Areas II, integrate adolescent level content with language arts. Students create WebQuests, engage in a graphic organizer project and apply their learning in content relevant classes in area schools for their Field Experience Projects. In EDUC 405, Elementary Methods: Teaching Math and Science, students engage in discussions and experiences exploring effective pedagogy and teaching techniques within the context of math and science. Students create lesson plans, develop math/science curriculum units, and teach in math/science classrooms. In EDUC 406, Instructional Strategies for the Secondary Classroom, students explore the unique aspects of pedagogy in their chosen content areas when they create lessons, develop curriculum units, and teach in appropriate content area classrooms.

We provide evidence of the content knowledge claim with students' major and overall grade point averages; scores on the NYSTCE Content Specialty Tests; scores on the content knowledge sections of the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics; student responses to question #1 of our Exit Interview Survey; responses from our graduates on the content knowledge section of our Graduate Survey; and qualitative data from our Case Studies.

Claim 2: Pedagogy and Methodology

Graduates of our program understand and apply the necessary pedagogy and methodology to meet the diverse needs of students.

The Wells Education Program expects students to apply pedagogy and instructional methodology that is supported by research and best practice. We believe that teaching is a decision-making process (Hunter, 1994) and that these decisions should be based on relevant, proven theory and practice (Marzano & Pickering, 1997; Tomlinson & McTighe, 2006).

In order to prepare for this decision-making process, students in the Education program take a number of different courses that explore effective pedagogy in the context of diverse classrooms. Through course readings, assignments, and Field work students develop a range of instructional practices that enable them to work effectively with diverse groups of students. Faculty play a key role, not just by providing the information in these courses, but by also modeling effective instructional practice in the Wells classroom. In addition Wells faculty frequently act as mentors by meeting with students outside of the classroom and providing feedback, support and guiding questions. Classroom teachers who host our Field students also play an important role through their modeling, reflection and feedback.

We support the pedagogy claim with students' grade point averages within the Education Program, scores on the NYSTCE Assessment of Teaching Strategies-Written; scores on the preparation/planning sections of the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics; student responses to question #2 of our Exit Interview Survey; responses from our graduates on the planning section of our Graduate Survey; and qualitative data from our Case Studies.

Claim 3: Responsive, Reflective Teaching

Graduates of our program are responsive, reflective professionals who have the knowledge and skills to serve their students.

Teaching is an incredibly complex and demanding task. As teachers strive to teach effectively the act of reflection becomes critical for their success. Metacognition, or the ability to think about one's own thinking, can "[help] teachers become adaptive experts who can manage complexity" (Hammerness et.al). Reflective teaching is a prominent theme throughout our program and can be seen consistently within our courses. Students are asked to reflect often and in a variety of contexts. EDUC 301, 302, 331, 332, 405 and 406 all have reflective teaching projects that require students to analyze and reflect on lessons taught in local classrooms. The *Student Teaching Reflective Seminar* is a course designed to engage student teachers in ongoing reflection and goal-setting. Reflection is directly assessed through the Student Teaching Evaluation Rubric (see Appendix F.1 and F.2 INQUIRY BRIEF ATTACHMENTS 2-15-13\Appendix F.2 ST EVALUATION RUBRIC MASTER 2-16-11.xls). This act of reflection also directly supports the concept of learning to learn. As Hammermass and colleagues note in the article *How Teachers Learn and Develop*, "Lifelong learning typically involves moving beyond existing routines and often requires people to rethink ideas, practices and even values in order to change what they are doing (Hammerness et.al, 2005).

We provide evidence of the responsive, caring teaching claim with students' scores on the instruction sections of the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics; student responses to question #3 of our Exit Interview Survey; responses from our graduates on the instruction section of our Graduate Survey; and qualitative data from our Case Studies.

Claim 4: Cross-Cutting Themes—Diversity & Multicultural Perspectives, Technology and Learning to Learn

Graduates of our program utilize relevant teaching technologies, their knowledge of students' individual and multi-cultural differences, and opportunities for continued growth in order to serve their students.

The theme of student diversity and multicultural perspectives run through all education courses at Wells and are reflected in course readings, experiences and class discussions. The first

Education course that students take, Teaching in a Diverse Society, works to provide a foundation for this theme. Texts by Sonia Nieto and Greg Michie, and readings by Paulo Freire, Jonothan Kozol and more, provide insight into multicultural education. Sociology of Education examines issues of social inequalities in schools and the assimilation of ethnic minorities. All methods courses (EDUC 405, EDUC 406, EDUC 331, EDUC 332, EDUC 301 and EDUC 302) provide the direct instruction of methodology needed to address a variety of academic and cultural needs in the classroom. EDUC 315, The Inclusive Classroom, addresses a range of diversity issues and practical strategies for addressing diversity in the classroom. This course deals with the nature of disabilities, the systems in place to meet the needs of the students with disabilities, and the instructional strategies that can benefit these students. In addition, this course looks at the challenges faced by students from culturally and linguistically diverse backgrounds. Field experiences attached to all education courses provide opportunities for students to work in a variety of classrooms. Although Wells College is located in a rural community, the Education Program works diligently to provide students with diverse school experiences. We are supported by a number of local districts including the Auburn Enlarged City School District, a small urban district approximately 18 miles from Aurora. Agreements with urban schools outside of the immediate areas (The World of Inquiry School in Rochester, NY and The James Baldwin School in New York City) provide additional opportunities for internships.

The application of technology as an instructional tool in the classroom is an important focus within the Education Program. Students in EDUC 315, *The Inclusive Classroom* learn about and experience technological tools that support the unique needs of students with disabilities. Students in EDUC 275, *Using Children's Literature in the Classroom*, create book trailers with local students in elementary classrooms. Students in EDUC 331, *Reading and Writing in the Content* Areas create WebQuests that support their content curriculum, while students in EDUC 302, *Literacy in Diverse Upper Elementary Classrooms*, engage in a WebQuest analysis project. In EDUC 405 (*Elementary Methods: Teaching Math and* Science) and EDUC 406 (*Instructional Strategies in Secondary* Education) students engage in a class blogging project.

The cross-cutting theme of learning to learn is evident in the Wells mission statement and in the Academic Program Goals of the college. It is, in essence, the reason for a liberal arts education. It is also an important aspect of developing strong pedagogical and instructional skills in teachers. Successful teachers engage in research, learning communities and professional development. We also understand that a deep understanding of content only comes from continued learning, reflection, and application over time. We strive to help students understand that learning is a life-long commitment that requires consistent, thoughtful attention. To that end, opportunities to engage in learning beyond the Wells classroom are regularly made available to Program students.

- Students in EDUC 405 have regularly had the opportunity to attend the Expeditionary Learning Site Seminar in Rochester, NY where they have been able to attend workshops with experienced teachers from across the country.
- In 2011 Program faculty member, Bryan Duff, coordinated an Inclusion Symposium in Auburn, NY that was attended by our student teachers.
- A number of Wells Program students also participated in a 2011 mini-grant competition
 designed to support pre-service teachers in learning from inclusive, achieving schools
 and to encourage them to share how their thinking and practice have changed as a
 result. Two Wells students received a mini-grant through this competition and
 presented at the Wells Activism Symposium, an annual event that allows our community
 to engage with individuals who are making change in various sectors across the globe.
- As part of the Student Teaching Reflective Seminar students have visited the area BOCES
 (Board of Cooperative Educational Services) and Teacher Center to learn about the
 availability of resources and regional professional development opportunities for
 teachers.
- In spring, 2012 the Well Education Program co-sponsored with area colleges the presentation "Teaching, Learning and the Power of the Human Factor" by Michelle Shearer, 2011 National Teacher of the Year.

• Student Teachers are expected to participate in professional development and inservice training available through their host district.

Support for the cross-cutting themes is provided by students' scores on specific, identified sections of the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics; student responses to specific, identified questions on our Exit Interview Survey; responses from our graduates on specific, identified sections of our Graduate Survey; student scores on their WebQuest projects; and qualitative data from our Case Studies.

Section 3: Description and Rationale of Assessments

Section 3 provides a description and rationale for each assessment used in providing evidence of our claims. Table 3.1 provides a summary of the sources of evidence for each claim. Reliability and validity of the assessments is discussed.

Table 3.1
Assessments Organized Around Claims

Claim	Sources of Evidence
Claim 1: Graduates of our program are proficient in subject matter knowledge and apply this knowledge in their teaching.	~GPA: Major ~NYSTCE test score: CST ~NYSTCE test score: LAST ~2007-2011 Student Teaching Evaluation Rubric: Content Knowledge ~2011-2012 Student Teaching Evaluation Rubric: Content Knowledge ~Student Exit Interview Survey: Content Knowledge
	(Question 1) ~Survey of Graduates: Content Knowledge ~Case Studies
Claim 2: Graduates of our program understand and apply the necessary pedagogy and methodology to meet the diverse needs of students.	~GPA: Education ~NYSTCE test score: ATS-W ~2007-2011 Student Teaching Evaluation Rubric: Preparation ~20011-2012 Student Teaching Evaluation Rubric: Planning for Diverse Learners ~Student Exit Interview Survey: Preparation (Question #2) ~Survey of Graduates: Planning ~Case Studies
Claim 3: Graduates of our program are responsive, reflective professionals who have the knowledge and skills to serve their students.	~2007-2011 Student Teaching Evaluation Rubric: Instructional Delivery ~2011-2012 Student Teaching Evaluation Rubric: Instruction for Diverse Learners ~Student Exit Interview Survey: Instructional Delivery (Question #3) ~Survey of Graduates: Instruction ~Case Studies

Claim 4: Graduates of our program utilize relevant teaching technologies, their knowledge of students' individual and multi- cultural differences, and opportunities for continued growth in order to serve their students.

~2007-2011 Student Teaching Evaluation Rubric:
Instructional Delivery-Technology (Criterion #6)
Knowledge and Appreciation of Student Diversity
Reflection
Professionalism Criterion #4

~2011-2012 Student Teaching Evaluation Rubric: Instruction for Diverse Learners: Technology (Criterion #2b)

Planning for Diverse Learners: Knowledge of Students Reflection and Continuous Growth Professionalism Criterion #6

~Exit Interview:

Know and Apprec. of Student Diversity (Question #5) ~Graduate Survey:

Instruction Question #2- Technology Reflection and Continuous Growth

~WebQuest Project

~Case Studies

GPA: Education Program and Major

Student performance in Education course work is important evidence to consider. The Education faculty has worked diligently over the years to develop and implement coursework that is grounded in respected theory and linked to effective practice. Once course work is planned, faculty work closely with students and help them extend and refine their learning as they move through the program. Students are consistently coached and mentored as they encounter challenges, tackle issues and strive to move theory to practice. Success in these courses provides evidence of pedagogical knowledge and knowledge of instructional practice. A minimum Education Program GPA of 2.7 (B-) is required. See Section 1, p. 13-14, for more information on the development of this cut score.

Student performances in course work from supporting majors provide indications of understanding the content our Adolescence Certification students will be teaching. These majors provide our students with the important concepts, principles, debates, methods of inquiry, and issues central to the disciplines. The content statements included in our Internal Audit articulate the connections between the New York State Learning Standards, the Common Core Standards and the courses within our majors.

New York State Teacher Certification Exams

Although Wells students could technically complete Education Program minor requirements without taking and passing the New York State exams, all students must pass these required exams in order to receive Initial Certification. We believe these test scores are useful external measures of student subject-matter and pedagogical knowledge.

The 2012-2013 NYSTCE Registration Bulletin notes that . . .

The NYSTCE are criterion-referenced, objective-based tests designed to measure a candidate's knowledge and skills in relation to an established standard rather than in relation to the performance of other candidates. The explicit purpose of these tests is to help identify for certification those candidates who have demonstrated the appropriate level of knowledge and skills that are important for performing the responsibilities of an educator in New York State public schools.

Test questions were developed using textbooks, New York State learning standards and curriculum guides, teacher education curricula, and certification standards. The tests were developed in consultation with committees of New York State teachers, teacher educators, and other content and assessment specialists.

Therefore, we feel confident that the New York State designated passing score of 220 in all exams is an adequate measure of competence especially when cross-referenced with other evidence.

The Liberal Arts and Science Test (LAST) is designed to measure knowledge and skill in five areas:

- scientific, mathematical, and technological processes
- historical and social scientific awareness
- artistic expression and the humanities
- communication and research skills
- written analysis and expression

Scores from this examination help to confirm our assertion that graduates from our program have proficient subject matter knowledge needed to teach effectively. This information is especially useful when confirming this assertion for our Childhood Certification Students who require a multi-subject foundation.

The Assessment of Teaching Skills- Written (ATS-W) assesses professional and pedagogical knowledge at both the childhood (Grades 1- 6) and adolescence (grades 7-12) levels, and it measures knowledge and skill in three areas:

- student development and learning
- instruction and assessment
- the professional environment

The Content Specialty Tests (CST) are examinations designed to assess knowledge and skills in the subject of the certificate sought. Adolescence Certification students take the CST in the content area they will be teaching. Those seeking Childhood Certification take the Multi-Subject CST.

Student Teaching Evaluation Rubric

Student Teaching is not only a valuable learning experience, it is the culminating course (paired with the *Student Teaching Reflective Seminar*) of the Education Program. The Student Teaching Evaluation Rubric plays an important role in our assessment system. Faculty (Susan Talbot, Susan Wansor, Bryan Duff) revised this rubric in spring/summer 2011 to align with our recently revised program goals and outcomes. The indicators developed were based on New York State Teaching Standards, the InTASC Model Core Teaching Standards (Interstate Teacher Assessment and Support Consortium) and Charlotte Danielson's Framework for Teaching (Danielson, 2007) with input from cooperating teachers. From fall 2007 to spring, 2011 the Education Program used a student teaching rubric developed by Program faculty (Susan Talbot, Susan Wansor) based on the New York State teaching standards and Danielson's Framework for Teaching (Danielson, 2007). Since this report includes data from the last five years, scores from both rubrics are included in this Inquiry Brief. A rating scale of 1 – 4 was used for both rubrics with quality descriptors assigned to each level. Student teachers in 2011-2012 were evaluated using the recently revised rubric (see Appendix F.1). Student teachers from 2007-2011 were evaluated using the earlier version of the Student Teaching Evaluation Rubric (see Appendix

F.2) INQUIRY BRIEF ATTACHMENTS 2-15-13\Appendix F.2 ST EVALUATION RUBRIC MASTER 2-16-11.xls

Program Completer Exit Interviews

All program completers are asked to provide us with feedback before they graduate. This feedback comes in the form of a Program Completer Survey that asks students to note the extent to which the Program prepared them to meet the nine defined standard areas. Our rational is that students are able to see the Program as a whole after they have completed all aspects. They complete the survey when they meet with the Program Administrative Assistant for their final certification conference. These surveys are intended to be anonymous unless students choose to disclose their names. Information from these surveys has been helpful over the years and has informed program modifications and adjustments.

As noted earlier, recently revised goals and outcomes have led to revised assessment tools. The exit interview data collected as evidence for this brief, however, comes from the survey that was designed to assess the standards that were in place through spring, 2011 (see Appendix F.3). It should be noted that although the language has been revised over the past year, the goals and outcomes essentially focus on the same general principles. What has changed is the organization of these goals and the clarity of language used to define them. The nine standard dimensions used in the exit interviews, although aligned to goals in place up to spring 2011, are also supportive of our current program goals and outcomes. These same standards are reflected in our 2011 student teaching evaluation rubric. The exiting students are asked to rate the Education Program on a scale of 1 – 5, one being the least effective and 5 being the most effective, based on how well the students felt we prepared them to meet each standard.

One limitation in the use of the Exit Interview Survey is our inability to distinguish Childhood from Adolescence Program completers. As an anonymous survey, students were not required to provide this information. Still, we feel that the information gathered is helpful in measuring

our success in these areas especially when cross-referenced with information gathered from other tools that specifically targeted Childhood and Adolescence Program participants. We have modified our current survey to gather information from students specific to each program. This updated, expanded survey, aligned with the recently revised goals and outcomes, was implemented for the first time in December, 2012.

Graduate Survey

We recently conducted an electronic survey of alumni who completed the program between 2008 and 2011 (see Appendix F.4 and Appendix F.5). Our goal was to gather information relating to their experiences since graduating from Wells as well as learn the perceptions of our completers regarding the teacher preparation they received in the Wells Education Program. These perceptions, we hoped, would be informed by our completers' teaching and academic experiences since graduating from Wells. Along with general information on where they were and what they had accomplished in recent years, alumni were asked to note the extent to which the Program prepared them to address the teaching standards as defined in the current Wells Assessment Plan (See Appendix F.7). This important section of the survey included 30 questions that crossed the seven goal areas. These same goals and standards are reflected in our current Student Teaching Evaluation Rubric (See Appendix F.1).

Graduates were asked to indicate their level of agreement to each statement using a 1-5 scale based on how well they felt the Wells Education Program prepared them to meet each noted standard. In addition graduates were asked to respond to questions regarding leadership roles they held, professional development and graduate work they engaged in, as well as unique professional accomplishments they achieved since leaving Wells.

WebQuest Project

The WebQuest Projects are assessments used in both the Adolescence and Childhood Programs, although there are unique qualities to each. In EDUC 302, Literacy for Diverse Upper Elementary Classrooms, students in the Childhood Program completed a WebQuest analysis integrating their knowledge of ELA, social studies and instructional technology in a critique of

teacher-designed WebQuests. In EDUC 332, Reading and Writing in the Content Areas II, students in the Adolescence Program created WebQuests that utilized both their knowledge of technology and knowledge of their content areas to create engaging, inquiry-oriented web experiences that engage students in higher-level thinking. These projects are rated using a grade point system. In this system A+= 4.3 and F=0. A faculty designed rubric and scoring guide are utilized to determine the assigned grade.

(g) Case Studies

Since we are a very small program, defending our claims using quantitative data alone is problematic. The mean Education Program cohort group (combined Childhood and Adolescence) over the last five years is 6.4 students. The mean Childhood cohort group is 2.6 and the mean Adolescence cohort group is 3.8. The content specific certification areas within the Adolescent Program frequently have cohort groups of only one student. Due to our small student population we are often unable to provide standard statistical measures of reliability and validity. Quantitative data (test scores, student teaching evaluation scores etc.) can provide us with examples of individual student success and, when supported by other examples of quantitative data, indications of program success. In an attempt to better understand how the Wells College Education Program prepares its graduates we also used a case-study approach to gathering data. We selected four program completers that represent Wells College graduates over the past five years. As the primary method of data collection was an interview with each of the four graduates, and we felt that it was important for those interviews to be done in person, we focused on those graduates currently living within one hundred miles of Wells College. We contacted as many Wells graduates within that area as possible via email, explained that we would like to conduct an interview with them for the purposes of these case studies, and asked if they were interested in participating. Eight graduates responded. We then selected four of the eight in order to represent, as best we could, the population of the Wells Education Program completers. Therefore, two of the graduates profiled in the case studies teach in elementary schools and the other two teach in high schools. Two graduates have completed master's programs, while the other two are

currently enrolled in master's programs. There is one male participant, reflecting the gender balance of Wells College. All names used are pseudonyms. Table 3.2 presents information on the four participants in the case studies.

Table 3.2
Case Studies Participants

Name	Certification Area	Graduation Year	Current Position
Laura Adams	Childhood	May, 2008	Kindergarten teacher Lake Street Elementary School Chittenango, NY
Ellen Finch	Childhood	December, 2008	Fourth grade teacher Emily Howland Elementary School Aurora, NY
Karen Harris	Adolescent: Math	December, 2011	SUITR teacher resident Syracuse University Syracuse, NY
Matthew Smith	Adolescent: Science	May, 2011	Biology teacher STEM High School Rochester, NY

The primary method of data collection was interviewing. Each participant completed one, semi-structured interview with Sara Levy, Visiting Assistant Professor of Education at Wells College. Sara was hired in spring, 2012 and had not instructed any of the participants. All interviews took place in September, 2012. The interview protocols were developed by Dr. Levy, in consultation with Susan Talbot, based on the three primary claims previously stated in this report. The interviews lasted from 35 to 75 minutes, with an average of 58 minutes. The interviews were audio recorded and transcribed verbatim by Dr. Levy. Quotations in their naturalized form appear throughout the following report in order to most clearly convey the thoughts of the four participants. In order to give a better sense of each graduate's trajectory from Wells College to their current positions, the participants' teaching portfolios from their student teaching experiences were also considered sources of data.

The data were analyzed according to a priori codes based on the three primary claims relating to subject matter knowledge, pedagogical knowledge, and caring, reflective practice and our

fourth claim relating to the cross-cutting themes of learning how to learn, diversity and multicultural perspectives, and technology. Dr. Levy read through each transcript and teaching portfolio several times in order to gather information about each participant in relation to the three areas of interest and to develop assertions and ground conclusions about each participant's performance.

Reliability and Validity of Measures

The Wells Education Program uses a variety of measures to provide a broad range of evidence that speaks to the success of our programs. The New York State Certification Exams are standardized measurements with externally established reliability and validity. These include the Liberal Arts and Science Test (LAST), the Elementary and Secondary Assessment of Teaching Skills—Written (ATS-W) and the subject specific Content Specialty Tests (CSTs).

A number of measures are embedded in the Education Program and follow established Program procedures. As noted earlier, due to our small student population we are often unable to provide standard statistical measures of reliability and validity given the population and sample sizes.

One measure we have chosen to include in this report is our Student Teaching Evaluation Rubric based on Program goals and standards. Since the Student Teaching Evaluation Rubric plays a prominent role across claims we have consciously defined the criteria at all levels of success. This rubric is used by two cooperating teachers when assessing a student. The student teaching supervisor explains the criteria to the cooperating teacher during a meeting early in the placement, providing concrete examples of expectations. Cooperating teachers "practice" using this criteria by completing a weekly reflection tool in which the students' performances are reviewed in light of the defined expectations. Supervisors review these reflections and avail themselves for questions and clarifications. Although supervisors and students also complete this rubric, only the cooperating teachers' assessments have been used in this report.

Supervisor evaluations and the student teacher's self-reflections using this rubric will be included in future data collection efforts.

Additional measurements utilized are:

- GPAs (overall, major, and Education Program)
- grades on specific tasks and assignments relevant to program goals and TEAC claims
 (WebQuest projects)
- results from student Exit Interview Survey developed to support program-specific goals
- results from Graduate Survey developed to support program-specific goals

The calculation of a student's grade point average is based on grades earned in Wells courses and courses taken through Wells affiliated programs. In this system A+=4.3; A=4.0; A-=3.7; B+=3.3; B=3.0; B-=2.7; C+=2.3; C=2.0; C-=1.7; D+=1.3; D=1.0; D-=0.7; F=0. All internships, including EDUC 290 and 390 (*Internships in Education*), are graded as "S" (satisfactory) and "U" (unsatisfactory). For additional information on the Wells' computation system for GPAs see the Wells College 2011-2012 Course Catalog, p. 48. http://www.wells.edu/pdfs/Wells College Catalog 2012-13.pdf

Course tasks (WebQuest and WebQuest Analysis) are designed by faculty to address program-specific goals. Student work is assessed using faculty designed rubrics and scoring guides and are rated using a grade and grade point system (see above). See Appendix F.6.

The Exit Interview Survey utilized in this Brief is a faculty designed survey created to align with the Education Program's 2007-2011 goals. This survey consists of nine questions which asked students to rate the Wells Education Program based on how well that student felt the Education Program prepared him/her to meet each of the defined standard areas. A 1 – 5 scale was used (one being the least effective and five being the most effective). See Appendix F. 3.

Our Graduate Survey was revised in spring, 2012 to align with the Education Program's 2011 revised goals and program outcomes. This electronic survey was designed by faculty and

includes questions clustered in sections supporting the goal areas. Graduates are asked to rate the Education Program on a scale of 1-5 based on how well they felt the Program prepared them to meet each standard. See Appendix F.4 and Appendix F.5.

Attempts have been made throughout to cross-examine our claims by combining methods and comparing results. These measures have face validity in that they reflect important, defined program expectations and outcomes as articulated in our Assessment Plan. By gathering information on alumni perceptions of our program's effectiveness we are attempting to address the predictive validity of other measures. The additional qualitative information gathered through case studies also allows us to see the connection between success on Wells program assessments and success in teaching and advanced study. In 2008 we gathered information on the success of a limited number of graduates through employer surveys. Over the years this has become challenging as more and more of our students are pursuing their master's degree immediately upon graduating from Wells. We question whether a program completer's success can be attributed to the Wells Education Program when that completer has also attended an additional graduate program.

Section 4: RESULTS

In this section we will provide evidence for our four claims.

The measurement tools noted in this report were frequently used across claims. However, the specific evidence gathered from each tool was unique to each claim. For example, the Student Teacher Evaluation Rubric provided data for all claims, but each claim was supported by a particular, unique section of the rubric. Although we have made an attempt to disaggregate data across programs (Childhood, Adolescence: Biology, English, Math, Social Studies, Spanish), our very small numbers frequently make it impossible to test statistical significance. Still, we were able to draw some general conclusions concerning our program. Included in this analysis

are comments from students that were collected from a number of our assessment tools, including the four case studies that were noted in the description of our measures.

Evidence to Support Quality Principle 1

Claim 1: Graduates of our program are proficient in subject matter knowledge and apply this knowledge in their teaching.

Table 4.1
Claim 1: Subject Matter Knowledge
Categories of Assessment
Adolescence Program

Claim	Categories of	Evidence					
	GPA:	NYS	Student Teaching	Student Teaching	Student Exit	Survey of Graduates:	Case
The program's	Major	Assessments:	Evaluation:	Evaluation:	Interviews	Content Knowledge	Studies
graduates		NYS CST	Content Knowledge	Content Knowledge	(Adolescence and	Section	
have acquired			Section	Section	Childhood)		
			2007-2011	2011-2012	Content Knowledge		
					Question #1		
	N=19	N=16	N=16	N= 3	N=31	N=8	
	GPA Range:	Score Range	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range 1-5	
	0-4.3	0-300					
			Performance	Performance	Performance	Performance	
	Standard:	NYS Cut Score	Standard: Level 3	Standard: Level 3	Standard: Level 4	Standard: Level 4	
	2.7	220					
Subject	Mean 3.41	Mean 259	Mean 3.74	Mean 3.34	Mean 4.16	Mean 4.53	х
Matter	(0.36)	(18.9)	(0.19)	(0.16)	(1.03)	(0.86)	

Table 4.2
Claim 1: Subject Matter Knowledge
Categories of Assessment
Childhood Program

Claim	Categories	s of Evidence					
	Overall	NYS	Student Teaching	Student Teaching	Student Exit	Survey of Graduates:	Case
The program's	GPA	Assessments:	Evaluation:	Evaluation:	Interviews	Content Knowledge	Studies
graduates		NYS CST	Content Knowledge	Content Knowledge	(Adolescence and	Section	
have acquired			Section	Section	Childhood)		
			2007-2011	2011-2012	Content Knowledge		
					Question #1		
	N=11	N=12	N=11	N= 1	N=31	N=2	
		Score Range 0-300	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range 1-5	
		NYS Cut Score	Performance	Performance Standard:	Performance	Performance	
		220	Standard: Level 3	Level 3	Standard: Level 4	Standard: Level 4	
Subject	Mean	Mean 256	Mean 3.64	Mean 3.34	Mean 4.16	Mean 4.37	Х
Matter	3.32 (0.41)	(18.3)	(0.33)	(0.16)	(1.03)	(0.53)	

Tables 4.1 and 4.2 look across the categories of evidence used to support Claim 1: Subject Matter Knowledge in both the Adolescence and Childhood Programs. Mean GPA in majors and NYSTCE CST exam means exceeded the performance criteria set by faculty. Scores on both the 2007-2011 and the 2011-2012 rubrics also exceeded the defined quality standard. The Exit Interview data was collected from a singular prompt that asked students to rate how well the Wells Program prepared them in terms of developing the breadth and depth of subject matter knowledge to teach effectively. This Exit Interview data was collected from both Childhood and Adolescence Program students as described in Section 3. The mean response level to this question exceeded the quality standard. The Graduate Survey section on content knowledge was used as supporting evidence for this claim as well. The mean for this section also surpassed the quality standard. The overall GPA was used as an additional measure for Claim 1 within the Childhood Certification Program. The faculty attempted to disaggregate the data to reflect grades in targeted courses within the multi-subject core. Since a majority of our Childhood Certification students were transfer students, however, many of the courses taken to meet the multi-subject core were transferred from other colleges. The overall GPA noted in this table reflects a broad understanding of the liberal arts and is an appropriate measure for those teaching in elementary programs, especially when the results are viewed in relation to a number of other relevant measures.

Table 4.3
Mean (and SD) GPA and CST scores and pass rates Adolescence: 2008 – 2012
Claim 1: Subject Area Knowledge
Adolescence Program

	Audiestenie i Togram									
	GPA in Major			Scores on NYS CST	Scores on NYS CST					
	Adolescence Pr	rogram		NYS Mean Scores	NYS Mean Scores					
	Program Standard: 2.7			NYS cut score 220	NYS cut score 220					
Content Area	Completers	Mean (0-4)	SD	Completers who	Mean Pass	SD	Mean			
				took test	Rates		State			
							Pass			
							Rate			
Biology	2	3.55	.21	2	261	26.8	257			
Chemistry										
English	4	3.65	.2	3	264	23.2	244			
Math	5	3.16	.45	5	261	15.4	259			
Physics										
Social Studies	5	3.44	.18	3	269	15.5	243			
(History)										
Spanish	3	3.36	.56	3	240	18.5	250			
Total	19	3.41	.36	16	259	18.9	255			

To find evidence of subject matter knowledge for the Adolescence Certification Program completers, we looked at the students' GPAs in their majors. At Wells, majors provide the vehicles for instruction in certification specific content. Table 4.3 presents the mean GPAs for the Adolescence Certification Program completers disaggregated by major. All GPAs exceeded the Program's standard. NYSTCE CST exam means also exceeded performance criteria set by faculty. All but one subject area mean pass rate (Spanish) exceeded the mean State pass rate.

Table 4.4
Mean (and SD) GPA and CST scores and pass rates Childhood: 2008 – 2012
Claim 1: Subject Matter Knowledge
Childhood Program

General GPA Childhood Program			Scores on NYS CST NYS Mean Scores NYS cut score 220			
Completers	Mean (0-4)	SD	Completers who took test	Mean Pass Rates	SD	Mean State Pass Rate
13	3.32	.44	12	255	18.3	247

To find evidence of subject matter knowledge for those within the Childhood Certification program, we looked at the General Education GPA that summarizes success in a variety of

liberal arts areas. Table 4.4 shows the NYSTCE CST exam means exceeded performance criteria set by faculty and exceeded the mean State pass rate.

Table 4.5
2008-2011 Student Teaching Evaluation Rubric Across Programs and Content Areas
Claim 1: Content Knowledge
Adolescence and Childhood Programs

Content Knowledge: The extent to which the teacher demonstrates knowledge of subject matter and curriculum Performance Standard: Level 3		Childhood	Adol.	Math	Biology	Spanish	Social Studies	English	Combined
		N=11	N=16	N=4	N=2	N=3	N=4	N-3	N=28
		Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD
1.	Understanding of content	3.6 (0.5)	3.9 (0.2)	3.7 (0.3)	4.0 (0.0)	3.8 (0.4)	3.8 (0.4)	4.0 (0.0)	3.8 (0.2)
2.	Communication of content	3.7 (0.3)	3.7 (0.3)	3.9 (0.4)	4.0 (0.0)	3.5 (0.7)	3.5 (0.0)	3.7 (0.4)	3.7 (0.2)
3.	Connection to standards	3.5 (0.4)	3.6 (0.2)	3.5 (0.4)	3.5 (0.0)	3.8 (0.4)	3.8 (0.4)	3.3 (0.4)	3.6 (0.2)
4.	Use of resources	3.9 (0.3)	3.9 (0.2)	3.9 (0.4)	4.0 (0.0)	3.8 (0.4)	3.8 (0.4)	3.8 (0.4)	3.9 (0.2)
5.	Analysis of content	3.5 (0.7)	3.8 (0.2)	3.9 (0.4)	3.8 (0.5)	3.7 (0.4)	3.6 (0.4)	4.0 (0.0)	3.7 (0.2)
6.	Questioning techniques	3.6 (0.5)	3.7 (0.1)	3.7 (0.3)	3.8 (0.5)	3.5 (0.4)	3.9 (0.4)	3.8 (0.4)	3.7 (0.1)

Table 4.5 looks at the mean scores across all dimensions within the content knowledge section of the 2007-2011 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. All mean scores exceeded the level 3 performance standard. Closer examination of the content knowledge rubric data shows the means for all indicators ranging from 3.5 to 3.9 within the Childhood Program and 3.6 to 3.9 within the Adolescence Program—substantially higher than the 3.0 performance standard.

Table 4.6
2011-2012 Student Teaching Evaluation Rubric Across Programs and Content Areas
Claim 1: Content Knowledge
Adolescence and Childhood Programs

		Childhoo	od	Adolesce (total)	nce	Adol. M	ath	Adol. So Studies	cial	Adol. En	glish	Child./A	
		N=1		N=3		N=1		N=1		N=1		N=4	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)	
Content	1. Cont	ent Standa	ards						·				•
Knowledge	1.a	3.5	0	3	0	3	0	3	0	3	0	3.12	.25
	2.Know	2.Knowledge of Content											
	2.a	3.5	0	3.26	.64	4	0	2.8	0	3	0	3.32	.53
	2.b	3	0	3	0	3	0	3	0	3	0	3	0
	2.c	3	0	3.16	.57	3.5	0	2.5	0	3.5	0	3.12	.47
3. Academic Language													
	3.a	3.5	0	3.66	.28	3.5	0	3.5	0	4	0	3.62	.25
	4.Tools	of the Dis	cipline		•								
	4.a	3	0	3.33	.28	3.5	0	3.5	0	3	0	3.25	.28

Table 4.6 looks at the mean scores across all dimensions within the content knowledge section of the 2011-2012 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. This represents the first year that the new Student Teaching Evaluation Rubric was utilized. The data has limited value given that there was only one student in the Childhood Program and only three students in the Adolescence Program, one in each of the certification areas noted. Most mean scores met or exceeded the level 3 performance standard but the student in the Social Studies Certification Program was scored as "approaching expectations" in two categories within the knowledge of content section—2.a (knowledge of concepts, principles and methods of inquiry) and 2c (content integration).

Table 4.7
Graduate Survey Results
Claim 1: Content Knowledge
Childhood and Adolescence Programs

Content	t Knowledge	Childhood	Adol.
Score R	ange: 1-5	N=2	N=8
Perforn	nance Standard: Level 4	Mean	Mean
		SD	SD
1.	Content Standards	4.0	4.9
		(0.0)	(0.35)
2.	Knowledge of Content	4.5	4.3
		(0.7)	(1.3)
3.	Academic Language	4.5	4.4
		(0.7)	(1.06)
4.	Tools of the Discipline	4.5	4.4
		(0.7)	(1.06

Looking at the graduate survey data (Table 4.7), the mean scores from the two graduates from the Childhood Program ranged from 4.0 - 4.5 (out of 5) and the mean scores from the eight Adolescence responders ranged from 4.3 - 4.9. All mean scores exceeded the performance standard. One out of the 8 responders, however, noted the degree at which Wells prepared her in terms of Knowledge of Content at level 1, least effective. One noted Academic Language at level 2 and one noted Tools of the Discipline at level 2.

Qualitative Data

Our small numbers limit our ability to draw firm conclusions especially regarding specific programs. In addition, the sole use of quantitative data would limit our ability to capture some of the strengths of our program—our mentoring approach, close relationships with students, consistent modeling of effective practice in college courses etc. A case study approach proved to be an effective way of capturing a more complex, accurate picture of the Wells Program. Pseudonyms were used throughout the discussion.

Each of the graduates interviewed felt well-prepared in their subject area and felt they had received an excellent liberal arts education. This is particularly instructive in the case of the two

secondary teachers, as they are perhaps more likely to rely on their major subject area in their everyday teaching. Ms. Adams, in her fourth week of teaching in her first full-time position, strongly believes that Wells College provided an excellent education in her chosen major, Biological and Chemical Sciences. In her interview she spoke about how prepared she felt to engage in the academic rigor of her graduate program. She noted, "I felt way above [my graduate school classmates} when it came to how to read an article, and disseminate the information and discuss it . . ." Mr. Smith also felt that his chosen major in math had given him a stronger grasp of his subject matter than peers from other undergraduate institutions: "It's really uncommon to see content area specialists, you see a lot more education people who minored in something. The math that I learned in college further explained the concepts that I'll teach, which lets me explain it better."

Ms. Harris, a dedicated fourth grade teacher noted that her English Literature major led to a love of literature and language that, in turn, enabled her to model that passion and interest for her students. Ms Harris also noted that the Wells liberal arts curriculum developed her ability to think critically and provided a strong model of constructivist, student-centered teaching (See Appendix G, Case Studies).

Claim 2: Graduates of our program understand and apply the necessary pedagogy and methodology to meet the diverse needs of students.

The Education Program courses directly address effective pedagogy and methodology in the classroom. Students are taught foundational theories throughout the program that ground the curriculum and lesson designing process. Themes of differentiation, total participation, and literacy across the content areas run though all courses. Principles of effective assessment frame many of the discussions as students experience the powerful, integrated relationship of curriculum, instruction and assessment. The Education Program was challenged by this process to identify measures that provided evidence specific to the Claim 2: Pedagogy.

Table 4.8
Assessments in Support of Quality Principle I
Claim 2: Pedagogy

Adolescence Program

Claim	Categories of	Evidence					
	GPA:	NYS	Student Teaching	Student Teaching	Student Exit	Survey of Graduates:	Case
The program's graduates have acquired	Education	Assessments: NYS ATS-W	Evaluation: Preparation Section 2007-2011	Evaluation: Planning for Diverse Learners Section 2011-2012	Interviews (Adolescence and Childhood): Preparation Question #2	Planning Section	Studies
	N=19 GPA Range: 0-4.3	N=16 Score Range: 0-300	N=16 Score Range: 1-4	N= 3 Score Range: 1-4	N=31 Score Range: 1-5	N=8 Score Range: 1-5	
	Standard: 2.7	NYS Cut Score 220	Performance Standard: Level 3	Performance Standard: Level 3	Performance Standard: Level 4	Performance Standard: Level 4	
Pedagogy	Mean 3.61 (0.28)	Mean 265 (12.8)	Mean 3.76 (0.16)	Mean 3.26 (0.34)	Mean 4.58 (.67)	Mean 4.78 (0.35)	х

Table 4.9
Assessments in Support of Quality Principle I
Claim 2: Pedagogy
Childhood Program

Claim	Categories of	Evidence					
	GPA:	NYS	Student Teaching	Student Teaching	Student Exit	Survey of Graduates:	Case
The program's	Education	Assessments:	Evaluation:	Evaluation:	Interviews	Planning Section	Studies
graduates		NYS ATS-W	Preparation Section	Planning for Diverse	(Adolescence and		
have acquired			2007-2011	Learners Section	Childhood):		
•••				2011-2012	Preparation		
					Question #2		
	N=13	N=12	N=11	N= 1	N=31	N=2	
	GPA Range:	Score Range:	Score Range: 1-4	Score Range: 1-4	Score Range: 1-5	Score Range: 1-5	
	0-4.3	0-300					
			Performance	Performance	Performance	Performance	
	Standard:	NYS Cut Score	Standard: Level 3	Standard: Level 3	Standard: Level 4	Standard: Level 4	
	2.7	220					
Pedagogy	Mean 3.57	Mean 272	Mean 3.61	Mean 3.10	Mean 4.58	Mean 4.65	Х
	(0.41)	(12.1)	(0.30)	(0.00)	(0.67)	(0.49	

Tables 4.8 and 4.9 show the categories of evidence used to support Claim 2: Pedagogy in both the Adolescence and Childhood Programs. Mean GPAs in the Education Program and NYSTCE ATS-W exam means exceeded the performance criteria set by faculty. Scores on Preparation and Planning sections of both the 2007-2011 and the 2011-2012 rubrics also exceeded the

defined quality standard. Exit Interview data were collected from a singular prompt that asked students to rate the extent to which the Wells Program prepared them to plan effective, standards-based lessons and classroom curriculum. Exit Interview data were collected from both Childhood and Adolescence Program students as described in Section 3. The mean response level to this question exceeded the quality standard. The Graduate Survey section on Planning was used as supporting evidence for this claim as well. The mean for this section also surpassed the quality standard.

Table 4.10
Mean (and SD) GPA and ATS-W scores and pass rates Adolescence: 2008 – 2012
Claim 2: Pedagogy
Adolescence Program

	GPA in Educat	ion Program C	Courses	Scores on NYS ATS- NYS Mean Scores NYS cut score 220			
Content Area	Completers	Mean (0-4)	SD	Completers who took test	Mean Pass Rates	SD	Mean State Pass Rate
Biology	2	3.85	.07	2	261	23.3	260
Chemistry							
English	4	3.67	.26	3	279	7.9	260
Math	5	3.48	.31	5	259	15.5	260
Physics							
Social Studies (History)	4	3.5	.30	3	260	3.5	260
Spanish	3	3.76	.28	3	269	12.3	260
Combined	18	3.61	.28	16	268	12.8	260

To find evidence of pedagogical knowledge for the Adolescence Certification Program completers, we looked at the students' GPAs within the Education Program. Education Program GPAs for Adolescence Program completers are presented in Table 4.10. These GPAs summarize success in those courses that address pedagogy and instructional theory. All Education Program GPAs exceeded the Program's standard. NYSTCE ATS-W exam means also exceeded performance criteria set by faculty and met or exceeded the mean State pass rates.

Table 4.11
Mean (and SD) GPA and ATS-W scores and pass rates Childhood: 2008 – 2012
Claim 2: Pedagogy

Childhood Program

Education Program GPA			Scores on NYS ATS-W					
Childhood Program Standard 2.7			NYS Mean Scores					
			NYS cut score 220					
Completers	Mean (0-4)	SD	Completers who	Mean Pass	SD	Mean State		
			took test	Rate		Pass Rate		
						2008-2012		
13	3.57	.41	12	271	12.1	262		

To find evidence of pedagogical knowledge for those within the Childhood Certification program, we looked at the Education Program GPA that summarizes success in those courses that address pedagogy and instructional theory (see Table 4.11). The mean Education GPA of the Childhood program completers and NYSTCE ATS-W exam means both exceeded performance criteria set by faculty. The ATS-W exam means also exceeded the State pass rate.

Table 4.12
2008 – 2011 Student Teaching Evaluation Rubric: Preparation Claim 2: Pedagogy

Adalasas and Childhan

Adolescence and Childhood Programs

Prep	aration:	Childhood	Adol.	Math	Biology	Spanish	Social	English	Combined
The e	extent to which the teacher						Studies		
dem	onstrates knowledge of pedagogy	N=11	N=16	N=4	N=2	N=3	N=4	N-3	N=28
in les	sson planning	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
		SD	SD	SD	SD	SD	SD	SD	SD
1.	Connection between	3.6	3.6	3.6	3.5	3.7	3.8	3.7	3.6
	curriculum/district goals & standards	(0.5)	(0.2)	(0.3)	(0.0)	(0.4)	(0.4)	(0.4)	(0.2)
2.	Use of Instructional material &	3.6	3.8	3.8	4.0	3.8	3.5	3.7	3.7
	strategies	(0.4)	(0.2)	(0.4)	(0.0)	(0.4)	(0.4)	(0.0)	(0.2)
3.	Lesson planning & engagement	3.6	3.8	3.9	4.0	3.8	3.4	3.8	3.8
	strategies	(0.5)	(0.2)	(0.3)	(0.0)	(0.4)	(0.4)	(0.4)	(0.2)
4.	Student relevant connections	3.7	3.8	3.9	3.8	3.8	3.8	3.8	3.8
		(0.3)	(0.1)	(0.3)	(0.5)	(0.4)	(0.4)	(0.4)	(0.1)

Table 4.10 presents the mean scores across all dimensions within the Preparation section of the 2007-2011 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. All mean scores exceeded the level 3 performance standard. Closer examination of the content knowledge rubric data shows the means for all indicators within the

Childhood Program ranging from 3.6 to 3.7 and 3.6 to 3.8 within the Adolescence Program—substantially higher than the 3.0 performance standard.

Table 4.13
2011 – 2012 Student Teaching Evaluation Rubric: Planning

Claim2: Pedagogy

Adolescence and Childhood Program

		Childho	od	Adolesco (total)	ence	Adol. M	lath	Adol. So Studies	ocial	Adol. Er	nglish	Child./A		
				N=3	N=3		N=1		N=1		N=1		N=4	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		
Planning	1. Goal De	٧.												
for	1.a	3.5	0	3.16	.28	3.5	0	3	0	3	0	3.25	.28	
Diverse	1.b	2.5	0	3.16	.28	3.5	0	3	0	3	0	3	.4	
Learners 2. Plan for Instruction														
	2.a	3.5	0	3.33	.57	4	0	3	0	3	0	3.37	.47	
	2.b	3.5	0	3.76	.25	4	0	3.5	0	3.8	0	3.7	.24	
	2.c	3	0	3.26	.25	3.5	0	3.3	0	3	0	3.2	.24	
	2.d	3	0	3.1	.36	3	0	2.8	0	3.5	0	3.07	.29	
	2.e	3	0	3.3	.57	4	0	3	0	3	0	3.25	.5	
	3. Know. c	of Student	:s											
	3.a	3	0	3.16	.28	3.5	0	3	0	3	0	3.12	.25	
	3.b	3	0	3.16	.28	3.5	0	3	0	3	0	3.12	.25	
	3.c	3	0	3.16	.76	4	0	2.5	0	3	0	3.12	.62	

Table 4.13 shows the mean scores across all dimensions within the Planning for Diverse Learners section of the 2011-2012 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. All but one program mean score (1.a Goal Development: Goals/Objectives) met or exceeded the level 3 performance standard but one student in the Social Studies Certification Program was scored as "approaching expectations" in two categories within the knowledge of Preparation section—2.d (use of resources) and 3.c (knowledge of students).

Table 4.14
Graduate Survey Results
Claim 2: Pedagogy

Childhood and Adolescence Programs

	6	
g	Childhood	Adol.
ange 1-5	N=2	N=8
nance Standard: Level 4	Mean	Mean
	SD	SD
Goal Development	4.5	4.9
	(0.7)	(0.35)
Plan for Instruction	4.5	4.8
	(0.7)	(0.46)
Knowledge of Students	5.0	4.4
	(0.0)	(0.46)
	ange 1-5 nance Standard: Level 4 Goal Development Plan for Instruction	Gange 1-5 nance Standard: Level 4 Goal Development Plan for Instruction Knowledge of Students Childhood N=2 Mean SD 4.5 (0.7)

Looking at the graduate survey data (Table 4.14), the mean scores from the two graduates from the Childhood Program ranged from 4.5 - 5 (out of 5) and the mean scores from the eight Adolescence responders ranged from 4.4 - 4.9. All mean scores exceeded the performance standard.

Qualitative Data

Knowledge of appropriate pedagogy and methods for teaching were clearly evident in the interviews and teaching portfolios of the graduates involved in the case studies.

During her interview, Ms. Harris mentioned that she regularly uses a variety of methods in her elementary classroom: cooperative learning, classroom contracts, flexible groups for guided reading and math, running records, and literature circles. She was able to thoughtfully discuss her reasons for utilizing the methods she did, especially regarding her use of cooperative learning when she highlighted both the social and academic theory for implementing the strategy. Based on her comments in her teaching portfolio and interview, Ms. Harris also seems to view differentiating instruction as an integral part of her pedagogy.

In his interview Mr. Smith noted that he has turned to the methods he learned at Wells College to teach math. He cited his student teaching experience as being particularly instructive in

developing and refining his teaching style. Mr. Smith, similar to Ms. Harris, also noted cooperative learning as a strategy learned at Wells that he frequently turns to. He noted that he continues to use the strategies learned at Wells in his new role as a resident teacher in an inclusive education program. During the interview Mr. Smith spoke often of his adoption of universal design theories – that truly inclusive educational design and planning does not single out students, but instead includes the necessary modifications within the body of the planned lessons and units.

Ms. Finch noted in her interview that she believes Wells College prepared her well for her work as a kindergarten teacher, and attributed this preparation to both the methods and ideas she was taught, as well as the way in which those methods were taught. She highlighted the development of a curriculum unit during her student teaching as being an educative experience that enabled her to utilize a variety of resources in order to implement curriculum.

Ms. Adams described the teaching methods and strategies that she learned at Wells as "foundational." She noted that her preparation in the development and writing of lesson plans "set her apart" from her peers at the University of Rochester because she knew "the difference between a goal and an objective" and that she should include assessments on her plans. Ms. Adams also noted in her interview that cooperative learning is almost always present in her classroom and shared that "the foundation" of her use of cooperative learning techniques came from her time at Wells.

Claim 3: Graduates of our program are responsive, reflective professionals who have the knowledge and skills to serve their students.

Table 4.15
Assessments in Support of Quality Principle I
Adolescence Program
Claim 3: Teaching Skill

Claim	Categories of Evidence				
	Student Teaching Evaluation:	Student Teaching Evaluation:	Student Exit Interviews	Survey of Graduates:	Case
The program's	Instructional Delivery Section	Instruction for Diverse	(Adolescence and Childhood):	Instruction Section	Studies
graduates	2007-2011	Learners Section	Instructional Delivery Question		
have acquired		2011-2012	#3		
	N=16	N= 3	N=31	N=8	
	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range 1-5	
	Performance Standard: Level	Performance Standard: Level	Performance	Performance Standard:	
	3	3	Standard: Level 4	Level 4	
Teaching Skill	Mean 3.68	Mean 3.34	Mean 4.48	Mean 4.66	Х
	(0.25)	(0.16)	(.62)	(0.26)	

Table 4.16
Assessments in Support of Quality Principle I
Childhood Program
Claim 3: Teaching Skill

Claim	Categories of Evidence				
	Student Teaching Evaluation:	Student Teaching Evaluation:	Student Exit Interviews	Survey of Graduates:	Case
The program's	Instructional Delivery Section	Instruction for Diverse	(Adolescence and Childhood):	Instruction Section	Studies
graduates	2007-2011	Learners Section	Instructional Delivery Question		
have acquired		2011-2012	#3		
	N=11	N= 1	N=31	N=2	
	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range 1-5	
	Performance Standard: Level	Performance Standard: Level	Performance	Performance Standard:	
	3	3	Standard: Level 4	Level 4	
Teaching Skill	Mean 3.50	Mean 3.15	Mean 4.48	Mean 4.2	Х
	(0.36)	(0.00)	(.62)	(0.42)	

Tables 4.15 and 4.16 present the categories of evidence used to support Claim 3: Teaching Skill in both the Adolescence and Childhood Programs. Scores on both the 2007-2011 and the 2011-2012 rubrics exceeded the defined quality standard. The Exit Interview data were collected from a singular prompt that asked students to rate the extent that the Wells Program prepared them to provide effective, engaging instruction using a variety of strategies. Exit

Interview data were collected from both Childhood and Adolescence Program students as described in Section 3. The mean response level to this question exceeded the quality standard. The instruction section of the Graduate Survey section was used as supporting evidence for this claim as well. The mean for this section also surpassed the quality standard.

Table 4.17
2008-2011 Student Teaching Evaluation Rubric: Instructional Delivery
Claim 3: Teaching Skill

OI :1 II			
Childhoo	d and	Adole	escence

	uctional Delivery: The extent to n the teacher demonstrates	Childhood	Adol.	Math	Biology	Spanish	Social Studies	English	Combined
know	ledge of instructional delivery	N=11	N=16	N=4	N=2	N=3	N=4	N-3	N=28
		Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD	Mean SD
1.	Connection to students	3.6 (0.5)	3.8 (0.2)	3.7 (0.3)	4.0 (0.0)	3.8 (0.4)	3.6 (0.4)	4.0 (0.0)	3.8 (0.2)
2.	Communication of instruction	3.5 (0.5)	3.6 (0.3)	3.7 (0.3)	3.5 (0.0)	3.5 (0.7)	3.8 (0.4)	3.7 (0.4)	3.6 (0.2)
3.	Variety of styles/strategies	3.7 (0.4)	3.8 (0.2)	3.9 (0.4)	4.0 (0.0)	3.8 (0.4)	3.6 (0.4)	3.8 (0.4)	3.8 (0.2)
4.	Use of teaching time	3.3 (0.4)	3.5 (0.3)	3.4 (0.3)	3.8 (0.5)	3.5 (0.7)	3.6 (0.4)	3.0 (0.0)	3.4 (0.2)
5.	Student understanding monitoring	3.6 (0.4)	3.7 (0.2)	3.6 (0.4)	3.8 (0.5)	3.8 (0.4)	3.5 (0.4)	4.0 (0.0)	3.7 (0.2)
6.	Use of technology	3.6 (0.4)	3.7 (0.3)	3.4 (0.7)	4.0 (0.0)	3.5 (0.4)	3.9 (0.4)	3.5 (0.0)	3.6 (0.2)

Table 4.17 presents the mean scores across all dimensions within the Instructional Delivery section of the 2007-2011 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. All mean scores exceeded the level 3 performance standard. The means for all indicators within the Childhood Program range from 3.3 to 3.6 and within the Adolescence Program they range from 3.6 to 3.8.

Table 4.18
2011-2012 Student Teaching Evaluation Rubric: Instruction

Claim 3: Teaching Skill
Childhood and Adolescence

		Childhood N=1		Adolesco (total) N=3	,		Adol. Math		Adol. Social Studies N=1		Adol. English		Child./Adol. Combined N=4	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		
Instruction	1.Active I	earning S	earning Strategies											
for Diverse	1.a	3	0	3.33	.28	3.5	0	3.5	0	3	0	3.25	.28	
Learners	1.b	3	0	3.33	.28	3.5	0	3	0	3.5	0	3.25	.28	
	1.c	3.5	0	3.66	.28	3.5	0	4	0	3.5	0	3.62	.25	
	2.Resources/Technology													
	2.a	3.5	0	3.5	.5	4	0	3.5	0	3	0	3.5	.4	
	2.b	3.5	0	3.33	.28	3.5	0	3.5	0	3	0	3.37	.25	
	2.c	3	0	3.16	1.04	4	0	2	0	3.5	0	3.12	.85	
	3.Instruct	3.Instructional Roles												
	3.a	3	0	3.5	0	3.5	0	3.5	0	3.5	0	3.37	.25	
	4.Use of Questions													
	4.a	3	0	3.5	0	3.5	0	3.5	0	3.5	0	3.37	.25	
	4.b	3.5	0	3.2	.17	3.3	0	3.3	0	3	0	3.27	.2	
	4.c	3.5	0	3.5	.0	3.5	0	3.5	0	3.5	0	3.5	0	
	5.Communication													
	5.a	3.5	0	3.26	.4	3.5	0	3.5	0	2.8	0	3.32	.35	
	5.b	3.5	0	3.33	.28	3	0	3.5	0	3.5	0	3.37	.25	
	5.c	3	0	2.93	.11	3	0	2.8	0	3	0	2.95	.1	
		ion Strate	egies Tha	at Support	t Literacy									
	6.a	3	0	3.33	.28	3.5	0	3.5	0	3	0	3.25	.28	
	6.b	3	0	3.43	.16	3.5	0	3	0	3.8	0	3.32	.39	
	6.c	3	0	3.16	.28	3	0	3.5	0	3	0	3.12	.25	
	6.d	3.5	0	3.33	.57	4	0	3	0	3	0	3.37	.47	
		siveness t												
	7.a	2.5	0	3.33	.28	3.5	0	3.5	0	3	0	3.12	.47	
	7.b	2.5	0	3.33	.28	4	0	3	0	3	0	3.12	.62	

Table 4.18 shows the mean scores across all dimensions within the Planning for Diverse Learners section of the 2011-2012 Student Teaching Evaluation Rubric. These scores have been disaggregated across the Childhood and Adolescence Programs and across the individual certification areas of the Adolescence Program. As noted earlier, the small number of students who were assessed using this rubric greatly limits the value of the data. Although a majority of means met or exceeded the Wells expectation, the specific indicator means (Childhood) below the 3.0 performance standard were 7.a (Responsiveness to Learner: Makes Adjustments to Lessons) and 7.b (Responsiveness to Learners-- Persistence). Indicator mean 5.c

(Communication: Direction) fell below the 3.0 performance standard within the Adolescence Program.

Table 4.19
Mean Scores Across Student Teaching Rubric 2008-2011
Claim 3: Teaching Skill
Childhood and Adolescence

Category	Childhood	Adolescence
	N=11	N=16
	Score Range 1-4	Score Range 1-4
	Mean	Mean
Preparation	3.62	3.75
Instructional Delivery	3.55	3.68
Knowledge of Student Development	3.57	3.77
and Diversity		
Assessment	3.51	3.76
Reflection	3.8	3.96

Table 4.19 provides a quick look at the means across five categories of the 2008-2011 Student Teaching Evaluation Rubric. All mean scores substantially exceeded the level 3 performance expectation. For the purpose of this report, the primary evidence gathered to support Claim 3: Teaching Skill was the Instructional Delivery section of the 2008-2011 Student Teaching Evaluation Rubric. It is important to note, however, that teaching involves the complex layering and interweaving of skills and attitudes. A teacher cannot be effective delivering instruction without first being prepared (both practically in terms of lesson/curriculum development, as well as in terms of having a strong theoretical and pedagogical foundation). Knowledge of who your students are (an awareness of their identities, backgrounds, cultures, strengths, weaknesses and learning needs) is critical if you want to teach effectively. Assessment is a cornerstone of effective teaching. Effective teachers monitor and adjust throughout the teaching/learning experience. Reflection occurs before during and after the teaching process. At its best it is a fluid, seamless process.

Table 4.20
Mean Scores Student Teaching Rubric 2011-2012
Claim 3: Teaching Skill
Childhood and Adolescence

Category	Childhood	Adolescence		
	N=1	N=3		
	Score Range 1-4	Score Range 1-4		
	Mean	Mean		
Planning	3.1	3.25		
Instruction	3.15	3.33		
Assessment	2.83	3.27		
Reflection	3.25	3.51		

The one Childhood certification student assessed using the 2011-2012 rubric was assessed slightly below the performance standard (3) in the area of Assessment. All mean scores within the Adolescence Program exceeded the standard. The 2011-2012 Student Teaching Rubric addresses the same relevant topics as the 2011-2012 rubric. It is important to note that criteria relating to diversity run through ALL sections of the evaluation tool and are NOT separated into a discrete goal. This is meant to reflect that addressing diversity in the classroom is not something that effective, caring teachers do in addition to other teaching responsibilities. It is a frame for all responsibilities, all classroom decisions.

Table 4.21 2008-2012 Mean Scores Graduate Survey: Instruction Claim 3: Teaching Skill

Childhood and Adolescence Programs

Instruct	ion:	Childhood	Adolescence			
	ange 1-5 nance Standard: Level 4	N=2	N=8 (unless noted			
Periorii	iance Standard. Level 4	DA	otherwise)			
		Mean SD	Mean SD			
1.	Active Learning Strategies	4.5	4.8			
1.	Active Learning Strategies	(0.7)	(0.46)			
		(0.7)	(0.40)			
2.	Resources (general)	4.5	4.8			
		(0.7)	(0.7)			
2a.	Instructional resources—	4.5	4.9			
	visual, primary sources etc.	(0.7)	(0.35)			
2b.	Technology	3.5	3.8			
		(0.7)	(0.88)			
2c.	Paraprofessionals	3.0	3.8 N=6			
		(0.0)	(0.75)			
3.	Instructional Roles	4.5	4.9 N=7			
		(0.7)	(0.37)			
4.	Use of Questions	4.0	4.9 N=7			
		(0.0)	(0.37)			
5.	Communication	4.5	5.0 N=7			
		(0.7)	(0.)			
6.	Strategies That Support	4.5	5.0 N=7			
	Literacy	(0.7)	(0.)			
7.	Responsiveness to Learners	4.5	4.9 N=7			
		(0.7)	(0.37)			

Table 4.21 shows the mean responses to the Instruction section of our Graduate Survey. Most means exceeded the performance standard of 4. Two areas that fell below this standard were Technology and Use of Paraprofessionals.

Qualitative Data

The information gathered in the case studies appears to support that Program graduates are responsive, reflective professionals who have the knowledge and teaching skills to serve their students.

Students described in the case studies elaborated on their use of high engagement and cooperative learning strategies with their students. Importantly, each of the students

mentioned they had learned these strategies at Wells and they truly believed in the theories and tenets of the cooperative learning pedagogy. Graduates all noted their commitment to the use of formative assessment to gauge student learning. Ms. Adams's daily conversations with students during lab times and Ms. Finch's use of the Talking Bug with certain students are excellent examples of how Wells graduates are adept at using formative assessments to guide adjustments or changes during instruction

Another area in which it seems Wells College excels at preparing teachers is in the Field of differentiating instruction. Whether it was Ms. Finch discussing how she would do "whatever it takes" to meet the needs of her students, or Ms. Adams noting that the "fun" part of teaching included the integration of accommodations into her teaching, the four graduates profiled here clearly believe that differentiation is a crucial part of teaching.

In conjunction with being teachers who regularly use cooperative learning strategies and who regularly differentiate instruction, the four graduates are reflective, caring practitioners. Each of these teachers talked about how they reflect on their teaching, in writing on a daily basis, as Ms. Adams does, or mentally during the day, as Mr. Smith does. They each talked about how good teachers must reflect on their teaching in order to improve their instruction and, ultimately, to better help their students succeed. Additionally, they each talked about the importance of working with other teachers and their administrators as part of this reflection and refinement. Each of the graduates discussed planning and working with other teachers in their departments and schools in order to best meet the needs of their students. Their care and concern for their students' development into active, kind, compassionate, intelligent, critical citizens was evident in each graduates' interview and teaching portfolio.

However, it is also important to note those areas in which the graduates felt that their Wells education was not as strong. One area that received mild criticism from students was in educational technology. None of the four students talked about their preparation to use educational technology in any Wells courses, though they all avail themselves of the technology

present in their current schools. Ms. Finch and Ms. Harris both discussed attending trainings or doing research on their own to be prepared to use technology like EnoBoards and iPads in their classrooms. Mr. Smith and Ms. Adams discussed how they use technology in their classrooms, but neither mentioned any training they had received at Wells in this area.

Claim 4: Graduates of our program utilize relevant teaching technologies, their knowledge of students' individual and multi-cultural differences, and opportunities for continued growth in order to serve their students

Table 4.21
Assessments in Support of Quality Principle I
Adolescence Program
Claim 4: Cross Cutting Theme – Technology

Cross Cutting	Categories of Evidence			
Theme	Student Teaching Evaluation:	Student Teaching Evaluation:	Graduate Survey:	WebQuest Project
	Instructional Delivery	Instruction for Diverse Learners:	Instruction Question #2	
	Criterion #6	Resources and Technology		
	2007-2011	Criterion #2b		
		2011-2012		
	N=16	N= 3	N=8	N= 19
	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range: 0-4.3
	Performance Standard: Level	Performance Standard: Level 3	Performance Standard: Level	Standard: 2.7
	3		4	
Technology	Mean 3.69	Mean 3.33	Mean 3.75	Mean 3.5
	(0.36)	(0.29)	(0.88)	(0.7)

Table 4.22
Assessments in Support of Quality Principle I
Childhood Program

Claim 4: Cross Cutting Theme - Technology

Cross Cutting	Categories of Evidence			
Theme	Student Teaching Evaluation:	Student Teaching Evaluation:	Graduate Survey:	WebQuest Analysis Project
	Instructional Delivery:	Instruction for Diverse Learners:	Instruction: Question #2	
	Criterion #6	Resources and Technology		
	2007-2011	Criterion #2b		
		2011-2012		
	N=11	N= 1	N=8	N= 13
	Score Range 1-4	Score Range 1-4	Score Range 1-5	Score Range: 0-4.3
	Performance Standard: Level	Performance Standard: Level 3	Performance Standard: Level	Standard: 2.7
	3		4	
Technology	Mean 3.45	Mean 3.5	Mean 3.75	Mean 3.1
	(0.52)	(0.00)	(0.88)	(1.0)

Tables 4.21 and 4.22 show means for the categories of evidence used to support the Cross Cutting Theme of Technology in both the Adolescence and Childhood Programs. Responses to specific criteria describing the integration of relevant technology into instruction from both the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubric were examined. Scores on both the 2007-2011 and the 2011-2012 rubrics exceeded the defined quality standard. Responses to question #2 (the extent to which Wells prepared you to apply instructional technology) within the Instruction portion of the Graduate Survey were also analyzed. The mean score for these responses fell short of meeting the performance standard of 4. In addition, the Education faculty looked at the mean scores of the WebQuest Projects used as assessments in EDUC 302, *Literacy for Diverse Upper Elementary Classrooms*, and EDUC 332, *Reading and Writing in the Content Areas II*. The mean score on these assessments surpassed the quality standard of 2.7. See page 25 - 28 for additional information on these tasks.

Table 4.23
Assessments in Support of Quality Principle I
Adolescence Program

Claim 4: Cross Cutting Theme – Diversity/Multicultural Perspectives

Cross Cutting	Categories of Evidence	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,			
Theme	Student Teaching Evaluation: Knowledge and Appreciation of Student Diversity Section 2007-2011	Student Teaching Evaluation: Planning for Diverse Learners: Knowledge of Students Section 2011-2012	Exit Interview: Knowledge and Appreciation of Student Diversity Question #5	Case Studies	
	N=16 Score Range 1-4 Performance Standard: Level 3	N= 3 Score Range 1-4 Performance Standard: Level 3	N=30 Score Range 1-5 Performance Standard: Level 4		
Diversity/ Multicultural Perspectives	Mean 3.76 (0.21)	Mean 3.16 (0.44)	Mean 4.4 (0.81)	Х	

Table 4.24
Assessments in Support of Quality Principle I
Childhood Program

Claim 4: Cross Cutting Theme – Diversity/Multicultural Perspectives

Cross Cutting	Categories of Evidence			
Theme	Student Teaching Evaluation:	Student Teaching Evaluation:	Exit Interview:	Case
	Knowledge and Appreciation of Student	Planning for Diverse Learners: Knowledge of	Knowledge and Appreciation of	Studies
	Diversity Section	Students Section	Student Diversity Question #5	
	2007-2011	2011-2012		
	N=11	N= 1	N=30	
	Score Range 1-4	Score Range 1-4	Score Range 1-5	
	Performance Standard: Level 3	Performance Standard: Level 3	Performance Standard: Level 4	
Diversity/	Mean 3.59	Mean 3.00	Mean 4.4	Х
Multicultural	(0.38)	(0.00)	(0.81)	
Perspectives				

Tables 4.23 and 4.24 look across the categories of evidence used to support the Cross Cutting Theme of Diversity/Multicultural Perspectives in both the Adolescence and Childhood Programs. Responses from cooperating teachers on specific sections within the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics were analyzed. Mean scores met or surpassed the performance standard. Responses to question #5 on the Student Exit Interview Survey (the extent to which Wells prepared you to address individual and diverse needs within the

classroom) were also analyzed. The mean score for these responses exceeded the Program standard.

Table 4.25
2008-2011 Student Teaching Evaluation Rubric:
Knowledge/Appreciation of Student Development and Diversity
Adolescence and Childhood
Claim 4: Cross-Cutting Theme – Diversity/Multicultural Perspectives

Clo	Claim 4. Cross-Cutting Theme – Diversity/Multicultural Perspectives										
Kno	wledge/Appreciation of Student	Childhood	Adol.	Math	Biology	Spanish	Social	English	Combined		
Dev	elopment and Diversity: The extent						Studies				
to w	hich the teacher displays a	N=11	N=16	N=4	N=2	N=3	N=4	N-3	N=28		
knov	wledge of student development	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean		
and	and/or student diversity		SD	SD	SD	SD	SD	SD	SD		
1.	Understanding	3.7	3.8	3.7	4.0	3.8	3.8	3.8	3.8		
	of students' needs	(0.5)	(0.2)	(0.3)	(0.0)	(0.4)	(0.4)	(0.4)	(0.2)		
2.	Use of instructional strategies and	3.5	3.7	3.6	4.0	3.7	3.5	3.7	3.7		
	differentiation of instruction	(0.5)	(0.2)	(0.4)	(0.0)	(0.4)	(0.4)	(0.4)	(0.2)		
3.	Consideration of cultural differences	3.6	3.8	3.9	3.8	3.8	3.9	3.8	3.8		
		(0.5)	(0.1)	(0.4)	(0.5)	(0.4)	(0.4)	(0.4)	(0.1)		
4.	Consideration of accommodations	3.5	3.8	3.9	4.0	3.8	3.8	3.5	3.8		
	and IEPs	(0.5)	(0.2)	(0.4)	(0.0)	(0.4)	(0.4)	(0.0)	(0.2)		

Table 4.25 examines the responses from cooperating teachers to the Student Development and Diversity section of the 2008-2011 Student Teaching Evaluation Rubric. Mean scores of all dimensions substantially exceed the Program performance standard.

Table 4.26
2011-2012 Student Teaching Evaluation Rubric: Planning—Knowledge of Students
Adolescence and Childhood

Claim 4: Cro	Claim 4: Cross-Cutting Theme – Diversity/Multicultural Perspectives												
		Childho	od				lath	Adol. Social		Adol. English		Child./Adol.	
				(total)				Studies				Combin	ed
		N=1		N=3		N=1		N=1		N=1		N=4	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)	
3.a	3. Knov	v. of Stude	ents										
Developmental	3.a	3	0	3.16	.28	3.5	0	3	0	3	0	3.12	.25
Characteristics													
3.b													
Learning Styles	3.b	3	0	3.16	.28	3.5	0	3	0	3	0	3.12	.25
etc.													
3.c													
Backgrounds		_		2.46						_		2.42	
and cultures	3.c	3	0	3.16	.76	4	0	2.5	0	3	0	3.12	.62

Table 4.26 examines the responses from cooperating teachers to the Student Development and Diversity Section of the 2011-2012 Student Teaching Evaluation Rubric. Mean scores for both the Childhood and Adolescence Programs meet or exceed the Program standard. One student scored below the standard on criterion 3.c.

Qualitative Data

The four participants spoke of the imperative to meet the varied needs and abilities of their students. Ms. Harris spoke about learning to work with students who had experienced (or were experiencing) trauma at home, while Mr. Smith's interest in working with students with learning differences led him to pursue a master's degree in inclusive education. Ms. Finch's empathy for her students drove her to provide whatever accommodations would best help her students be successful. Ms. Adams highlighted the need to meet her students' multiple intelligences. Importantly, each of the four students viewed this work as an integral part of both their daily teaching and, more broadly, of their teaching philosophy.

Table 4.27
Assessments in Support of Quality Principle I
Adolescence Program

Claim 4: Cross Cutting Theme – Learning How to Learn

Cross Cutting	Categories of Evidence	ce				
Theme	Student Teaching Eva 2007-2011	aluation	Student Teaching Eva 2011-2012	luation:	Graduate Survey: Reflection and Continuous Growth	Case Studies
	Reflection Section	Professionalism Criterion #4	Reflection & Cont. Growth Section	Professionalism Criterion #6.c	Section	
	N=16 Score Range 1-4 Performance Standard: Level 3	N=16 Score Range 1-4 Performance Standard: Level 3	N= 3 Score Range 1-4 Performance Standard: Level 3	N= 3 Score Range 1-4 Performance Standard: Level 3	N=8 Score Range 1-5 Performance Standard: Level 4	
Learning How to Learn	Mean 3.94 (0.11)	Mean. 3.89 (0.21)	Mean 3.51 (0.11)	3.67 (0.29)	Mean 4.87 (0.24	х

Table 4.28
Assessments in Support of Quality Principle I
Childhood Program

Claim 4: Cross Cutting Theme – Learning How to Learn

Cross Cutting	Categories of Evidence										
Theme	Student Teaching Eva 2007-2011	luation	Student Teaching Eva 2011-2012	luation:	Graduate Survey: Reflection and Continuous Growth	Case Studies					
	Reflection Section	Professionalism Criterion #4	Reflection & Cont. Growth Section	Professionalism Criterion #6.c	Section						
	N=11 Score Range 1-4 Performance Standard: Level 3	N=11 Score Range 1-4 Performance Standard: Level 3	N= 1 Score Range 1-4 Performance Standard: Level 3	N= 1 Score Range 1-4 Performance Standard: Level 3	N=2 Score Range 1-5 Performance Standard: Level 4						
Learning How to Learn	Mean 3.77 (0.35)	Mean. 3.81 (0.33)	Mean 3.25 (0.00)	3.00 (0.00)	Mean 3.5 (0.7)	Х					

Tables 4.27 and 4.28 look across the categories of evidence used to support the Cross Cutting Theme of Learning in both the Adolescence and Childhood Programs. Responses from cooperating teachers on the Reflection sections of the 2007-2011 and 2011-2012 Student Teaching Evaluation Rubrics were analyzed. Mean scores exceeded the performance standard substantially, especially within the Adolescence Program. Responses to Professionalism criteria #4 (2007-2012) and #6.c (2011-2012) — "is eager to go 'above and beyond' to meet the needs of students, the program in general, and his/her own professional development"— were also examined. The mean score for these responses met or exceeded the Program standard.

Table 4.29
2008-2011 Student Teaching Evaluation Rubric: Reflection
Adolescence and Childhood

Claim 4: Cross-Cutting Theme – Learning How to Learn

Reflection:		Childhood	Adol.	Math	Biology	Spanish	Social	English	Combined
							Studies		
		N=11	N=16	N=4	N=2	N=3	N=4	N-3	N=28
		Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
		SD	SD	SD	SD	SD	SD	SD	SD
1.	Assessment of lesson's	3.7	4.0	3.9	4.0	4.0	3.9	4.0	3.9
	goals/strengths/weaknesses	(0.3)	(0.2)	(0.3)	(0.0)	(0.0)	(0.4)	(0.0)	(0.2)
2.	Adjustment initiation	3.8	3.9	3.9	4.0	3.8	3.9	3.8	3.9
		(0.5)	(0.2)	(0.3)	(0.0)	(0.4)	(0.4)	(0.4)	(0.2)
3.	Acceptance of Feedback	3.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)

Table 4.29 shows the responses from cooperating teachers to the Reflection section of the 2008-2011 Student Teaching Evaluation Rubric. Mean scores of all dimensions substantially exceed the Program performance standard.

Table 4.30
2011-2012 Student Teaching Evaluation Rubric: Reflection
Adolescence and Childhood

Claim 4: Cross-Cutting Theme – Learning How to Learn

		Childhood		Adolescence		Adol. Math		Adol. Social		Adol. English		Child./Adol.	
		N=1		(total) N=3		N=1		Studies		N=1		Combined N=4	
			-	_				N=1					
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)		(1-4)	
Reflection and	1.Reflection on Teaching												
Continuous	1.a	3.5	0	3.66	.28	3.5	0	3.5	0	4	0	3.62	.25
Growth	1.b	3	0	3.26	.25	3.3	0	3.5	0	3	0	3.2	.24
	1.c	3	0	4	0	4	0	4	0	4	0	3.45	.5
	2.Consid	2.Consideration of New Ideas											
	2.a	3.5	0	3.33	.57	4	0	3	0	3	0	3.37	.47
	2.b	3.5	0	3.16	.28	3.5	0	N=1	0	3	0	3.25	.28
								3					
	3.Goal S	.Goal Setting											
	3.a	3	0	3.66	.28	3.5	0	3.5	0	4	0	3.5	.4

Table 4.30 examines the responses from cooperating teachers to the Reflection portion of the 2011-2012 Student Teaching Evaluation Rubric. Mean scores for both the Childhood and Adolescence Programs meet or exceed the Program standard.

Table 4.31
2008-2012 Mean Scores Graduate Survey: Reflection and Continuous Growth
Claim 4: Cross-Cutting Theme – Learning to Learn
Childhood and Adolescence Programs

ermanood and Adorestence Frograms								
Instruct	ion:	Childhood	Adolescence					
	ange 1-5 nance Standard: Level 4	N=2	N=8 (unless noted otherwise)					
		Mean	Mean					
		SD	SD					
1.	Reflection on Teaching	4.5	5.0 N=7					
		(0.7)	(0.)					
2.	Consideration of New Ideas	4.5	4.9					
		(0.7)	(0.35)					
3.	Goal Setting	4.5	5.0					
		(0.7)	(0.)					

Table 4.31 looks at the responses to the Reflection section of our Graduate Survey. All means scores well exceeded the performance standard of 4 set by the Education faculty.

Qualitative Data

The four participants of the case studies have clearly learned how to learn on their own and have become critically reflective practitioners. All four discussed the importance of reflection in order to improve their teaching. For example, Ms. Harris noted that she constantly reflects on her teaching, both in the moment and at the end of each day. Mr. Smith also discussed how he used reflection in his search for balancing the diverse needs of his students. Similar to Ms. Harris, Ms. Adams engages in reflective practice during the school day and uses a written journal at home to help her process the day's events and to better plan for the next day.

Each of the participants also noted the importance of working with colleagues to learn from each other and/or to collaborate in lesson planning and instruction. Their desire to learn from and with their colleagues reflects their commitment to lifelong learning. Ms. Finch emphasized the importance of consulting and working with her colleagues to plan and implement instruction in order to best serve the diverse needs of their students. Mr. Smith also talked about the benefits of co-teaching and espoused his belief that working with his co-teacher provided for the most robust, rigorous curriculum and instruction. Ms. Adams discussed her

collaboration with another teacher to plan a unit and her desire for critical feedback from colleagues and supervisors. The participants' willingness to seek out advice, partnership, and feedback from colleagues demonstrates their desire to continue learning about teaching.

In our recent Graduate Survey virtually all of our responders who remained in the field of teaching had received a master's degree or were currently enrolled in master's program. Many had received or aimed to receive additional certifications. A number of graduates noted taking advantage of a range of professional development opportunities—BOCES workshops, curriculum development training, professional conferences, technology training, special education classes, therapeutic crises courses etc., and one noted presenting at a STANYS (Science Teacher's Association of New York State) conference. Additionally, graduates talked about participating in leadership roles within their schools—curriculum committees, class advisor, instructor in an after-school science program for girls, department head, financial committee member, coaches etc.

Section 5: Discussion and Plan

The Wells College Education faculty makes four claims about our programs. Were these claims supported by the results? How do we plan to use these results to continually improve our program?

Claim 1: Graduates of our program are proficient in subject matter knowledge and apply this knowledge in their teaching.

There is substantial evidence across the measures used in this report that students completing the Wells Education Program bring a firm foundation of subject matter knowledge into their classrooms. This evidence includes mean major and overall GPAs that exceed the Wells standard; mean NYS CST scores that exceed the New York State established cut score; mean scores on the Student Teaching Evaluation Rubric (Content Knowledge) that exceed the Wells performance standard; and supportive qualitative information from our case studies. Students

appear to have an understanding of the major concepts and structures of the discipline that will allow them to create meaningful learning experiences and make important aspects of their discipline(s) accessible to learners.

As noted in the Internal Audit, we feel there is a need to continue our discussion with the history department regarding modifications of course requirements for students seeking certification in social studies. This came about, not as a direct result of evidence gathered in this Inquiry Brief, but as a result of a closer examination of the course offerings (Internal Audit) and informal feedback provided by cooperating teachers. We also believe that the Program would benefit from continued conversation with all majors that support the Education Program, regarding refining course requirements in a manner that would strengthen relevant subject matter knowledge and increase the connections between subject matter and effective teaching.

Claim 2: Graduates of our program understand and apply the necessary pedagogy and methodology to meet the diverse needs of students.

There appears to be ample evidence that students completing our program understand and apply the necessary pedagogy and methodology to meet the needs of students. This evidence includes mean Education Program GPAs that exceed the Wells standard; mean NYS ATS-W scores that exceed the New York State established cut score; mean scores on the Student Teaching Evaluation Rubric (Planning/Preparation) that exceed the Wells performance standard; and supportive qualitative information from our case studies. Students appear to understand the short and long-term planning processes and utilize these to develop engaging, effective learning experiences. Graduates apply a range of proven, instructional strategies as they work to respond to the unique learning and developmental needs of individual students. Themes of differentiation and meeting the needs of diverse learners are common threads throughout all Education courses. That said, faculty generally agreed that that students would benefit from an additional course that focused primarily on meeting the needs of students from

culturally diverse backgrounds, especially English Language Learners. Adding to our concerns is the fact that New York State will have a new assessment in place beginning in fall, 2013 that addresses the theme "Educating All Students." Twenty seven percent of this assessment will focus on English language learners and another twenty-seven percent on diverse student populations. An additional twenty-seven percent will be devoted to students with disabilities and other special learning needs. Reorganizing our inclusive education core to include two courses, one focusing on disabilities and special learning needs and the other on diverse student populations and English language learners would strengthen our program. As a result, a course on English Language Learners and the Multi-Cultural Classroom is being developed for proposal in spring, 2012 and implementation in fall, 2013.

Claim 3: Graduates of our program are responsive, reflective professionals who have the knowledge and skills to serve their students.

The Student Teaching Evaluation Rubric, Alumni Surveys and Case Studies produced a substantial amount of information that supports that the graduates of the Wells Education Program are responsive practitioners who have the foundational knowledge and instructional skill to serve their students. Program completers appear to embrace the importance of differentiation and have the skills to adapt instructional practice in order to meet the diverse needs of learners. They appear to utilize reflection as a means of evaluating and improving that practice.

Claim 4: Graduates of our program utilize relevant teaching technologies, their knowledge of students' individual and multi-cultural differences, and opportunities for continued growth in order to serve their students.

Given the evidence from the Student Teacher Evaluation Rubric, Exit Interviews and Graduate Survey the Education Program has done an adequate job of preparing our graduates to utilize relevant instructional technology. Our completers understand the important role technology

can play in a dynamic, engaging lesson. They are open to the application of technology and are comfortable learning about and applying technology as it becomes available to them in the classroom. This is one area it has become clear we need to develop. Student comments on Exit Interviews, data from the Graduate Survey, and discussion within the Case Studies all support an increased focus within the Wells Education Program on developing and enhancing instruction relating to the application of relevant, supportive technology in the classroom. Currently the Education Program integrates the use and instruction of technology with content from a number of different courses. Students explore WebQuests in their literacy courses, create Blogs in their methods courses and work with students to create book trailers in EDUC 275, Using Children's Literature in the Classroom. In addition to maintaining these tasks, a new 2 credit Education course on Using Technology in the Classroom was proposed in fall, 2012 and is being offered for the first time during the spring, 2013 semester. The addition of this course will likely strengthen future Wells College education program graduates in this increasingly important area.

Evidence within this brief supports that graduates from the Wells Education Program utilize their understanding of student differences in order to instruct their students effectively. As noted in the discussion of Claim 2, the importance of addressing diversity in the classroom is a thread that runs through all of our courses. It is reflected in our readings, our rubrics and our course assignments. Although multicultural perspectives are addressed in numerous discussions and readings especially in EDUC 105 (*Teaching in a Diverse Society*), EDUC 320 (*Teaching for Social Justice*- taught occasionally), EDUC 315 (*The Inclusive Classroom*), and SOC 320 (*Sociology of Education*), the Education faculty felt that more could be done. After a careful review of our current offerings, the faculty felt that developing a course for a primary purpose of exploring multicultural perspectives would strengthen our over-all program and provide increased opportunities for creating assessments specifically designed to measure students' understandings in this area. As noted above, a course on English Language Learners and the Multi-Cultural Classrooms is being developed for proposal in spring, 2012 and implementation in fall, 2013.

Substantial evidence supports that the graduates of the Wells Education Program are practitioners who consistently reflect on their teaching, consider new ideas, develop professional goals and seek opportunities to expand their learning for the purpose of being more effective teachers.

As a result of our examination of the evidence collected for the Inquiry Brief and of the Internal Audit, additional actions are being considered:

- Development of an Education Program Advisory Board comprised of area teacher, principals, and program completers will be explored. This structure would provide access to additional relevant voices as we continue to review and strengthen our program.
- The Education Program faculty recommends and supports a Wells College evaluation/review system for faculty in shared instructional/administrative positions.
- Our Program Director is currently working with the Registrar to begin the process of evaluating and registering additional liberal arts majors to support the Childhood Certification Program.
- Review and strengthening of our assessment system:
 - Continued work needs to be done on aligning course assessments to our recently revised goals and outcomes. This will provide us with a system that collects thoughtful, relevant evidence consistently THROUGHOUT a student's participation in the program.
 - The Education Program will begin to collect and analyze student teaching evaluation data in the form of rubrics that are filled out by supervisors and student teachers. Data from these evaluations and self-assessments will support the information already being gathered in the form of the cooperating teachers' assessments of our pre-service teachers.
 - Candidates applying for initial certification in New York on or after May 1, 2014,
 will be required to take and pass the edTPA. EdTPA is a student-centered

multiple measure assessment of teaching. It is designed to be educative and predicting of effective teaching and student learning. Stanford University faculty and staff at Stanford Center for Assessment, Learning, and Equity (SCALE) developed edTPA. They received substantive advice and feedback from teachers and teacher educators throughout the development process. This should prove to be a strong addition to our assessment package.

 Currently our portfolio review process consists of two important components. The portfolio itself is reviewed by the faculty instructing EDUC 408: Student Teaching Reflective Seminar. Individual required components are assessed throughout the semester and the portfolio as a whole is assessed using a general portfolio rubric. Prior to this review, students completing the Program present their portfolio to a panel of faculty, essentially engaging in a portfolio defense. Faculty engage the students in reflective conversations about the evidence presented in the portfolio and question the students regarding their meeting of the defined outcomes in the areas of planning; content knowledge; assessment; diverse learners; instructional practice; professionalism and collaboration; and reflection and professional growth. Following the defense, faculty discuss the student performance and provide feedback to the student. This process has the potential to be both a powerful assessment and a powerful learning opportunity. What has been missing is a set of clearly defined criteria for both the portfolio product and the defense process—criteria that is aligned with Program goals and outcomes. A draft of this criteria was developed in fall, 2012 utilized for the first time in December. The portfolio defense process also provides us with an opportunity to pull in outside raters, something we have yet to do. An Advisory Board of local teachers, administrators and graduates could easily provide us with skilled third-party evaluators. We will move forward on these changes with the plan of using the information gathered from this process as data in future evaluations.

Section 6: References

CCSSO Interstate Teacher Assessment and Support Consortium, retrieved from http://www.ccsso.org/documents/2011/intasc model core teaching standards 2011.pdf

Danielson, C. (2007) *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, VA: Association for Supervision & Curriculum Development

Darling-Hammond L., Banks J., Zumwalt, K., Gomez L., Sherin, M.G., Griesdorn, J., Finn, L. (2005) "Educational Goals and Purposes: Developing a Curricular Vision for Teaching." In L. Darling-Hammond & J. Branford (Eds.). *Preparing Teachers for a Changing World* (169-200). San Francisco, CA: Jossey-Bass

Darling-Hammond, L. & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do.* SanFrancisco, CA: Jossey-Bass

Feiman-Nemser, S. (1996) Teacher mentoring: A critical review. Retrieved from ERIC Database. (ED397060)

Hammerness K., Darling-Hammond L., Bransford J., Berliner D., Cochran-Smith M., McDonald M, Zeichner K. (2005) "How Teachers Learn and Develop." In L. Darling-Hammond & J. Branford (Eds.). *Preparing Teachers for a Changing World* (169-200). San Francisco, CA: Jossey-Bass

Hunter, M. (1994). Enhancing Teaching. New York, NY: Macmillan College Publishing

LePage, P., Darling-Hammond, L., Akar, H., Gutierrez, C., Jenkins-Gunn, E., Rosebrock, K. (2005) "Educational Goals and Purposes: Developing a Curricular Vision for Teaching." In L. Darling-Hammond & J. Branford (Eds.). *Preparing Teachers for a Changing World* (327-357). San Francisco, CA: Jossey-Bass

Marzano, R. & Pickering D. (1997). *Dimensions of Learning: Teachers Manual.* Alexandria, VA: Association for Supervision & Curriculum Development

Nieto S. (2003). What Keeps Teachers Going. New York, NY: Teachers College

NYSTCE Registration Bulletin (2012). Pearson Education. Retrieved from http://www.nystce.nesinc.com/NY17 overview.asp

Tomlinson, C. A. (2001). How to Differentiate Instruction in Mixed Ability Classrooms. Alexandria, VA: Association for Supervision & Curriculum Development

Tomlinson, C. A. & McTighe, J. (2006). *Integrating differentiated instruction and understanding by design.* Alexandria, VA: Association for Supervision & Curriculum Development

Yin R.K. (2009). *Case study research: Design and methods.* Thousand Oaks, CA: Sage Publications