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ABSTRACT

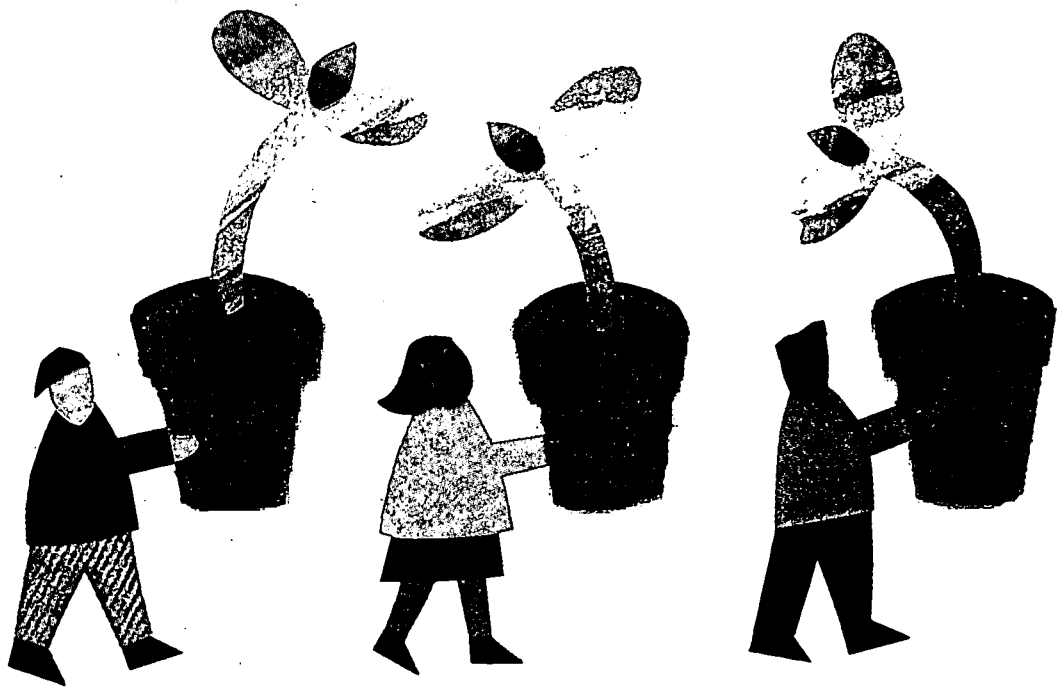
This book presents case studies of two highly successful teacher education programs. It is part of a three-volume series that includes seven case studies. The book documents the goals, strategies, content, and processes of teacher education programs that are widely acknowledged as exemplars for preparing prospective teachers to engage in skillful, learner-centered practice. Using observations, interviews, and surveys, researchers examined all aspects of each program of study and clinical practice. The book documents the capabilities of prospective teachers who graduate from these programs by focusing on the teachers' own work during teacher education and in the field, interviews with faculty and administrators in the schools where graduates teach, and surveys of principals. The book also examines what policies, organizational features, resources, and relationships have enabled these programs to succeed. Some of the programs' common features include a clear, shared vision of good teaching; well-defined standards of practice and performance; extended clinical experiences; and extensive use of case study, teacher research, performance assessment, and portfolio evaluation. The two case studies are "Ability-Based Teacher Education: Elementary Teacher Education at Alverno College" (Kenneth Zeichner) and "Learning to Become a Teacher: The Wheelock Way" (Lynn Miller and David Silvernail). (Papers contains references.) (SM)

Studies of Excellence in Teacher Education: Preparation at the Undergraduate Level

Kenneth Zeichner, Lynne Miller
and David Silvernail

AACTE
2000

STUDIES OF EXCELLENCE IN TEACHER EDUCATION



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FOREWORD

by Linda Darling-Hammond

This set of case studies about extraordinary teacher education programs is one of three volumes being published by the American Association of Colleges for Teacher Education in collaboration with the National Commission on Teaching & America's Future. A cross-cutting analysis of the cases, published separately, will describe the common features of these seven programs that are distinguished by their success in preparing teachers to practice in ways that we describe as both *learner-centered* and *learning-centered.* By this, we mean that they prepare teacher to meet the needs of very diverse learners—to teach in ways that are responsive to individual students' intelligences, talents, cultural and linguistic backgrounds, needs, and interests; and they prepare teachers to teach for understanding—to teach in ways that support active, in-depth learning which results in powerful thinking and flexible, proficient performances on the part of their students.

These abilities are the foundation of new standards developed by the National Board for Professional Teaching Standards (NBPTS), the Interstate New Teacher Assessment and Support Consortium (INTASC), and the National Council for Accreditation of Teacher Education (NCATE), along with professional associations engaged in developing new standards for students. However, while there is increasing consensus on what teachers and their students need to know and be able to do in order to meet the more ambitious goals of 21st century schools, there is not yet a well-developed knowledge base about how to prepare teachers to do these things. Although teacher education has been much critiqued, little research has been done to examine the kinds of learning experiences that help beginning teachers acquire the knowledge and skills that underlie learner-centered and learning-centered practice.

That teacher knowledge is central to this mission is a new concept in 20th century school reform. After decades of trying to fix schools by changing curriculum packages, texts, tests, and management systems, most reformers now agree that deepening teachers' knowledge and skills is critical to the success of ongoing efforts to reform American education. Only very knowledgeable and skillful teachers who are able to respond differentially and appropriately to students' interests and needs can enable diverse

learners to succeed at much more challenging learning goals. These goals include helping students learn to master ambitious subject matter content and to think critically, create, and solve complex problems, rather than merely to perform rote tasks. And teachers are being asked to achieve these goals for *all* children, not just the 10 to 20 percent who have traditionally been siphoned off into programs for the gifted and talented or "honors" track. Furthermore, students are more diverse in their needs and backgrounds and less supported in their communities than in the past. So schools are being asked to take achieve higher goals for a broader group of students with greater learning needs than ever before.

This collection of case studies seeks to answer a question that has not yet been yet addressed by reformers: How can we prepare teachers for this daunting mission? The study, conducted under the auspices of the National Commission on Teaching & America's Future at Teachers College, Columbia University, reports how seven teacher education programs have been able to prepare teachers to succeed at the kind of highly demanding practice described above, and thus to create substantially more successful and powerful learning experiences for students. It provides evidence about the outcomes of the programs as well as the content they engage and the processes they employ. The goal of this work is to provide greater knowledge that others in the field can build upon—knowledge that will help us understand what successful teacher education models look like, what they aim for, what they do, and what their students can accomplish as a result.

One motivation for this study was to counteract the widely shared set of myths about teaching and teacher education. Among others, these myths include the following: that good teachers are born and not made; that good practice cannot really be taught—it can only be intuited through trial and error; that few can ever really master complex teaching practices or attend to the needs of individual learners (thus, teacher-proof curricula should be continued targets of educational investment); that there are no worthwhile teacher education programs anyway so the whole process of preparing teachers should be abandoned. These myths, despite their lack of grounding, drive much policy work and deflect attention from needed investments in high quality preparation for teachers.

To provide evidence about alternatives, we set out to look at teacher education programs that are so noticeably good at what they do that the

distinctive practice of their graduates is obvious as soon as an observer sets foot in the classroom. This phenomenon is one that I have noticed over the years of my work in schools and teaching. In my years in New York, for example, I could almost invariably identify the graduates of preservice programs like those of Bank Street and Teachers College, Columbia by seeing them teach and hearing them discuss their practice. Like the graduates of other programs that we discovered by asking practitioners in other parts of the country, these teachers' knowledge of curriculum and assessment, their focus on and understanding of individual students, and their capacity to use sophisticated teaching strategies for engaging diverse learners were immediately evident. Furthermore, I found that in many parts of the country I could find a high degree of consensus among principals, superintendents, and teachers who operated schools that were extraordinarily successful with diverse learners about where they liked to hire their teachers. These excellent practitioners agreed on a very short list of colleges in their vicinity (often only one or two) that they believe prepare teachers from their very first moments on the job to shape powerful learning experiences for their students and to understand their students' learning and how to support it very, very well.

The seven programs in this study are by no means the only ones that fit these criteria and the more formal parameters we ultimately used in developing the sample. The programs were selected from a much longer list of candidates because they represent elementary and secondary programs in public and private institutions serving different kinds of clientele in different parts of the country. The programs were selected through an extensive review of evidence, including national reputational sampling from researchers, expert practitioners, and scholars of teacher education; local evidence from employers about who they prefer to hire and why; and evidence of outcomes from prior surveys of program graduates. To these data about program outcomes, we added as part of the study a comparison survey of recent program graduates and a national random sample of beginning teachers about their preparation and practices; a survey of the principals of program graduates about their views of the program graduates' abilities and practice in comparison with those of other programs; and observations of graduates' classroom practice after graduation.

The sample institutions use very different models of preparation, some are undergraduate while others are postbaccalaureate or five year (com-

bined undergraduate and graduate); some have created professional development school relationships while others organize student teaching in more traditional ways; some use cohort models while others do not; some attract current or recent college students while others attract mid-career recruits to teaching. Thus, together they represent the gamut of possibilities for teacher education currently found in the field:

- Bank Street College in New York City offers a graduate school program that is known for its long-standing commitments to progressive, democratic practice and has the Bank Street School for Children as an on-site lab school. We examined the programs for preparing elementary and middle school teachers.

- The University of California at Berkeley's Developmental Teacher Education Program is a two-year graduate school model of early childhood education that is strongly focused on the application of developmental psychology to teaching.

- University of Southern Maine's Extended Teacher Education Program (ETEP) is a one-year graduate school model that is substantially school-based. Almost all fieldwork and much coursework for both the elementary and secondary teacher education programs takes place in schools that are professional development school partners with the university.

- Wheelock College in Boston, Massachusetts is known for progressive early childhood education, much like Bank Street. We examined the undergraduate early childhood education program that is also a pathway to a master's degree program required of all teachers in Massachusetts before they receive a career teaching license.

- Alverno College in Milwaukee, Wisconsin is an undergraduate model that organizes its work around a sophisticated performance assessment strategy tied to its ability-based curriculum. We examined the elementary teacher education program that works in strong collaboration with Milwaukee Public Schools.

- Trinity University in San Antonio, Texas operates a five-year model that

extends from undergraduate through graduate school in a blended program that awards both a disciplinary bachelor's and a Master's in Education for both elementary and secondary candidates. Trinity adopted the major recommendations of the Holmes Group and has organized all of its field work around professional development schools.

- University of Virginia in Charlottesville, Virginia is a five-year dual degree program like Trinity's that does not rely upon professional development schools. We examined the secondary education programs in English and mathematics. These programs provide insights into the preparation of high school teachers, an area that we found was problematic nationwide.

The study does three things: First, it documents the goals, strategies, content, and processes of teacher education programs that are widely acknowledged as exemplars for preparing prospective teachers to engage in skillful, learner-centered practice. Using a standard set of observation and interview protocols, as well as survey instruments, a team of researchers examined all aspects of the program of study and clinical practice engaged in by students—by surveying graduates and their employers; shadowing and interviewing students; visiting classes, seminars, professional development school sites, collecting record data (syllabi, assignments, student work, program descriptions, and statistics) and observing and interviewing university-based and school-based faculty about the intentions, processes, and outcomes of their work.

Second, the study documents the capabilities of the prospective teachers who graduate from these programs. This is done through examination of the teachers' own work during teacher education and in the field (direct observations as well as artifacts of practice: portfolios, exhibitions, lesson plans, assignments, and samples of their own students' work); interviews with faculty and administrators in the schools where graduates teach; surveys of principals comparing the knowledge and skills of these candidates to others whom they have hired; and record data from other surveys and accreditation reviews. Finally, the study examines what policies, organizational features, resources and relationships have enabled these programs to be successful, taking into account the university and state policy contexts within which these programs exist.

We sought to study a diverse set of programs because we believe the findings will be more robust and useful if they characterize important features of successful programs that exist in a wide range of contexts with which other schools can identify. The goal of the study is not to suggest a single cookie-cutter approach to preparing teachers, but to understand the core features of a range of programs that make a difference for preparing teachers who understand their students and who can teach in ways that develop deep understanding and high levels of competence. While they conceptualize and conduct their work in different ways, these programs do have many common features. Among them are the following:

- a common, clear vision of good teaching that is apparent in all coursework and clinical experiences;
- well-defined standards of practice and performance that are used to guide and evaluate coursework and clinical work;
- a curriculum grounded in substantial knowledge of child and adolescent development, learning theory, cognition, motivation, and subject matter pedagogy, taught in the context of practice;
- extended clinical experiences (at least 30 weeks) which are carefully chosen to support the ideas and practices presented in simultaneous, closely interwoven coursework;
- strong relationships, common knowledge, and shared beliefs among school- and university-based faculty; and
- extensive use of case study methods, teacher research, performance assessments, and portfolio evaluation to ensure that learning is applied to real problems of practice.

These features and others help these programs productively confront many of the core dilemmas of teacher education: the strong influence of the "apprenticeship of observation" candidates bring with them from their years as students in elementary and secondary schools; the presumed divide between theory and practice; the potential limitations of personal

and cultural perspectives each person brings to the task of teaching; the difficulty of teaching people how to enact their intentions in complex settings for practice; and many more.

We hope that readers find the case studies to be generative for their own research, thinking, and practical efforts with regard to the education of teachers. If the illustrations provided here spark an idea or an initiative that enables teachers to learn more productively how to teach more powerfully, our work will have been well rewarded.

Linda Darling-Hammond
Provence, July 7, 1999

Note: The research team was led by Linda Darling-Hammond, then William F. Russell Professor of Education at Teachers College, Columbia University and currently Charles E. Ducommun Professor of Teaching and Teacher Education at Stanford University. It included Julia Koppich, President of Julia E. Koppich and Associates, an education consulting firm; Maritza B. Macdonald, Senior Research Associate, National Center for Restructuring Education, Schools, and Teaching, Teachers College, Columbia University; Kay Merseth, Executive Director of the Harvard Project on Schooling and Children at Harvard University; Lynne Miller, Professor and Director of the Southern Maine Partnership at the University of Southern Maine; Gordon Ruscoe, Professor in the Foundations of Education at the University of Louisville; David Silvernail, Professor and Director of the Center for Educational Policy, Applied Research and Evaluation at the University of Southern Maine; Jon Snyder, Associate Professor and Director of Teacher Education at the University of California at Santa Barbara; Betty Lou Whitford, Professor of Education and Director of the National Center for Restructuring Education, Schools, and Teaching at Teachers College, Columbia University; and Kenneth Zeichner, Hoefs Bascom Professor of Teacher Education at the University of Wisconsin-Madison.

Ability-Based Teacher Education: Elementary Teacher Education at Alverno College

BY KENNETH ZEICHNER
UNIVERSITY OF WISCONSIN-MADISON

As I look for teachers, I most immediately look for Alverno applicants.

Integrating new teachers into the staff from Alverno is so much easier, because of their high ability to be self-reflective, their personally wide experiences with performance assessment at the college level, and their ability to apply critical research bases to their classroom experiences.

They are highly collegial, unafraid to seek out all they need to know from mentors and staff around them.

I'll take 10 more teachers like the two I've had this year.

-Principals' comments on Alverno teachers

OVERVIEW

Alverno College is a Catholic liberal arts college for women with an enrollment of about 2,300 students located in the city of Milwaukee, Wisconsin. It was founded in 1887 as a normal school to prepare teachers for parochial schools, became a four-year teachers college in 1936, and a four-year liberal arts college in 1946. Although all of the baccalaureate degree programs are limited to women, some of the non-degree programs, such as post-baccalaureate teacher certification, are open to men as well. A few men are enrolled in these programs. Of the approximately 2,300 students at Alverno, around 1,400 are enrolled in the Weekday College and 900 are enrolled in the Weekend College. Education majors (about 300 students) at Alverno College make up about 22 percent of the Weekday College and about 14 percent of the total college enrollment.

About two-thirds of the students at Alverno College are from the Milwaukee metropolitan area. Alverno is essentially a commuter campus that has historically served first-generation college students. Faculty estimate that over 50 percent of the current students are the first in their immediate families to attend a higher education institution. A large percentage of students are employed; approximately 85 percent of students receive some form of financial aid; and about 25 percent of students now at Alverno are people of color. An increasingly older population attends the Weekday College program; only about 39 percent of the students in this program are under the age of 23, the average age of education students at Alverno is 26 to 28; and many of the students in the classes we observed were parents.

The education department at Alverno College offers teacher licensure preparation programs in early childhood education, elementary education, secondary education, bilingual education, music education, art education, and adult education. Elementary education majors can elect to broaden their certification in grades one to six to include either early childhood (N-K) or middle school (grades 7-9). Other certifiable support areas available to elementary majors are bilingual education, computer studies, dance, language arts, math, science, social studies, Spanish language and culture, and theater.

The elementary teacher education program which is the focus of this case study is the largest of the Alverno College teacher education programs. Over the last four years, an average of 53 students have graduated with ele-

mentary certification each year. (There has been an average of 217 students enrolled in elementary education over the last four years.) About one-third of the 53 graduates per year were post-baccalaureate students, and about 40 percent were students who transferred into Alverno at some point. Although Alverno offers a four-year undergraduate program leading to certification as an elementary teacher, only about 20 of the 53 students who graduated from Alverno College during each of the last four years with elementary certificates actually spent four full years enrolled at Alverno. Also, many students take more than four years to complete the program because of the intensive demands of the program or because of their need to work or care for their families. In order to complete the program in four years, a student would need to take 18 credits each semester.

Faculty that we interviewed (see Appendix A) argue that a cohort model which moves groups of students through a program in intact groups is inappropriate for Alverno College because of the relatively older working class population it serves. They feel that a cohort model would make it impossible for many of their students to attend Alverno and that the college meets many of the same goals of the cohort model (e.g., developing a supportive learning community) through other means. For example, the fact that the program is embedded in an institutional culture that places a high priority on teaching and teacher education leads to a situation where faculty spend a great deal of time getting to know their students and working with them The absence of grades and a common language for communication among faculty and students, provided by the ability-based curriculum of the college, also promote a more noncompetitive and supportive learning environment.

In talking to students and faculty, we were informed that students attend Alverno College for a variety of reasons. Some students are attracted to Alverno College because of its reputation in the Milwaukee area as an institution with a high-quality teacher education program. This reputation was confirmed in our talks with area teachers and principals. They like to hire Alverno College graduates because they feel that they have been well nurtured and trained, and the word on the street, as one student said, is that "Alverno teachers get jobs." Some students chose Alverno College in part because they were attracted to the personal attention to students in small classes and direct contact with faculty rather than teaching assistants. Other students chose Alverno because they felt that

their relatively lower grades in secondary school would not have allowed them to get into other institutions. Alverno College allows any student who has been admitted to the college to declare an education major upon entering, and the first review process occurs after the first two semesters. Finally, the desire to attend college in the Milwaukee area is a big factor in the decision of many students to attend Alverno College. More than 84 percent of the graduates of the college stay in southeastern Wisconsin after graduation. In a survey of 96 graduates of the program over the last four years, 77.1 percent said that the reputation of the program was a factor in their choice of Alverno. Other factors such as cost (5.2%), "fit my teaching philosophy" (32.3%), and geographical convenience (36.5%) were also cited.

A distinctive feature of all of the teacher education programs at Alverno College is that they are designed around a college-wide ability-based curriculum which makes explicit the knowledge, skills, and dispositions that students must demonstrate. Eight general abilities are used throughout the entire college and five additional advanced-education abilities are the conceptual basis for the teacher education programs. Students receive feedback as to their progress in all these abilities throughout the program. (See Program Goals and Content section.) There are no grades at all at Alverno College. Narrative transcripts are provided to each student upon graduation; these describe the nature and quality of their work in relation to the abilities required.

This ability-based curriculum was initially developed during the period 1969-73 and has been continually revised since then as outlined below. A performance-based assessment system that includes both in-class and external assessments of students' work related to various levels of competence regarding the general and education-related abilities is an essential aspect of teacher education at Alverno College. Instead of obtaining grades for various courses, students obtain "validations" of their competence in particular levels of the abilities. There is also a strong emphasis in the college on the responsibilities of a liberally educated person to give service to the community.

There is a very high placement rate for the graduates of this teacher education program (about 80-90 percent of the graduates are hired as teachers). About 40 percent of the graduates who get teaching jobs end up working in the Milwaukee public schools (MPS), a typical urban dis-

trict of around 103,000 pupils, about 78 percent of whom are of color and about 71 percent of whom qualify for free and reduced-cost meal programs. Because of the relatively small size of Alverno's teacher education programs, Alverno graduates typically make up only about 8 percent of the new hires each year in the MPS. Despite these relatively low numbers, the ties between Alverno and MPS are quite close because many of the Alverno faculty are involved on a long-term basis in a number of substantial consulting projects in MPS. These include helping schools incorporate the performance assessment of pupils across the curriculum, integrating technologies into the classroom, developing whole language literacy programs in bilingual schools, and developing integrated curricula in the arts and humanities. The links between MPS and Alverno are also close because a number of the Alverno faculty serve on key MPS and school-level committees such as strategic planning teams, and because Alverno over time has recruited a number of former MPS teachers and principals to join its faculty.

The elementary teacher education program at Alverno College has been very successful over the years in preparing teachers to work in a variety of different schools. Survey data, interviews, and observations of program graduates, interviews with and observations of the current students and faculty, and surveys of and interviews with employers of Alverno graduates all point to the noticeable impact that the program seems to have on its participants. Unlike the portrait painted in the literature of preservice teacher education programs as impotent and ineffectual (Zeichner & Gore, 1990), the evidence gathered in this case study is very strong that this program produces poised and confident teachers who employ teaching strategies that are rich in learner-centered and learning-centered practices, and who perceive themselves and are perceived by others as successful and innovative teachers in a variety of settings, including the public schools of Milwaukee.

THE ALVERNO PHILOSOPHY IN ACTION

At 8:30 a.m., following a half-hour informal period during which students read some of the numerous trade books scattered throughout the room and participate in a spirited recitation of the school creed by the whole school, Berthina Johnson[1] gathers her 26 first-graders on the floor

1 All teacher and student names are pseudonyms. Actual names of Alverno faculty are used.

in front of the calendar. Adams School is located in one of the poorest neighborhoods of the city of Milwaukee. About 93 percent of the 746 pupils in the school qualify for the free breakfast and lunch program and the school has a mobility rate of 34 percent. All 26 of Ms. Johnson's pupils (13 girls and 13 boys) are African American like their teacher (744 of the 746 students in the school are African American), and for several of the pupils who are six and seven years old, first grade at Adams is the first formal school experience.

Berthina graduated from Alverno College four years ago with a degree in elementary education and is beginning her fifth year of teaching first grade at Adams. She entered the teacher education program at the age of 28 after a brief career in the insurance industry. Berthina's classroom presents a bright and cheery atmosphere, with freshly waxed floors and walls covered with colorful materials related to the alphabet, numbers, colors, shapes, days of the week, and basic vocabulary words. Almost every inch of wall space is used to review and reinforce concepts and words found in the students' everyday world. The students' desks are set up in two large groups facing each other in a way that encourages social interaction. Several learning centers are scattered throughout the classroom, providing opportunities for children to work on basic math and reading skills with computers, to write and draw, and to listen to a tape while following along in a book.

One of Berthina's major goals for her first graders is to encourage them to become more independent and responsible for their actions over the course of the year. Throughout the morning, Berthina continually reminds her pupils that they are first-graders and not kindergartners, so they must do things like speak in complete sentences, and take responsibility for their own behavior. Throughout the morning, she repeatedly poses questions to the class as reminders of things discussed beforehand: "How can we become good readers?" and invites a choral response from the class: "By reading good books." Berthina uses choral responses like this frequently throughout the morning. Although the pupils are focused intently upon the activity at hand the whole morning except for a brief interlude of free-choice time at the centers, the class is lively and buzzing with talk about the things students are working on.

On Wednesday mornings, the day of our observation, Berthina's class meets from 8:00 a.m. to 11:30 a.m. without any formal breaks in the

schedule. This morning Berthina uses the calendar-time block in her schedule, a period of about one half hour, to review and reinforce with her pupils basic ideas such as the date, the meaning of the words yesterday, today, tomorrow, and weekend, and basic math algorithms and concepts such as place value and counting forwards and backwards. The pace is very quick and the expectations are high for student success. Berthina poses one question after another and asks for a response either from an individual child or the whole group. If a child or the group does not answer a question correctly (e.g., How many ones are in the number 15? What is tomorrow's date?), she keeps encouraging the children until they are able to figure out the answer.

Upon finishing the calendar lesson, the class moves almost immediately to an activity involving the short *a* sound. The pupils cut out and color a cap with the letters ap marked on it and slip in sheets of paper with consonants and consonant blends and read the words together as a class and then in pairs. Berthina encourages the children to take their materials home that night and read the words to someone else. The rest of the morning is spent working on penmanship skills and on math problems involving place value and simple addition. For the addition problem, the pupils are asked to draw a picture to show how they have solved the problem. Two pupils are then asked to draw their pictures on the board and to explain to the rest of the class what they have done. The pupils have each solved the problem using a different strategy, something which is commented on favorably by Berthina. During the half hour when students are free to choose to work at any one of the various learning centers in the room, several students are sitting at computers working on games which provide drills in basic math algorithms and phonics; some are drawing, listening to tapes and following along in a trade book, or just reading.

Throughout all of the academic tasks, Berthina is very attentive to individual children and their needs and is quickly on top of potentially disruptive situations before they get out of hand. Two boys complain of feeling ill and require individual consultations about whether they want to stay in school or go home (both decide to stay) and a girl complains about her eye hurting. Another young boy who is crying because he cannot find his pencil also requires a few minutes of hugging and support. Several parents come into the room at various times during the morning and speak with Berthina about various matters. Each time she warmly welcomes them into

the room and spends a few minutes talking with them. In her responses to her pupils throughout the morning, she reveals knowledge of all of the special circumstances involved with contacting the children's homes. In one case, an older brother is to be contacted to pick up an ill child. In other cases, Berthina refers to a child's grandmother, uncle, mother, or father. She seems to know in each case who needs to be contacted.

Berthina has carried much of what she has learned at Alverno into this urban first-grade classroom, although she has adapted and modified it to address what she sees as the needs of her students and the circumstances of her work. For example, although her room is filled with trade books which the children read on a daily basis and learning centers that provide a variety of activities for students to pursue in different subject areas, she also takes time regularly to teach particular phonics skills that she thinks will be helpful to her children's development of reading competence. She describes her program as involving a combination of the child-centered practices advocated at Alverno and some of the more traditional methods in which skills are taught in isolation. She has picked up these traditional practices from her own education and from some of her field placements while at Alverno. Although Berthina makes time to teach specific skills and concepts in isolation, she always attempts to have the children use these in relation to the events and circumstances in their everyday lives. For example, instead of just having the children fill out worksheets about the days of the week and basic number facts, she continually asks them to talk about these in relation to things they have done or will be doing as a class and as individuals.

Berthina has made a conscious decision to blend "process" and "skill-oriented" instruction in her classroom despite some pressure from her colleagues and principal to employ a purer form of whole language instruction. Consistent with the focus of her preparation at Alverno, she has focused first and foremost on what she perceives to be in the best interests of her pupils, and has stood her ground on their behalf. What we found in her classroom transcends the categories of "process" and "skill" instruction and incorporates elements of both approaches within the context of warm and caring relationships between the teacher and each of her students. Along with the warmth and affection that were evident between Berthina and her students, there was also a clear effort on Berthina's part to push her students to do their best work and to achieve at high levels. For example, a number of the students would respond to Berthina's questions with phras-

es instead of complete sentences. Berthina was very persistent in pushing the students in a friendly and supportive way to respond in complete sentences and would stick with them until they did so.

Also, consistent with the focus of the Alverno program to prepare teachers who will be leaders in educational reform, Berthina is a member of the school district's assessment team and is involved in piloting the use of portfolios to assess the work of her pupils. Finally, like many of the other graduates from the Alverno College teacher education program, Berthina remains involved with the program after her graduation by mentoring the Alverno College field students who work in her classroom and by talking about her teaching to Alverno College students on campus.

THE OVERALL STRUCTURE OF ALVERNO'S ELEMENTARY TEACHER EDUCATION PROGRAM

The course of study in elementary education at Alverno College is divided into three levels, each one highlighting a stage in the development of the abilities of a professional teacher. The first three semesters (freshman year and the first sophomore-year semester) emphasize the *preprofessional* frameworks of the liberal arts disciplines as well as introducing some pedagogical frameworks and experiences to students.

The middle three semesters of preparation focus on *professional* teaching frameworks in relation to practice in the field. Here students take a variety of education department courses and participate in field experiences which help them plan, implement and assess their teaching from a variety of different perspectives, such as invitational teaching. Invitational teaching is one of a number of educational frameworks introduced to students to help them master the core abilities in the program curriculum. This particular framework focuses on the development of pupils' self-concepts through the use of specific teaching practices that invite the participation of all learners in the classroom. Consistent with the overall philosophy of the Alverno program, invitational teaching works toward the creation of an atmosphere of acceptance in the classroom that welcomes and celebrates diversity (Purkey & Novak, 1984).

The final two semesters are designated as the beginning of *professional practice,* where students complete student teaching and engage in reflective scholarship and other activities of teachers. (See Appendix B for a list of the courses in the program.)

Admissions and Advancement Policies

Students can declare an education major as early as their freshman year. At the end of the first two semesters, students apply to the preprofessional level of practice, which includes the first of four pre-student teaching field experiences. A faculty admissions and advancement committee handles all of the decisions regarding continuation in the program at all of the various stages. When students apply to the preprofessional level of the program they must have completed a year of course work at Alverno College, a required one-credit human relations workshop, and a portion of the math content requirement, as well as present faculty with recommendations from instructors.

After two more semesters and the completion of two of the pre-student teaching experiences, students apply to be admitted to the professional level of the program. Here they must show successful completion of the first two field experiences (and present letters of recommendation), demonstrate a specific ability (communication, level 3; see Program Goals and Content section), meet the state-wide minimum cutoff scores on the reading, writing, and mathematics sections of the pre-professional skills test, and show successful completion of one of the several standard assessment exercises that are spread throughout the program, the "Behavioral Event Interview and Self-Assessment."

This exercise is an hour-long interview conducted in the second semester of field experiences. Each education department member interviews two students each semester. The aim of the interview is to give students a chance to talk about their actions and thinking in relation to working with pupils. It focuses on stories elicited by questions (e.g., Can you tell me about a time you came to a realization about children's development through an experience with a child or children?). The students then are asked to use their stories as data for a self-assessment process focusing on the five advanced education abilities (e.g., Where do you see yourself drawing upon x ability? Where do you see a need to strengthen this ability?) The interview is audiotaped and students take the tape with them to complete a written self-assessment. They set goals for their next stage of development in their teacher education program and then meet for a second session with the faculty interviewer.

After the completion of two more semesters, including two more field experiences, students apply for admission to student teaching, which is a

full-semester teaching experience matching the school (not the college) calendar. Here students must have successfully demonstrated communication ability at level 4, and have successfully completed all four pre-student teaching experiences and another of the standard assessment exercises, "Professional Group Discussion Assessment" (see Appendix C). Students also compile a portfolio that includes a videotape of their teaching together with a written analysis of that teaching in relation to the five advanced education abilities, cooperating teacher evaluations, etc. The student then participates in a half-day interview with principals and teachers from area schools who are part of a pool of over 400 educators helping to assess students' readiness for student teaching. In reality, very few students are prevented from entering student teaching on the basis of this performance assessment.

The careful monitoring of students' progress through the program is a significant characteristic of this teacher education program. I doubt that there is a teacher education program anywhere that gives such careful attention to assessment of its students. In addition to requiring checkpoints in the education program outlined above, the whole program is built on the idea of students demonstrating competence in ("getting validations on") specific levels of the eight general-education abilities and the five advanced-education abilities. From their very first day at Alverno, when they are required to make a videotape of themselves giving a short speech to their peers, students are constantly assessed in relation to these abilities. During one of our visits, we saw a film that showed the progression in a few students' communication abilities over their four years at the college by presenting brief clips of their taped speeches each year. The growth over time in students' abilities to give a public speech was quite striking.

The admission and retention of minority students is a college-wide commitment at Alverno College. The 25 percent minority enrollment at Alverno is one of the highest percentages of minority student attendance at a post-secondary education institution in Wisconsin. The college does outreach activities to local high schools and to paraprofessionals in the Milwaukee Public Schools (MPS). There are also special remedial courses and services to address the academic weaknesses of students who have experienced an inferior K-12 education. Alverno College, along with the University of Wisconsin-Milwaukee, participates in one of the Pathways to Teaching projects funded by Dewitt Wallace and coordinated by Bank

Street College. These programs are designed to recruit paraprofessionals and emergency licensed people (especially those of color) into teaching. During the 1995-96 year, 20 Alverno students participated in this program. The program pays two-thirds of tuition for participants.

The Faculty and Institutional Culture

There are 15 full-time faculty and a total teaching staff of 35. Of the 15 full-time education department faculty listed in the documentation for the 1995 NCATE review of Alverno's teacher education programs, seven had a doctoral degree in education and four others were in the process of completing doctoral degrees. Sixteen adjunct department faculty were also listed in this report; all 16 had master's degrees in education and two were in the process of completing doctoral degrees. Of the total professional education faculty listed in the NCATE documentation for 1994-95, three are African American, one is Hispanic, one is Native American, and the rest are Caucasian. All of these faculty, except for six are female.

The education department faculty and staff share a common vision of teacher education that is made explicit through an ability-based curriculum. This curriculum provides a common language for faculty to talk with each other, with students, and with their school-based collaborators about teaching and teacher education. Cooperating teachers are introduced to this language and vision during a course on supervising teacher education students that meets a state requirement specifying course preparation for cooperating teachers. Students are introduced to the specialized language of the ability-based curriculum and the philosophy of teacher education at Alverno when they are admitted into the preprofessional level of study during the second semester of their sophomore year. All of the students with whom we met spoke to us in the language of abilities that is used at Alverno, speaking of "getting validations" on such and such in various courses. Faculty estimate that it takes two to three years for a new faculty member to learn this system and feel comfortable in it because of its uniqueness.

It was clear to us during our visits that teacher education is a high priority in this institution. A lot of work related to teacher education is required of all faculty in the program. There is a 12-credit per semester teaching load, a minimum of two hours per week spent in departmental

meetings continuing the development of the program, and time that is spent in administering and evaluating the various assessments that are placed at specific points throughout the program. For example, each year, many faculty members in the education department are assigned to write a narrative transcript for about two students who have just completed the program. This involves reviewing all of the students' records and often includes an interview with the students to verify the accuracy of the transcript. One faculty member estimated that she spends about six hours completing each of the transcripts that she writes.

In addition to departmental meetings, each faculty member is assigned to a committee that is responsible for continual program development work on a specific part of the program. Recently all of the methods courses had been redesigned to be integrated across content areas and the human relations workshop was currently undergoing a substantial revision. Faculty also serve on interdepartmental committees that are constructed around the eight general abilities (e.g., social interaction) or a particular cross-cutting issue such as technology, and meet every other week for several hours on Friday afternoon, when there are no classes scheduled. These committees provide regular contact between education faculty and their liberal arts colleagues, focused on substantive issues of teaching and learning.

Several faculty told us that to successfully work in the education department at Alverno College you must want to work as part of a team and participate in the ongoing refinement of the program's vision. Some of those who do not believe in this vision or who want to work on their own without extensive participation in the culture of collaboration end up leaving, usually on their own. There is a syllabus for every course in the program (including the field experiences) that makes explicit the specific expectations for students in relation to the abilities, and the learning activities that are designed to help students gain competence in them. Many of the assignments within courses indicate which levels of the abilities they help students meet. Coherence is assured by agreements about what is taught in specific courses, and faculty regularly share materials with each other that are used in the courses. Many faculty told us that they work extremely well together as a group: "What is distinctive about Alverno is that all faculty work together . . . you have a group of people who are all going in the same direction because they have the same frame-

work and belief system (Sister Armella Weibel, Bonnie Kotvis, and Muriel Plichta, personal communication).

It is unusual for faculty to interact with the teacher education program as much as we have seen in this case. The result of all of this interaction is an unusually coherent program with a great deal of clarity about what is expected of students at every point. Faculty seem to know what is covered in all of the different courses in the program even if they do not teach those courses. Almost all faculty time is devoted to teaching and the teacher education program as well as to consulting work in local schools. The research and writing that is done by faculty focuses mostly on their teaching and their teacher education program. There is a lot of talk by faculty and in the program materials about the scholarship of teaching. This scholarly attitude toward teaching is a college-wide perspective and forms the basis for the faculty reward structure.

One good example of the scholarly attitude toward teaching and of the priority given to faculty development at Alverno College is the institute program that exists for all faculty in the college. Three times per year, once in August for three to four days, in January for three to four days and in May for a week or two, all faculty in the college get together and study some aspect of teaching. Recent institute topics include critical thinking, group discussions, and integrated curriculum.

Faculty are very serious here about continuing to learn about teaching and improving their work. For example, in 1993-94, faculty undertook a concentrated effort to learn about gender issues, to incorporate their understandings of these issues into their own teaching, and to make this work explicit in the teacher education curriculum. Two faculty attended a workshop on this issue and shared what they had learned at one of the institutes. A teacher education task force on gender equity then was formed to explore how the issue of gender equity could be integrated into all courses. The course for cooperating teachers also included work on gender equity in schooling that was informed by the faculty self-study work in the area.

Department faculty are also involved in ongoing, collaborative inquiries into student learning in relation to the program's teaching and assessment practices. For example, as new procedures were introduced into an interview-based self-assessment in 1993, the department and the college's Office of Research and Evaluation analyzed student performanc-

es to learn about how students took up self-assessment activities and how they understood the curriculum's advanced outcomes (Alverno College Office of Research and Evaluation, 1995).

The cooperation among faculty, together with the absence of grades, according to the students with whom we spoke, leads to a noncompetitive learning atmosphere in the college where students feel they are "allowed to be who they are" and where the environment encourages them to fulfill their potential. A number of students told us that the noncompetitive environment in the program was a key factor in the growth as teachers that they were able to achieve. For example:

> With a graded system, I don't think that I would have been where I am now with the confidence and the strengths that I have now. I've been able to demonstrate them not only on paper but through other means. It has made me a rounder person and a better teacher. It has also given me direct feedback to where my strengths and weaknesses are and then I know what to focus on . . . I work well in a cooperative atmosphere. To me it brought out my strengths and abilities. In a graded program, I would just be your average line person because I'm not into competition. I would not have been as successful.

Many of the students we interviewed feel that they receive very personalized attention in the program from faculty, who they think are very accessible. Students feel that the faculty really know them and the entire teacher education curriculum (not just the particular courses they teach): "I've never been in a class where they didn't say "remember in your other class . . . " They'll name a class and they know what's going on in the other classes, even if they don't teach it." Another student said:

> They don't have a factory model of a teacher that they try to stamp out like some schools do. Each student teacher is really a different person and their personality comes through in their teaching, their beliefs and perspectives . . . . What I think is really unique to Alverno is that they let students be who they are.

Because of the relatively small size of the college and the personalized attention that students feel that they receive from the faculty, students describe the atmosphere at the college as "family-like," where everybody knows and supports everyone else. This intimacy has been achieved without the deliberate pacing of students through the program in cohorts.

> Almost all of the instructors in the program know you on a first name basis. It's almost like a little intimate family here at Alverno . . You walk in the hallways and you basically know all of the people. . . . It's very intimate.

Many of the faculty at Alverno are closely involved with area schools in a variety of consulting projects. One faculty member told us that she does everything she can to find opportunities to get into the schools. Faculty serve on school and school district committees and provide consulting expertise to schools in areas such as assessment, whole language instruction, integrated curriculum and technology. Alverno College does not have professional development schools (PDSs) as they have been described in the literature (e.g., Darling-Hammond, 1994), but does have "professional development relationships" with a number of teams of teachers and schools in MPS and three partnership elementary schools. The difference between the Alverno approach and some PDS approaches is that Alverno faculty work with some, but not all of the staff in these schools. Also, there is no formal partnership contract between Alverno and the school as is the case in many PDS partnerships.

Current faculty involvement with schools includes a Joyce Foundation funded Assessing Learning Project that will, upon completion, have involved all middle schools and high schools in MPS in the incorporation of performance assessment and portfolio assessment across the curriculum. There is also an Ameritech project in which Alverno College faculty are assisting two elementary schools in incorporating a range of technologies into the classroom. Other faculty have worked with all of the 21 P-5 schools in MPS (elementary schools serving high concentrations of children in poverty) in designing performance-based assessments. In the three partnership elementary schools, faculty have provided consulting services to the schools in a number of specific areas (e.g., the development of whole-language programs in bilingual classrooms). Teachers in these

schools serve as cooperating teachers in the program, as advisory council members, and as participants in the portfolio assessment that takes place for admission to student teaching.

Faculty feel that these ongoing contacts with the schools give them much important information about which teachers should be used as cooperating teachers for field-experience students and student teachers. They pass information about potentially good cooperating teachers to the faculty member (Susan Stang) who makes all of the placements; she keeps a notebook with information about particular classrooms. We had the impression in talking with most of the faculty who work in the elementary education program that they are in touch with what is going on in the local schools, especially those in MPS.

Several of the principals that we interviewed said that unlike the other campuses they work with who request a specific number of placements at particular grade levels, Alverno College requests specific teachers to work with particular student teachers. According to our principal contacts, the care with which Alverno faculty select mentors for their students is characteristic of the care with which they do everything related to their program. It seemed to these principals that the important details have been addressed and structured in some way for the benefit of Alverno students. A principal said:

> Alverno is one of the few universities that really hand picks the cooperating teachers. They really know who they are. At some of the other universities they'll just say I've got four student teachers . . . will you take them? And then it's at the principal's discretion to put them wherever they want . . . What they try to do, I think, is to really look at the cooperating teachers and match them with the most appropriate person . . . Every time they've called me they've identified the teachers that they want.

Consistent with the importance of teaching and teacher education in the culture of Alverno College, the faculty pay a great deal of attention to potential faculty members' teaching backgrounds in K-12 schools and to their current capability to work effectively with teacher education students in a way that is consistent with the philosophy of the Alverno program. Mary Diez, teacher education coordinator at Alverno, said:

> We look for people who have preferably had recent experience in K-12 schools and solid experience. . . people who have been successful as teachers themselves . . . We are looking for people who are wanting to teach and focus their research on improving their teaching (Mary Diez, personal communication).

The careful attention that the faculty pays to hiring people who not only prioritize teaching, but who will also fit in with the philosophy of the program, is illustrated by the following description of an exercise that was assigned to two finalists for a faculty position:

> When we hired X, we had them (the two finalists) view a tape of a student teacher, a recent student teacher . . . They viewed the tape of the student teacher and then we videotaped them giving feedback to that person . . . . The first candidate sat down with the student and said, "Well, you should have done this, you should have done that. X sat down with the person and said "Tell me what you were thinking as you designed the lesson and carried it out," and just drew from the student every point the other woman gave her . . . The other woman talked as if she believed in constructivism. But when you saw her interacting with the student, it was telling. We hired the second candidate (Mary Diez, personal communication).

PROGRAM GOALS AND CONTENT

The General Education Abilities

The most significant aspect of elementary teacher education at Alverno College is its ability-based curriculum which clearly states what program graduates are expected to know, be able to do, and hold as dispositions to successfully complete the program and be certified as elementary teachers. The Alverno faculty have defined an ability as "including a complex integration of knowledge, behaviors, skills, values, attitudes, and self-perceptions." (Diez, Rickards, & Lake, 1993, p. 9). Between 1969 and 1973, the faculty redefined the baccalaureate degree and liberal arts education for all majors as the demonstration of eight abilities (Alverno College Faculty, 1996). Each of these abilities, which cut across the disciplines, was subdivided into six developmental levels specifying increasingly com-

plex knowledge, skills, and dispositions which students are expected to demonstrate in all of the courses and field experiences in the program. To fulfill the general education requirements of the program, students must demonstrate their competence on levels 1-4 of each ability. Levels 5 and 6 of the abilities are addressed within the students' major areas of study such as nursing, management, and education. (For additional information on the general education program see, Alverno College Faculty, 1992). The education department has developed a set of five advanced-education abilities to address levels 5-6 of the general education abilities. Each department course makes clear which particular general education validations are offered in the course, but states the specific outcomes in terms of the advanced education abilities. The eight General Education Abilities follow:

- **Communication**—The effective communicator habitually makes meaning by connecting with everything involved in communication: people, ideas, texts, media, and technology. She integrates a variety of communication abilities (speaking, writing, listening, reading, quantitative and media literacy) to meet the demands of increasingly complex communication situations.
- **Analysis**—The competent analyzer is a clear thinker. She fuses experience, reason, and training into considered judgment.
- **Problem Solving**—The competent problem solver defines problems and integrates a range of abilities and resources to reach decisions, make recommendations, or implement action plans.
- **Valuing in Decision Making**—The responsible decision maker is reflective and empathic in approaching the value issues in her life. She habitually seeks to understand the moral dimensions of her decisions and accepts responsibility for the consequences of actions taken in all facets of her life. She understands and is sensitive to a variety of perspectives and experiences in making her own decisions.
- **Social Interaction**—The competent interactor knows how to get things done in committees, task forces, team projects and other group efforts. She elicits the views of others and helps reach conclusions.
- **Global Perspectives**—The person who takes multiple perspectives articulates interconnections between and among diverse opinions, ideas, and beliefs about global issues. She makes informed judgments and tests out her own position.

- **Effective Citizenship**—The effective citizen makes informed choices and develops strategies for collaborative involvement in community issues.
- **Aesthetic Responsiveness**—The aesthetically responsive person articulates informed responses to artistic works which are grounded in knowledge of theoretical, historical, and cultural contexts. She is able to engage in and to make meaning out of artistic experiences and to articulate reasons for her choice of aesthetic expressions. (Alverno College Faculty, 1994b)

When the college moved to the ability-based curriculum, all of the courses were redesigned to ensure the systematic development of the knowledge, skills, dispositions, and attitudes implied by the abilities. All of the course syllabi at Alverno make explicit which developmental levels of the abilities they address and the learning activities and assessments that are provided to help students acquire the abilities and to judge how well they have learned them. Several levels of the abilities require validations in several different contexts. Following is an example of how the ability of social interaction has been conceptualized in terms of developmental levels. All of the other abilities have a similar developmental framework associated with them:

- **Level 1**—Identify own interaction behaviors utilized in a group problem solving situation.
- **Level 2**—Analyze behavior of others within two theoretical frameworks.
- **Level 3**—Evaluate behavior of self within two theoretical frameworks.
- **Level 4**—Demonstrate effective social interaction behavior in a variety of situations and circumstances.

In majors and areas of specialization:

- **Level 5**—Demonstrate effective interpersonal and intergroup behaviors in cross-cultural interactions.
- **Level 6**—Facilitate effective interpersonal and intergroup relationships in one's professional situation. (Alverno College Faculty, 1994b, p. 2, 4)

A college-wide philosophy of "assessment as learning" (Alverno College Faculty, 1994a) underlies Alverno's ability-based curriculum. Here faculty believe that learning occurs best when the learners have a good sense of why

they are setting out to learn something, of the specific standards that they must meet to accomplish this learning, and a way of seeing what they have learned.

The faculty believe that the best way to determine how well the students have developed the abilities is to assess behavior that is associated with them and demonstrates their mastery, such as writing, speaking, conducting inquiry, etc. They believe that assessment enhances learning through feedback provided by instructors and students' self-assessments on learner strengths and weaknesses.

In 1976, Alverno began a systematic and continuing program of educational research and evaluation studies of its curriculum, involving students, alumnae, and other professionals who are not Alverno graduates. The program employs multiple methods to address a range of inquiries from broad faculty concerns (e.g., Do individual students achieve over time as a result of the curriculum? How do assessment practices contribute to learning?) to targeted questions of practice (e.g., Will students apply the skills learned in integrated language practice to subsequent coursework?) (See, for example, Mentowski & Doherty, 1984). This work has provided a basis of validation for the college's outcomes and has supported the continued development and refinement of the curriculum (Mentowski, 1988; Mentowski & Loacker, 1985; Loacker & Mentowski, 1993). The assessment system and the procedures themselves have been an important part of these inquiries (Rogers, 1994).

The emphasis in the program's curriculum is on putting knowledge to use. The faculty work to ground students' understanding of a variety of theoretical frameworks in realistic experiential applications that include actual classroom performance, analysis of case studies, and performance in situations that simulate important aspects of the teacher's role. The faculty further believe that the abilities are transferable to varied situations in students' lives and provide multiple opportunities for them to demonstrate their competence. This perspective has been fundamental in the assessment program and has been validated in inquiries of students and alumnae (Mentowski & Rogers, 1993).

Professional Education Abilities

Based on a review of the literature and on their own experiences as teachers in a wide variety of contexts, the faculty in the Education department, together with faculty from the liberal arts and other professional

disciplines developed a set of five professional education abilities. These abilities, developed in the context of a study over a number of years beginning in the late 1970s, represent a complex integration of knowledge, skills, and dispositions. The abilities define the kind of teachers which the program seeks to prepare (Diez, 1990). They include:

- **Conceptualization**—integrating content knowledge with educational frameworks and a broadly based understanding of the liberal arts in order to plan and implement instruction.
- **Diagnosis**—relating observed behavior to relevant frameworks in order to determine and implement learning prescriptions.
- **Coordination**—managing resources effectively to support learning goals.
- **Communication**—using verbal, non-verbal, and media modes of communication to establish the environment of the classroom and to structure and reinforce learning.
- **Integrative interaction**—acting with professional values as a situational decision maker, adapting to the changing needs of the environment in order to develop students as learners. (Alverno College Faculty, 1996, p.2).

Following the identification of these advanced education abilities, the faculty went on to create detailed conceptual maps of the five abilities which describe knowledge, skills, and dispositions expected of professional performance at three different points in a teaching career: expectations for the beginning teacher (those aimed for in the preservice program), expectations for the developing teacher with classroom experience, and expectations for the experienced professional teacher. For example, a few of the expectations for beginning teachers with regard to the ability of conceptualization are:

- Developing sensitivity to learners as individuals within the group as a whole.
- Making links between developmental theory and concrete individuals in order to use appropriate depth of subject matter.
- Recognizing the impact of differences (in culture, gender, learning preferences, etc.) in order to plan instruction that meets the needs of individuals and the group.
- Planning material both to meet learners' current needs and to lead to

the next level of development (e.g., preparing developmentally appropriate activities, relating subject matter to previous work) (Alverno College Faculty, 1996).

Goals are stated in all of the individual courses and field experiences based on the five abilities, and performance assessments have been developed related to all of these goals. In the general education courses taken during the first two years of study, the goals are stated in terms of the eight abilities. For example, a few of the goals stated in the syllabus for the course United States History in the Twentieth Century are:

- To demonstrate how gender, race, ethnicity, and class affect historical interpretation of the American past and to strive for a more complex and inclusive understanding of U.S. history. (Global Perspectives, Analysis, level 3).
- To formulate historical interpretations based on a critical analysis of primary and secondary historical sources and an awareness of your own and other historian's perspectives (Communications, Analysis, Global Perspectives, level 3).
- To understand and evaluate the impact of industrialization and the application of technology on Americans' values, attitudes, and ways of life (Valuing, level 3).

In the education department, a sixth semester course, Integrated Reading 3, has stated the following goals for students.
The student:

- Analyzes and applies learning theory in designing and implementing literacy instruction.
- Assesses literacy development of intermediate students and prescribes appropriate teaching strategies.
- Uses knowledge of writing workshop and reading workshop strategies and implements workshops in the intermediate classroom.
- Evaluates trade books for use with intermediate learners.
- Integrates technology to enhance the writing process in the classroom.
- Shows refined communication skills to support professional growth.
- Demonstrates knowledge of classroom research with understanding of the dynamics of the classroom and of how to improve practice (Alverno College Faculty, 1996, p. 7).

This third literacy methods course in a series of three courses focuses on the intermediate elementary grades. The two previous courses focus on literacy instruction in grades K-1, and 2-3 respectively.

The articulation of specific goals for each course related to the abilities of the professional teacher and the general education abilities creates a specialized language which enables faculty, students, and cooperating teachers to communicate clearly and precisely about what is expected to successfully complete a course or field experience. It also ensures that teachers encounter a well-developed knowledge base about teaching. One faculty member described her course, Language Theory and Critical Thinking, required for all elementary education majors, as follows:

> It's a sophomore level course . . . Analysis at level 4 is offered in that class. They can take speaking and writing validations through level 3 and 4 . . . They can also get a validation at level 3 on global perspectives because they're asked to take a problem of global significance and put together a unit to teach that infuses critical thinking and what they learned about language. (Diane Gardner-Gletty, personal communication)

In addition to the five advanced-professional education abilities, the faculty have identified five essential concepts that are integral to those abilities:

- **Developmental needs of learners**—frameworks to promote the success of all learners.
- **Diversity**—promoting learning in a climate of positive regard and success for all.
- **Professionalism**—practicing ongoing inquiry to inform teaching.
- **School and Society**—focusing on the purposes of schooling in a democracy and a belief that everyone can be educated.
- **Media and Technology**—using technology in planning, instructing and assessing. (Alverno College Faculty, 1996)

Students are provided with a handbook when they enter the program that shows how these key concepts are related to all of the abilities and how they are infused into the entire professional education component of the program. The program philosophy in relation to each of the essential

concepts is expressed in the context of this discussion. For example, the discussion of the concept of diversity reveals an action-oriented and proactive view of teaching for diversity:

> The view of diversity your faculty wants you to develop goes beyond having background knowledge of cultures to developing a proactive stance, which includes looking at the role that culture plays in society and its institutions, such as schools. It means working actively to negate stereotypes and taking actions that move toward the full inclusion of all learners. You will do this by reviewing literature for bias, by examining your own teaching performance for actions that neglect one group or individual, and by planning for the infusion of diversity throughout the curriculum. (Alverno College Faculty, 1995, p. 27).

Consistent with the program emphasis on the use of the abilities in realistic situations, their handbook also presents students with nine teaching stories written by teachers who work with Alverno students. The students are asked to examine the stories to see how the five education abilities are reflected in them.

Student Advising and the Supervision of Field Experiences

When students enter the college as freshmen, they are advised by academic staff who specialize in student advising. When students enter the education program as education majors (usually during their third semester), they are assigned a faculty advisor in the department who advises them for the rest of their stay in the program. Faculty advisors meet regularly with their advisees to go over their progress in mastering the different aspects of the ability-based curriculum and to make plans for the following semester. They also are responsible for reviewing their advisees' portfolios before they are given to the external assessors the semester before student teaching, and will usually be the ones who write the narrative transcript for their advisees at the end of their program. Faculty see their advising role as also giving students advice about plans beyond graduation such as job opportunities and graduate school study. A typical advising load for a faculty member is around 15 to 20 students. The main difference between the advising system in this program and others is the tremendous amount of

information that advisors have about their advisees' work in the program. Advisors are routinely sent information on the validations achieved in various courses and field experiences by their advisees, the results of their performance on the external assessments, as well as other information. In most programs, advisors have very little information about their students beyond the names of the courses they have completed.

All of the faculty participate in the supervision of practicums and student teaching and are given load credit for this work based on the number of students supervised. The responsibility of supervising includes the teaching of weekly seminars in which students analyze and discuss their school experiences. The assessment of student work during these clinical experiences is closely tied to the ability framework. Supervising faculty usually make a minimum of two visits to each student during the first practicum, one visit during each of the next three practicums, and four visits during student teaching, including at least two visits in which the student teacher, cooperating teacher, and university supervisor complete and discuss the student-teacher assessment form (see Appendix D).

Performance Assessment

An elaborate performance-based assessment system has been developed both within and outside of the courses and field experiences to enable students and their teacher educators to know how well the abilities are being mastered by students. Here the focus is on the quality of students' conceptual integration of the components of the abilities: knowledge, skill or behavior, attitudes, and values. Students are asked to apply their knowledge and skills in realistic contexts. Some of the assessments are related to meeting the goals for specific courses and field experiences. Others are used to enable students to progress through the different stages of the program, such as to qualify for student teaching. Each semester that they are in the program a matrix is prepared for use by students and their advisors which shows the validations that have been achieved by students in particular courses (e.g., Valuing, level 1 in Psychology 101). These matrices are used to plan a student's program for the following semester.

Within the program courses and field experiences, a wide variety of assessments are utilized, such as essays, letters, position papers, case study analyses, observations of events, talks to simulated audiences, producing a video, developing curriculum materials, simulated events such as par-

ent-teacher conferences, etc. (For additional perspectives on performance assessment, see Diez, Rickards, & Lake, 1993).

In addition to these in-class assessments, there are a series of external assessments that enable students to pass from one stage of the program to another. For example, in a fifth-semester external assessment which integrates learning from several courses, students are asked to take on the roles of teachers from a school district. In the scenario they are presented with, the teachers have been called to a group planning meeting to review the district's mission statement. In this simulation, they study background materials regarding the district's philosophy and complete readings on several issues, such as curriculum integration and multicultural education. In preparation for the assessment, students review the criteria for the abilities of social interaction and effective citizenship by which their performance will be assessed. Students meet in groups of five to six and their meeting is videotaped. Following the simulation and before receiving feedback from faculty, they view the tape of the meeting and complete a self-assessment response form.

Throughout the program, all of the assignments and assessments in the various courses include a self-assessment component. This emphasis on self-assessment is designed to help students develop the habits of mind and skills to be reflective about their teaching. The specific criteria for the evaluation of all class assignments are presented to students beforehand and they always complete a self-assessment before receiving feedback from faculty. For example, in the third integrated language arts methods course, students are required to develop and use a rubric to assess intermediate grade students' writing samples. They analyze samples for strengths and areas of need and plan appropriate teaching strategies based on their analysis. The students work in groups and collaborate on developing their teaching plans. Before they begin this task, students are given a list of the specific criteria that will be used to assess their performance. The student:

1) Assesses the developmental level of the learner's performance and provides sufficient evidence to support the judgment.
2) Diagnoses areas requiring attention/instruction and provides an appropriate teaching plan.
3) Contributes to the group discussion of the process.
4) Assesses own performance on all components of the task. For additional work on self-assessment and its role in the education curriculum, see Alverno College Office of Research and Evaluation, 1995.

One of the major external assessments, the portfolio interview assessment, occurs at the end of the pre-professional stage of the program and is used as a gateway to student teaching. Here students create their own portfolios by reviewing their work in all of their courses, including their general education courses. They collect examples of written work, lesson and unit plans, videotapes of their work with pupils, and instructional materials they have created, and make decisions about what represents their strengths. Included in the portfolio is a written analysis of a videotaped lesson based on the five abilities. The portfolios are reviewed by students' faculty advisors and then by teams of principals and teachers from area schools on a special assessment day. The principal and teacher assessors provide feedback to students about their areas of strength and areas of needed growth as demonstrated in the portfolio and make a recommendation to Alverno about the students' readiness for student teaching. Specific goals are formulated for student teaching by the students with input from the school assessors.

Program Courses

During the preprofessional stage of the teacher education program (semesters 1 through 3), students complete a variety of courses both within and outside of the department of education including courses in the humanities and fine arts, natural sciences, mathematics, social sciences, general and developmental psychology, small group interaction, and integrated communication. During this first year and a half of study students also complete four professional education courses, a one-credit human relations workshop, courses on instructional design and educational computing and their first of four field experiences.

During the second phase of the program (semesters 4 through 6), students continue to take courses in the liberal arts, such as U.S. history, but increase their focus on the study of professional education frameworks. They complete a series of three integrated language arts methods courses, and methods courses in the arts, social studies, science/health, and mathematics. They also complete the three remaining pre-student teaching field experiences and a course on exceptional learners that includes an additional field experience.

During the third and final phase of the program, the students complete a course in integrating the elementary curriculum, do eight weeks of stu-

dent teaching, take part in a coordinating seminar, and take a culminating course in the philosophy of education.

Field Experiences and Student Teaching

Because of the strong belief of the faculty that knowing and doing must be closely interrelated, field experiences are an important part of each of the four semesters preceding student teaching, beginning with the first semester of the sophomore year. The Wisconsin Department of Public Instruction requires a minimum of 100 clock hours of field experience prior to student teaching. Because the Alverno program is based on the demonstration of abilities, the actual time spent in these fields by Alverno students sometimes exceeds 100 hours.

Each of these field experiences includes at least 25 hours a semester in a school classroom (two to three hours per week) and includes a 50 minute weekly seminar led by an Alverno faculty member. Students are observed by an Alverno faculty member twice in the first field experience and once in each of the others. During student teaching, they are observed twice during each of their two nine-week placements.

In each of the field experiences, students complete weekly "reflective logs" in which they are asked to make observations and draw relationships between what they see and do in the classroom and the various theoretical frameworks they learn about in other courses in the program. These logs are submitted weekly to faculty for review and comment. A minimum of 12 logs is required in each of the field experiences. Following is an example of the guiding questions in a field experience log. This particular log is the third one completed during the first field experience.

Weekly Log—Focus on the Teacher

A. Conduct an interview with your cooperating teacher addressing the following issues:

1. What are some important qualities of a good teacher?
2. How does a teacher determine the needs of a class?
3. What are some general expectations for students at this age?
4. Give some examples of how you might use support staff members in your school. If you are in art or music, what services do you provide for the rest of the school? What unique problems do specialty teachers face?

5. How is cultural diversity recognized at this school?

B. Refer to #5 above and reflect upon your personal experience as well as your experience in ED116 (The Human Relations Workshop). In your opinion, does this school appropriately meet the diverse cultural needs of this school population? (Alverno College Faculty, 1992)

The faculty provide the reflective logs to structure the field experiences for their students to insure that all students have certain kinds of experiences and the opportunity to develop particular abilities while in schools. This structuring of students' time in the field is in stark contrast to the most common situation where students and their cooperating teachers are left to make decisions about the use of teacher education student time based at most on a set of very general guidelines. The reflective logs indicate a particular developmental sequence in the acquisition of abilities over the four semesters of field experiences.

> We give so much personal direction with our field placements. It's not that they go into a school and are on their own . . . Our fields are so developmental. We know what is developed in the first field, and what we can expect in the second, third, and fourth. So there is a real developmental framework that we can rely on to help guide the students. (Nancy Jelen and Susan Stang, personal interview)

In addition to the reflective logs within each of the fields, each field is coordinated with campus courses in the program. For example, when students are doing their first field, they are always enrolled in a principles of instructional design course and a course on educational computing. All of the courses which are coordinated with field experiences require students to carry out some of the assignments in their field placements (see Appendix E). The determination of placement sites, which is handled by faculty member Susan Stang, is a purposeful activity that insures that all students experience a variety of grade levels, geographical and physical settings, socioeconomic and cultural groups, and various types of educational approaches.

The Human Relations Code of the Wisconsin Department of Public Instruction requires all newly certified teachers in the state to complete (in addition to studying various issues related to race, class, and gender in

their courses) a minimum of 50 documented hours of direct involvement with adult and pupil members of a group whose background the student does not share and including at least one of a designated set of ethnic minority groups.

At least two of the four fields and one of the two nine-week student teaching placements for all students are in the Milwaukee Public Schools. All placements are made with teachers who have successfully completed a preparation course for cooperating teachers that is offered three times per year. Over the course of the four fields, students gradually assume more and more responsibility for instruction and interacting with pupils.

The mentoring and assessment of field students and student teachers by their school and college teacher educators is closely tied to the ability framework. During student teaching, student teachers videotape a teaching sequence in each nine-week placement and share it during their weekly campus seminar, assessing how and to what degree the five advanced abilities are demonstrated in the sequence. Feedback from peers is directed toward the five abilities as well.

During the fields, students are assessed on particular abilities in a developmental sequence that progresses over the four field experiences. For example, during our observation of one of the seminars for the first field experience, the instructor told the students that she would be observing each of them in the next two weeks for a validation on level four of the social interaction ability. Students were provided before the observation with a sheet listing the criteria associated with this particular validation in relation to both the general education abilities and the professional education abilities. Some of the criteria on this sheet are:

- Demonstrates ability to integrate theories of learning and human development with the teaching/learning process (conceptualization, coordination, diagnosis).
- Gives evidence of considering the predisposition of the learner for a particular learning task (social, intellectual, developmental).
- Uses learning experiences appropriate to the developmental state of the learner.
- Uses a sequential step-by-step approach to learning, moving from simple to more complex levels of understanding.
- Challenges the learner to higher levels of thinking through effective questioning. (Field Experience 1 Syllabus, 1996)

Additional Program Themes and Program Pedagogy

Beyond the articulation of the general education and professional education abilities that form the basis of the teacher education curriculum, faculty expressed to us a particular point of view about the kind of teachers they hoped to prepare. The major theme that came through in the interviews was the desire of faculty to prepare "child-centered" teachers who focus on pupils as individuals and adapt their teaching to meet the needs of the pupils rather than try to force pupils to fit a rigid and unbending classroom.

> We really focus on child-centeredness. We hope that they look at the child as an individual, and look at what that child has as far as strengths—knowing about backgrounds and knowing how they can support them as learners, rather than writing them off because they don't have something teachers who look at what they (pupils) do have and work with them. (Maggie Sneed and Kathy Henn-Reinke, personal communication)

In addition to this focus on child-centeredness by faculty, there was also an emphasis on providing all pupils with access to powerful kinds of learning experiences. There was a general feeling expressed by faculty that they want students to see that "ability is abundant" among pupils and a strong rejection of the cultural deficit view that some pupils cannot learn high-level problem solving and thinking skills and so on because they are different in some way (e.g., culturally, physically). As one student in the program told us, "We were taught not to label, to try to recognize differences rather than saying this person can't do x, y, or z . We were taught to learn to work with differences."

Faculty told us that they encourage students to do whatever is necessary to accomplish this goal of powerful learning experiences for all pupils. According to several faculty, the courses in the program encourage students to go beyond the textbook and to employ thematic teaching and an integrated curriculum which promotes a lot of student-student interaction in the classroom. Both the faculty and the students told us about the emphasis on whole-language teaching in the sequence of three literacy courses which integrate the study of the teaching of writing, reading, speaking, listening, and children's literature. The faculty expressed a par-

ticular concern that their students have opportunities to see these practices at work in the city schools so that they don't get the idea that they can only be used with middle-class kids in the suburbs. Because these practices are less commonly found in MPS than in the suburban schools, it has been a continual challenge to try to make sure that Alverno students learn how to integrate these "holistic" practices into MPS schools.

One of the difficulties in helping Alverno students to become committed to and competent at teaching in a more holistic way is that few of them have ever experienced this kind of teaching apart from the modeling that goes on in this teacher education program. One strategy that has been used to overcome some of the limitations of the students' prior socialization in more traditional images of teaching has been to develop ways to have more concentrated periods of time with students. The development of a coherent set of three language arts methods courses, with a developmental sequence covering three semesters to replace several separate courses, is an example of this strategy.

> We really felt that the more we had access to those students, the more likelihood that they're going to take on this other philosophy. Because none of them have been taught throughout their K-12 experience in what would be called learner-centered classrooms, no matter what the surveys show. Very few of ours have had anything that would be considered a child-centered classroom. So . . . to help them see there is a better way of doing it, we figured we needed them for a longer period of time. The old sequence was that they might have had reading here, language arts methods there . . . It was just kind of a smattering of things. This way, it's very sequential. We know what happens the semester before, so we can build on that . . . we keep trying to build on those experiences. Another thing that we did is to break it up so we have them twice a week (instead of once). Again the idea of seeing them more often. (Maggie Sneed and Kathy Henn-Reinke, personal communication)

Another important element in the hopes of faculty for their students is the emphasis in the program on preparing teachers who are open to sharing what they know with their colleagues and who are inclined to go to

their colleagues for help when they have problems. This focus on teaching as a collaborative activity is one among a number of the themes in the program that we found to be modeled by the faculty in the way they implement the teacher education program. Many of the courses in the program are team-taught by faculty, and students are very aware of all of the collaborative program development work that the faculty do. The structure of many of the methods courses involves an integration of content across disciplines. Most of the classes that we observed were dominated by a high degree of student to student interaction and actively involved students in the activity at hand. In the nine classes that we observed, we saw very little evidence of faculty lecturing students. A number of faculty told us how important it was to them and to the program as a whole to model the kind of student-centered and interactive teaching that they hoped to develop in their graduates:

> We want to model how you want to work with your students. You want to take from your students and find out what they want to know and how they learn, and go from there (Geri Langman & Ginny Schuldenberg, personal communication).

> My practice should be consistent with the philosophy that I want them to have. So my classroom has to be inviting. I have to be tuned into students who are not understanding and I have to find a way to bring them in and address a variety of learning perspectives. I have to put learning at the center (Diane Gardner-Gletty, personal communication).

The faculty believe that it is not only important to model the practices that you want your students to use, but also to be explicit about the fact that you are doing so. In our interviews with students, cooperating teachers, principals and graduates there was continual reference to the fact that Alverno faculty practice what they preach.

One example of the deliberate modeling of learner-centered practices in both the form and content of the program is found in the integrated science and health methods class. On the day that we observed this class, several students were teaching 12 to 15 minute segments of lessons that they had developed. The lessons where based on interviews the students

had conducted with children in their field placement classrooms to find out what questions they have about the natural world. The Alverno students were required to develop an integrated and "hands on" unit that addressed some of the questions of their pupils. During the class period we observed, the Alverno students taught a lesson from their unit as if they were in an elementary school and then received comments and feedback from the students and two faculty in the class. All of the peer teaching that we observed actively involved the "pupils" in investigations related to the topic under study. The following week, the students were going to teach the lesson in school, informed by this feedback. They were then going to bring a videotape of the lesson back to class with a self-assessment of the tape made according to specified criteria and receive further feedback from their peers and professors.

In addition to the modeling of a student-centered and interactive approach to teaching for prospective teachers, one can also see from this brief example the intensity of focus on assessment that characterizes this program. In much of what we saw, there was an attempt to encourage students to place the same degree of emphasis on assessment in their own teaching in elementary schools. The focus in all of the situations that we observed was on assessment as a learning tool rather than just as a way of giving grades.

For example, in our observation of Geri Langman's Integrated Reading Curriculum 3 course, the students who had previously analyzed the writing of some of the pupils from their field placements were discussing in small groups aspects of this writing (e.g., use of figurative language, paragraphing, varying sentence structure, etc.). They were looking for elements that could be used as the basis for "mini lessons" with their pupils, using assessment as a tool for learning.

Although many of the classes that we observed contained a very strong practical emphasis on the application of ideas to the elementary school classroom, something one would expect in a program where many of the faculty were hired right out of the classroom and where there was a stated emphasis on the use of knowledge, this does not mean that there was an absence of "deep thinking " about complex and difficult issues. For example, in the philosophy of education course taught by Julie Stoffels that we observed, students were engaged in a lively discussion about alternative perspectives on multicultural education that were contained in the readings that they had done for the class. These fifteen students, who had

already completed their student teaching, were grappling with the implications for the classroom of papers on multicultural education by James Banks, Lisa Delpit, bell Hooks, and Ricardo Garcia.

One unusual aspect of the modeling of student-centered instruction that occurs at Alverno is that there is a college-wide desire to model good teaching. A number of factors have contributed to this college-wide collaboration on preparing teachers. The ability-based curriculum has provided a common language to talk about teaching. In addition, the strong emphasis on faculty development at the college results in professional education and general education faculty coming together for intensive periods of study at least three times per year to discuss their teaching. Furthermore, liberal arts faculty participated in the development of the five advanced-education abilities and continue to work on a regular basis with them in the biweekly interdisciplinary meetings which focus on the teaching of the abilities. Thus, an understanding of desirable teaching practices and an institutional culture that values inquiry into practice have developed throughout the college.

The State Policy Context

Despite a very stormy relationship between the Wisconsin Department of Public Instruction and many teacher education institutions in Wisconsin a decade ago (Prestine, 1992), recent years have seen close cooperation between individual institutions and the state. Alverno College has been a key player in this cooperation. On the one hand, many of the policies of the Department of Public Instruction have supported the efforts of Alverno to make school-based studies an important aspect of the teacher education curriculum. As mentioned previously, the department has required cooperating teachers who work with student teachers to complete a course or workshop on mentoring student teachers. In addition, 100 hours of field experience are required prior to student teaching, lengthened to approximately 18 weeks to match the public school calendar.

Also, with regard to Alverno's effort to prepare teachers to teach all students to high academic standards, the state human relations code requires all teachers certified in Wisconsin to study certain topics related to race, class, and gender equity, and to have documented cross-cultural experiences in the field. In addition to the documented field experience with groups different from oneself and who are members of one set of designated ethnic "minority" groups, students are required to fulfill seven code

points in the human relations code by studying certain topics. One of these code points requires the study of the psychological and social implications of the forces of discrimination, especially racism and sexism, and their broader impact on relationships among members of various groups in American society. Various professional education courses and liberal arts courses at Alverno meet all seven of these code points.

In the area of performance-based assessment in teacher education, Alverno has played an important role in transforming teacher education in Wisconsin. Mary Diez, the former chair of the education department at Alverno, and Peter Burke, the state director of teacher licensing at the department of public instruction, were both members of the working group which developed the Interstate New Teacher Assessment and Support Consortium (INTASC) standards for beginning teachers (Ambach, 1996). Within the context of this state involvement with the INTASC experience and Alverno's many years of developing the idea of performance-based assessment in teacher education, the Wisconsin department of public instruction recently initiated a major revision of the state code for teacher preparation and certification. The new code, which will be fully implemented by the year 2000, calls for the elimination of most state requirements for teacher education program content and the specification by each teacher education program in the state of the knowledge, skills, and dispositions that they seek to develop in their students and an assessment system that demonstrates that they have been achieved. In Alverno's case, the state policy context has largely been supportive of its efforts to implement their ability-based approach to teacher education.

PERCEPTIONS OF THE NATURE AND IMPACT OF THE PROGRAM: GRADUATES, EMPLOYERS, STUDENTS

A Survey of Graduates' Perspectives

A survey of 96 graduates of the elementary teacher education program at Alverno College in the past four years indicates that they strongly feel that they have been well prepared for the demands of teaching (92.4 percent felt that they were very well or well prepared). At the time they completed the survey, 88.3 percent of these graduates were teaching. Of these, 69.9 percent were teaching in urban schools, 24.7 percent in suburban schools, and 5.5 percent in rural schools. Nineteen percent of the respondents are of color.

The survey responses further indicate that the graduates feel that they have been prepared to be the kind of reflective, learner-centered and learning-centered teachers that the Alverno faculty say they want to prepare. For example, many of the items on the survey relate specifically to how well students feel they were prepared to teach in a learner- and learning-centered way. These include questions as to how well graduates feel they have been prepared to understand how different students in their classrooms are learning; develop a curriculum that builds on students' experiences, interests, and abilities; use instructional strategies that promote active student learning; teach students from a multicultural vantage point; evaluate curriculum materials for their usefulness and appropriateness to students; use a variety of assessments to determine student strengths, needs, and programs; and help students think critically and solve problems. Eighty-five percent or more of the graduates felt that they had been well or very well prepared to do these and similar things and almost no students felt poorly prepared. This was in comparison to a randomly selected group of 410 graduates of teacher education programs from across the country, where only about 50 to 70 percent of respondents felt that their program prepared them well or very well in the same areas. The average difference per item between the percentage of Alverno graduates who felt that they had been very well or well prepared to teach in a learner and learning-centered way and graduates from the other programs across the country who felt similarly well prepared was 26 percent.

In some areas, the differences between the Alverno graduates and the comparison group were very large. For example, 93.5 percent of the Alverno graduates felt that they were well or very well prepared to teach the knowledge and skills of their disciplines as compared to only 33.6 percent of the comparison group. Similarly, 83.9 percent of the Alverno graduates felt well prepared to use technology in the classroom as compared to only 39.6 percent of the comparison group. When the ability to be articulate and reflective about one's teaching was considered, the Alverno graduates once again evaluated their program very highly. For example, when asked how well their program prepared them to evaluate the effects of their actions and to modify their plans accordingly, 92.5 percent of the respondents said very well or well, compared to only 63.3 percent in the comparison group. Similar results were obtained for questions related to how well

the program prepared them to provide a rationale for their teaching decisions to students, parents, and colleagues (80.6 percent vs. 61.9 percent in the comparison group) and to conduct inquiry and research to inform their teaching (79.3 percent vs. 47.3 percent for the comparison group).

The survey also confirmed what we were told during our site visits about the importance placed on the preparation of teachers at Alverno to work collaboratively with their colleagues in providing leadership for school reform. When asked how well their teacher education program had prepared them to plan and problem solve with colleagues, 77.4 percent of the Alverno graduates said that they were well or very well prepared as compared to only 44.5 percent of the comparison group. Similarly, 81.8 percent of the Alverno graduates felt well prepared to assume leadership positions in their school as opposed to only 52.4 percent of the comparison group. When asked questions related to how much they actually collaborate with their colleagues in their current jobs, the Alverno graduates indicated a high degree of collaborative activity. For example, 82.7 percent of the graduates indicated that they shared ideas about instructional approaches with other teachers, and 86.3 percent of the group indicated that they consult with their colleagues as a part of their reflection on their own teaching.

There were only a few items on the entire survey of 41 items where the Alverno graduates did not feel as positive about the preparation provided by their teacher education program. One area of particular concern to the graduates relates to preparation to teach in ways that support new English learners. Here only 30.4 percent of the Alverno graduates felt well prepared and 20.7 percent felt poorly prepared. The comparison group respondents felt even less well prepared than this with 21.4 percent reporting they were well prepared and 26.1 percent saying they felt poorly prepared. Other areas where Alverno graduates identified less adequate preparation although still better than the comparison group, were preparation to work with parents and families to better understand students and support their learning (59.1 percent of Alverno grads felt well prepared vs. 45.4 percent of the comparison group), and preparation to maintain discipline and an orderly and purposeful learning environment (58.1 percent of Alverno graduates felt well prepared vs. 55.6 percent of the comparison group). Fifteen percent of the respondents to the survey wrote that they felt the program needed to include more content related

to classroom management and maintaining discipline. This was the most frequent response in an open-ended part of the survey which asked for an identification of program weaknesses.

It is useful to compare these results with the college's own studies. In Rickards & Diez (1992), there is strong evidence that students are performing according to the faculty's expectations. At the same time, there are areas specifically related to the context of urban schools that the faculty identified for further development (e.g., working with students achieving significantly below grade level).

In summary, the survey of 96 Alverno graduates over the last four years revealed that they are highly satisfied with the preparation they received for teaching in Alverno's elementary teacher education program. 93.3 percent of the 96 respondents said that they probably or definitely would choose the same preparation program again, if given the opportunity.

This preparation, from the point of view of the graduates, has promoted the development of reflective teachers who are able and disposed to assume leadership positions in their schools and work closely with their colleagues to implement a learner centered approach to teaching that seeks to have all students achieve high standards. These teachers as a group are very confident about their ability to teach all students to high levels (84.8 percent agree or strongly agreed with this statement) and 96.7 percent of the Alverno graduates agreed or strongly agreed that they are confident that they are making a difference in the lives of their students. Furthermore, contrary to the popular image that formal teacher education programs contribute very little to teacher learning, the Alverno graduates attribute a lot of what they know about teaching to what they learned in their teacher education program. 85.9 percent of the Alverno graduates agreed or strongly agreed that they learned much of what they know about teaching from their teacher education program as compared to only 63.5 percent of the comparison group.

Employer Perspectives

In addition to the survey of the teacher education program graduates, we also surveyed 29 employers of the graduates. Here we asked a group of school principals with direct knowledge of the teaching of Alverno graduates how well they felt the Alverno graduates had been prepared in comparison with graduates of other programs in the same areas that had

been included on the graduate survey. The employers' responses generally agreed with that of the graduates with regard to the areas of perceived strength. On most of the items that related to preparation to engage in reflective and learner and learning-centered teaching, the principals rated the quality of skills brought to teaching by the graduates as very high . For example, with regard to how well has the teacher education program prepared the teacher to understand how different students in his or her classroom are learning, 82.8 percent of the employers felt that the program had prepared students well or very well. For the question, "how well do you think the teacher education program prepared this individual to provide a rationale for their teaching decisions to students, parents, and colleagues," 78.6 percent of the principals said very well or well as compared to 80.6 percent of the graduates.

Interestingly, the employers were more favorable than the graduates on the items where the graduates perceived weaknesses in their program. For example, with regard to the item that asked about preparation by the program to teach in ways that support new English language learners, 58.3 percent of the employers said it was very well or well done as opposed to only 30.4 percent of the graduates. On the items noted earlier related to preparation to work with parents and families and to maintain discipline and an orderly and purposeful learning environment where the graduates were relatively critical of their program, the employers were more positive. 75 percent of the employers felt that the program prepared students well or very well to work with parents and families (as compared to 59.1 percent of the graduates) and 75.8 percent of the employers felt that the program prepared teachers well or very well to maintain an discipline and an orderly and purposeful learning environment (as compared to 58.1 percent of the graduates).

A focus group interview with seven school principals from the Milwaukee Public schools generally confirms the positive picture presented in the survey about employer views of the quality of the Alverno elementary teacher education program. These elementary and middle school principals consistently told us that the graduates of Alverno are well prepared to come into city schools as student teachers and beginning teachers. They are perceived as very poised, confident, reflective and able to critically assess their teaching. They are also seen as very open and accepting to different points of view and to reaching out to families, as using

pupils' prior knowledge in their teaching , as good team players, and as very competent and serious about their work.

> If I had my choice, it would probably be an Alverno graduate. My perception is that if a student is a graduate of Alverno, that student has gone through the rigor of preparedness and is ready to meet the challenges of teaching. (principal interview)

One principal felt that Alverno graduates come into the Milwaukee city schools "a step ahead" of graduates from other teacher preparation institutions because of the careful way in which they are nurtured and supported in their program by Alverno faculty.

> I think it is the structure of the program that makes the difference. It's how you work with the students when you bring them into the program. If you are going to enroll the students and leave them on their own, which many large universities do, then the likelihood of these people becoming excellent teachers (unless you have it inside to be a teacher) is far less than in a setting like Alverno. Alverno has more of a nurturing kind of program. It takes its students and actually follows them from the freshman year. They are really supported by their supervisors and advisors. (principal interview)

The Milwaukee principals made it clear that they felt many graduates from other institutions are able later to develop some of the skills of teaching and reflecting about teaching that Alverno graduates bring from the beginning. They feel that the rigor of the Alverno program with the constant demand to demonstrate competence through performance, and the repeated practice associated with this performance-based assessment is responsible for the relatively high skill level and ability to self-reflect brought to teaching by Alverno graduates.

> They constantly reflect on their instruction and they're very open to suggestions or to changing a lesson. They're very able to assess the actual lesson they've taught and in a fairly critical manner. They have the skills to do that—the ongoing assessment of lessons. That's not to say that other students are not

> able to pick it up. It's just that Alverno students seem to come with that knowledge. They've been forced to practice it on an ongoing basis so they have refined it. (principal interview)

The principals also told us that although Alverno College could be doing a better job in hiring a more ethnically and racially diverse faculty, that they were very pleased with both the numbers of student teachers of color who worked at their school as part of their training at Alverno and with the general ability of all of the Alverno students they had worked with to "be involved with folks of different ethnic backgrounds or different cultures than themselves." One principal told us that she had received more student teachers of non European backgrounds from Alverno than from any other institution and another described to us how the Alverno student teachers who had worked in her school were more willing than students from other institutions to go out into the community with their cooperating teachers to make home visits and that they seemed to have a better handle than students from other institutions on interacting with parents and on trying to pull them into the school program.

Observations and Interviews of Program Graduates

In addition to our observation and interview with Berthina, a fifth-year teacher in MPS and graduate of Alverno, we also spent a full day with each of three other Alverno graduates who were teaching in Milwaukee area schools: Kim, a third-year kindergarten teacher in a suburban school serving primarily white middle class pupils; and two fourth-grade teachers in the same MPS elementary school serving a primarily low income African American population, Anita, a second-year teacher and Sarah, a third-year teacher.

All three of these Alverno graduates were very confident about their teaching abilities, believed that they had gained a lot of useful and practical information about teaching from Alverno, and felt that they were successful teachers. When asked to assess the impact of their teacher education program on their current teaching practices, these graduates identified a number of areas where they felt the Alverno program had made an impact on their lives. First, all three teachers indicated that the constant demand in the program for self-assessing their teaching practice had carried over into their current jobs. They felt that they were now very skilled

at examining and learning from their practice. In one case, Kim told us that this practice of emphasizing student self-assessment had carried over to how she treats her own pupils.

> Alverno was always trying to get us to go a little bit deeper. And so when we're asked to go a little bit deeper, I think we ask that of our students . . . They always gave you a set of criteria. So if I was doing a paper or a speech or some kind of project, we always had to follow these criteria. At the end of the paper, at the end of the project, or at the end of the speech, we were asked to reflect on whether or not we thought we met the criteria. You couldn't just hand in a paper and say "here it is." There was always a top sheet that you had to attach checking off the criteria that you used in your paper or speech with an assessment type comment... The most important thing that I've gotten from Alverno is the constant questioning, you question yourself, you question others, you seek information. You do all of these things to better yourself and your profession. (Kim, personal interview)

Anita told us that the structure of the Alverno program based on assessment of performances and the constant pushing by the faculty to analyze and become better at the abilities embedded in the curriculum helped her move from being a very poor writer to someone who now sees writing and the teaching of writing as areas of major strength. She feels that the individual attention that she was able to receive from a faculty member was a key factor in her personal transformation as a writer.

> I did this one paper, I swear for three semesters. Because I handed in the paper and it wasn't up to the level that it was supposed to be up to. And she kept saying poor sentence structure and poor this and poor that. And I hadn't the slightest idea of what she was talking about . . . So I worked on it with her and I did this paper for three semesters. I think that's what changed me into an expert writer, coming from not knowing how to write at all. I think that was the point that I understood writing when I was able to work with her one-on-one. And then they asked

me to become a writing teacher for incoming college students. (Anita, personal communication)

Alverno's emphasis on a learner-centered approach to teaching where teachers spend a great deal of time getting to know their students and building curriculum around student interests and needs was another area where the graduates felt the program had a lasting influence. They felt that they really knew how to get to know their pupils as whole people and to then construct learning activities for their classrooms based on what they learned.

> I feel very confident in my ability to look at children as a whole. I do a lot with kids outside of school so that I get the big picture... I spend every Saturday with a group of students. Just by watching them, what they do in their free time, tells me what kind of learner they are. I feel like I really know my students. (Sarah, personal communication)

> I believe that I am very in tune with the children's interests . . . How I learn about their interests is just by positioning myself in various areas and just taking in what they are doing and entering it in as I see it . . . Although we are required to teach certain things and topics according to the curriculum that was given to us... I can still bring things in as I look at the children's interests and try to make connections. (Kim, personal communication)

Sarah then told us about a unit on the solar system that she had planned and taught based on her students' interests.

> This unit on the solar system came about because we were studying dinosaurs . . . With our study of dinosaurs the kids got interested in comets and asteroids because they learned that is maybe how the dinosaurs became extinct. They became so interested that I decided to plan the unit on the solar system. So first I listen to what is going to pique their interest and from there I try to set my goals. I try to find ways to get to all of the skills that I'm required to cover. (Sarah, personal communication)

There were important differences in the way that the Alverno philosophy was applied by the graduates in Kim's suburban kindergarten classroom serving mostly white middle class students and in the three MPS classrooms of Anita, Berthina, and Sarah, which served mostly poor African American students. While all four of the graduates told us about how the conditions of their work sometimes prevented them from doing all of the things that they learned how to do and wanted to do (e.g., having enough time to do all of the authentic pupil assessments that they would like to do), there was a particular way in which the teachers in the city schools combined the child-centered and whole language philosophy they learned about at Alverno with some more traditional practices of teaching skills in isolation. The city teachers told us that they felt that it was necessary to adapt the Alverno philosophy in this way because of the needs of their pupils. Anita estimated for example, that of the 75 fourth graders at her school, only about 23 were at or above grade level in the language arts and felt that it was important to use a variety of approaches so that the needs of all of her students would be met.

This adaptation did not involve a rejection of what they learned at Alverno and a total retreat to a deadening "drill and kill" teaching with low expectations for students that characterizes so many urban classrooms across the country. All three of the city classrooms were lively and interesting places for children where there was abundant evidence that the teachers were using real literature, were building on children's interests and varied styles of learning, and were expecting all of their pupils to achieve at high levels.

Nor did this integration of progressive and more traditional methods involve a submission to the pressures of colleagues who were committed to traditional approaches. In Sarah and Anita's school for example, there was a strong school wide commitment to whole language teaching and "reader's workshop" and Anita referred to a time when she had been criticized in one of her teaching evaluations for her critical attitude toward "reading workshop" as a single school wide approach to teaching reading. Sarah and Anita's decision to incorporate more traditional skill teaching and teacher directed activities into their classrooms, along with their use of activities based on a whole language and student centered philosophy, actually went against the grain in their schools. In Berthina's case , her integration of traditional methods with the more child centered methods

learned at Alverno moved her towards the more traditional approach to teaching that was dominant in her school. All three of these teachers had decided that an exclusive focus on a single approach to teaching reading (and writing and math) through a workshop approach was not meeting the needs of all of their students. It was a very pragmatic decision demonstrating independent thinking, that attempted to respond to situations where some children were not succeeding with the dominant approach.

> I changed my belief and now feel that sometimes old fashioned teaching methods aren't wrong. When I started this year, everything was a big workshop approach and groups were here and groups were there . . . I almost lost my mind. And then I realized there is nothing wrong with the teacher standing up in front of the room sometimes and directing. (Sarah, personal communication)

This critical perspective on whole language teaching and reader's workshop is exactly the kind of behavior one would expect from teachers who were prepared to focus on their students and their needs and to adapt the school program to meet those needs so that all students would have access to high level learning experiences. It is exactly the kind of attitude that one would expect from teachers who were taught to be analytic and reflexive about educational approaches in general and about their own practice. There was plenty of evidence in both the survey and in our observations and interviews that Alverno graduates who teach in the city of Milwaukee utilize many of the practices that were advocated in their teacher education program. For example, there was much evidence of the planning of integrated units around themes associated with pupils' interests , the use of various forms of portfolio assessments and small group work which encouraged student- student interaction. This child-centered philosophy was played out however, in a way that did not ignore the need to adopt a combination of different approaches for students who were not succeeding.

Delpit (1995) argues that those teachers who are most skillful at educating black and poor children do not allow themselves to be placed in the skills or process boxes, but understand the need for both approaches. This is exactly what we found with the three Alverno graduates we visited in the Milwaukee public schools and to a lesser extent with the one graduate we visited in the Milwaukee suburban school.

Other Research on Program Impact

Studies conducted by Alverno College's Office of Research and Evaluation are consistent with the findings gained through our survey and interviews. For example, the results of two studies indicated that graduates of Alverno's teacher education program do demonstrate the five advanced professional education abilities as evidenced in assessment data gathered during student teaching and in first year follow-up studies. Student teacher performances were judged strong or satisfactory on 96 percent of the performance criteria by cooperating teachers, college supervisors, and in self-assessments. In the graduate follow-up study, principals rated the graduates as strong across the descriptors related to the five abilities (Rickards & Diez, 1992).

Student Teacher Perspectives

As part of our visits to the Alverno campus, and in addition to the numerous informal interviews conducted with students before, after and during our observations of Alverno classes, we conducted two focus group interviews with nineteen current students who were at various stages in their program. The findings from these interviews with regard to program impact are consistent with the data discussed above from graduates, employers, and from other research. While students who were enrolled in the program at the time of our visit consistently told us about the care and concern that they experienced with the faculty whom they felt knew them and their beliefs well, they also told us about the very high expectations for their performance by the faculty despite the absence of formal grades. The well developed ability to be self-reflective about one's teaching that was pointed out by the employers of Alverno's graduates is not surprising given the great emphasis on self-reflection throughout the program.

> You're in a system that expects you to continually grow and to continually do better at your work. And when teachers know you like they do here, they will call you on things. It may be a pass/fail system, but it is still expecting a very high quality of performance.

> They're always asking you how you could have done it differently, how you could have done it better, what are some changes

you would have made? They always throw the ball in your court at Alverno. They are asking me to be just better and better, to constantly revise and reassess.

In addition to the high expectations for student performance by the faculty, the explicitness of the criteria that are used to evaluate students' performances on the various abilities which the curriculum aims to develop seems to contribute to the impact of the program on students. One student told us that she has begun to use this practice of stating explicit evaluation criteria in her own classroom:

> Our teachers give us criteria before we do something. When we have a project or a visit to do or something, they give us criteria, what we have to do to successfully complete the task. I'm doing that in the classroom, letting my students know what is expected before they start on something. Then there is no fuzzy area. They know right away what is expected.

Students described to us various changes that they had seen in themselves as people since enrolling in the program. Because of the great emphasis in the program on social interaction skills and on teaching in urban schools, some of the changes reported by students are related to these areas. For example, on their first day as freshmen students are required to make a video tape of themselves giving a short speech. This speech is evaluated by the students according to explicit criteria related to the communication ability and each semester that they are in the program the students are required to do the same thing- give a short speech which is videotaped and then self-evaluated. In addition, students also videotape various lessons that they teach in the four field experiences. By the time students are ready to assemble their portfolio and be considered for admission to student teaching, they have accumulated a whole series of tapes which show their public speaking and teaching abilities at different points in their development. A number of students and graduates commented to us about the growth they saw in their public speaking and teaching abilities over time when they analyzed their videotapes (as required) prior to student teaching. The way the task was structured, to have students focus closely on their behavior according to criteria, pushed

them to see things in their behavior that they don't think they would have seen otherwise:

> You see a lot of growth. When you come in you give a speech . . . talking into this camera. At first, it was really intimidating for me. I don't want to see myself on camera. How is this going to help me? But then you get to look for evidence of a lot of criteria. Did you make eye contact? Did you pause when someone asked a question? Did you have voice inflection? Did you answer questions while you were speaking? You can watch it again and again and see things that you miss. It's unbelievable.

Another student commented to us about how Alverno's policy of requiring all students to complete several field experiences in the Milwaukee public schools helped her to overcome the stereotypes that she brought to the program about city schools and what could be learned in school by city students.

> I grew up in a suburb and heard all these horror stories about what it would be like teaching for MPS—that there are all these terrible schools and the children aren't learning and that you have to take a crummy car and all these terrible things. And now I have been in a number of city schools and have not seen these things in any school. I've seen children learning. I've seen teachers actively engaged and a lot of really good things going on. And now I take that back to my friends and relatives and say "no, you're only pointing out one side of the picture. Did you know that this is happening and that is happening?" I am in a school now that teaches toward reform and I would like to be part of that.

The comments of the students we interviewed in the two focus groups clearly confirmed the emphasis on a learner-centered approach to teaching that was stated by faculty and written in program documents. Here we were told that all of the courses in the program emphasized getting to know your students well and then modifying the classroom program to fit the needs and learning styles of students rather than having a set curriculum, "At Alverno, they've taught us how to look at your students, assess their

needs, and to make the material fit with your students rather than asking your students fit with the material (Student interview # 2, p.5)."

Students also generally felt that there was open acknowledgment by the faculty that some of the schools in which they worked during their program did not always exemplify the learner-centered philosophy of the program. Here they felt that they were being encouraged in their program to be teachers who would be at the cutting edge of reform and help lead their schools toward a more learner-centered and learning-centered approach, one student said: "And they're instilling into us, how can we be different than the teachers who taught us? How can we really meet the needs of all of the children in our classrooms?"

Unlike other reform-oriented programs discussed in the literature that have emphasized "tearing down" what now exists in the schools to replace it with something better (e.g., Cochran-Smith, 1991), the Alverno program, according to its students, emphasizes a more cooperative approach to reform where reform-minded teachers work to understand and respect different points of view while trying to accomplish their goals. Both the faculty interviews and student interviews indicated that the program works on developing diplomacy skills in students so that when they go out into schools and want to create changes they have the ability to persuade others about their point of view and mobilize support. Students are provided with placements that expose them to a variety of teaching styles throughout the program to help them develop the ability to work with different kinds of people in all kinds of settings. The students repeatedly expressed the view that they felt they could learn something valuable from any situation:

> They teach us how to express our ideas and they always tell us as a school you have to work together. It's not just you against them. It's part of being on a team and working together. So you have to share your ideas and listen to everyone else's ideas at the same time.

> They have taught us to be sensitive to teachers who may not teach like we teach. Just because they don't do things like I would want them done doesn't mean that I can't hear what they have to say and then work with them.

Similar to the comments of the MPS principals indicating that they felt Alverno prepared teachers who were in step with some of the innovative practices being implemented in MPS, such as performance assessment, the Alverno students felt as a group that Alverno graduates have gone out after graduation and been influential in creating reforms:

> If you were to go into MPS schools, anything that you saw that excited you probably was started by an Alverno grad. At X elementary school, they have a student production where the students do the news everyday and that was started by an Alverno grad. And she was the one who got all of the other members of the faculty excited about this. It's been going on for two years now.

CRITICAL FEATURES OF ALVERNO'S ELEMENTARY TEACHER EDUCATION PROGRAM

A number of key aspects of Alverno's elementary teacher education program have led to its success in preparing individuals for urban schools who are confident and who see themselves and are seen by others as successful and innovative teachers. First and foremost is the seriousness with which both teaching and teacher education are taken by the faculty on the Alverno campus. Historically, teacher education has been a low-status enterprise in higher education, and there have been few incentives for faculty to spend time developing and implementing good programs. On many campuses, faculty are actually penalized in the reward structure for such work (Goodlad, 1990). At Alverno, it is expected that faculty will work hard as part of a team to develop and implement the best possible teacher education program and the institutional reward structure encourages such work. Some of the consequences of a reward structure that places high value on teaching and teacher education are that faculty spend a great deal of time in getting to know their students and in being responsive to their needs, and in continually developing the program to make it better. Faculty continually try to find more time to work with their students and to work in schools. Their knowledge of each individual student's strengths and weaknesses is comprehensive and striking.

Second, there is an unusual degree of coherence in this program across

the entire college, in part because of a culture of collaboration among faculty that encourages substantive interaction about teacher education and teaching across program levels and disciplines. Students experience a great deal of consistency across the program and faculty have detailed knowledge of the whole program curriculum, not just of their own piece. Unlike many other institutions, this collaboration often involves interactions between liberal arts and education faculty about how to prepare teachers. This culture of collaboration encourages work that benefits the "common cause" of the institution rather than glory for individual faculty. There is a great deal of pride by the faculty in the results of their common efforts and not a lot of evidence of faculty seeking individual recognition for their work. This is in contrast to many programs where faculty primarily seek individual recognition for their work rather than for the institution and the common educational mission.

The teacher education reforms at Alverno have taken place within the context of overall institutional reform. This institutional climate of reform and focus on teaching has created a favorable environment for the development of the teacher education program. The institution has invested an unusual amount of effort in developing faculty with its program of faculty institutes. Faculty have played a strong role in determining both the wider institutional reforms and in the teacher education reforms. This active involvement by faculty in creating the reforms has contributed to their unusually strong sense of the whole.

Another factor contributing to clarity about program goals and vision and to the impact of the program on students is the ability-based curriculum and performance-based assessment system, which have provided both a common language for faculty, students, and cooperating school personnel to talk in clear and precise ways about teaching and learning and also clear expectations for student performance. Cooperating teachers and principals who work with Alverno seem to be unusually knowledgeable about the content of the campus component of the program.

The constant and rigorous demands on students to analyze their own practice and to have it analyzed by their peers and teacher educators according to explicit criteria seems to develop habits of inquiry about one's own teaching that carry over into at least the first few years of teaching.

The faculty's deliberate and explicit efforts to model in the program the kinds of teaching practices they hope to have their students consider is

another factor that seems to strengthen the impact of the program. Because the Alverno students have not experienced many of the ideas and practices in their own K-12 schooling they are exposed to in their program, such as integrated curriculum work and performance assessment, and because some of the practices are not widespread in area schools, this modeling by faculty provides students with an important opportunity to see what the ideas look like when implemented and how learners experience them.

Another critical feature of the program is the unusually strong connections between the campus and field components of the program. Many of the faculty are involved in local schools on a regular basis working to promote the same kind of reforms that are embedded in the teacher education curriculum. A number of the faculty came to Alverno right from positions as teachers or principals in elementary or secondary schools and were hired because of their potential to do innovative work in teacher education that is in line with the program philosophy. The involvement of the faculty in the schools has resulted in the building of networks of potential cooperating teachers who are supportive of the program's goals. Around 24 percent of the program graduates who responded to this survey indicated that they had continued their involvement with teacher education at Alverno after graduation by serving as members of various teacher education advisory groups, going into Alverno classes to talk about their teaching, participating in the portfolio assessment screening for student teaching, or by serving as cooperating teachers for Alverno students.

The program also tries to involve graduates of their program as teacher educators whenever possible. The elaborate school-based studies curriculum which includes over 40 reflective logs and additional activities, represents a very uncommon case of college teacher educators treating school-based studies in teacher education as seriously as any other course in the program.

Finally, an important factor in the Alverno program has been the presence of a recent state policy largely supportive of the efforts of faculty to reform their program. Several state requirements in the areas of human relations and school-based studies have supported Alverno's efforts to build strong connections between the college and cooperating schools and to prepare teachers to teach all pupils to high standards. There have been few state regulations in recent years that have interfered with the process of teacher education reform at Alverno and in fact, the State

Department of Public Instruction has looked to Alverno faculty for leadership in transforming the rest of the teacher education institutions in the state to an ability-based approach.

As this report is being written, Alverno College's elementary teacher education program continues to be developed by the faculty. The intensity of the commitment of the faculty to improving their program is inspirational. While some of the continuing challenges in the program have been pointed out—challenges such as recruiting a more ethnically and racially diverse faculty; finding placement sites in city schools which exemplify some of the practices advocated in the program; and preparing teachers to work with new English language learners, there is little doubt in our view that this is a highly successful undergraduate preservice teacher education program that deserves serious study by teacher educators across the country.

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APPENDIX A: METHODOLOGY

A total of eight visits from one to two days each were made to the Alverno College campus and Milwaukee, Wisconsin, area schools during the 1995-96 academic year and in fall 1996. In total, the study team (I conducted all of the interviews with and observations of program faculty, cooperating teachers, students, principals, and one of the program graduates. Bernadette Baker, Rosemary Griffith, and Peter Youngs conducted observations of and interviews with the other three program graduates that we studied.) interviewed 14 faculty (some more than once), 19 students who were then enrolled in the program, seven principals from the Milwaukee public schools, and five cooperating teachers. We also interviewed and observed, for one full school day, four graduates who had finished the program within the last four years. Nine different program courses were also observed for a full class period as was one regularly scheduled meeting of the education department faculty and staff. The classes observed included methods classes, foundations classes and field seminars for pre-student teachers and student teachers. Additionally, a survey sent out by NCREST staff obtained the views of another 96 individuals who had graduated from the elementary teacher education program at Alverno during the last four years as well as those of their building principals.

The teacher survey attempted to assess how well the graduates felt their teacher education program prepared them to teach in various areas associated with learner-centered and learning-centered education, how often they think learner-centered and learning-centered practices occur in their classrooms, their opinions about the Alverno teacher education program, and their sense of efficacy as teachers. The principal survey asked the respondents to evaluate the Alverno graduates on the same dimensions of learner-centered and learning-centered education in comparison with graduates of other teacher education programs who have similar length of experience.

We also reviewed numerous documents about Alverno College and its programs, listed at the end of this appendix, including all of the documentation that was prepared for the 1995 National Council for Accreditation of Teacher Education (NCATE) review of the college's teacher education programs. Finally, we met with Marcia Mentowski and Bill Rickards of the Alverno College office of research and evaluation to discuss the research that the college has conducted relative to the validity and effectiveness of its ability-based teacher education curriculum.

Additional Documents Reviewed

In addition to these papers, we also examined course syllabi from many of the professional education and liberal arts courses including the field experiences.

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APPENDIX B: COURSES IN THE ELEMENTARY EDUCATION PROGRAM*

Semesters 1-3

Humanities and Fine Arts
Natural Sciences
Mathematics
Social Sciences
General and Developmental Psychology
Small Group Interaction
Integrated Communication
Human Relations Workshop
Principles of Instructional Design
Introduction to Educational Computing
Field Experience 1

Semesters 4-6

Humanities and Fine Arts
U.S. History
Language Theory and Critical Thinking
Integrated Reading Curriculum 1, 2, 3
Methods (Science, Social Studies, Arts, Mathematics)
Field Experiences 2-4
Exceptional Learner

Semester 7-8

Integrating the Elementary Curriculum
Student Teaching and Seminar
Philosophy of Education
Coordinating Seminar

*This list does not include courses taken in a students speciality area.

APPENDIX C: PROFESSIONAL GROUP DISCUSSION ASSESSMENT

During their third semester of field work, students take part in a professional group discussion. This assessment asks them to take the role of a teacher in a district called upon to meet with other teachers in a planning meeting to make a recommendation (e.g., regarding a gender equity policy for the district, a plan for inservice related to multicultural education, changes in the curriculum related to the Columbus quincentennial, etc.)

Assessment focuses on the student s ability to draw upon aspects of the teacher education curriculum (i.e., multicultural education principles and developmental frameworks) and to apply their abilities, especially in conceptualization and integrative interaction. The group discussions are videotaped and students review their tapes as they complete a self assessment.

The following criteria are used for the professional group discussion:

1. Shows awareness of current interpretations of the issue
   interprets the task from more than one perspective
   articulates conflicting cultural perspectives
   accurately infers perspectives of others through discussion
   recognizes and articulates relevant frameworks
   interprets information according to framework(s) of others

2. Analyzes relationships between the issue and her own philosophy
   articulates the purpose of the task
   articulates own position or perspective with respect to the task
   accurately infers the position of perspective of others
   recognizes assumptions embedded in different points of view
   points out implications of ideas and assertions presented

3. Demonstrates understanding of school district organization in terms of how individuals work with and through others to achieve common goals
   compares organization s goals and values to her own
   articulates an understanding of how the school district functions
   identifies strategies to engage other district wide teachers in the process
   articulates impact of decisions on others in the organization

4. Shows openness to perspectives different from her own
   demonstrates flexibility in discussing opposing ideas
   follows up on, or elaborates on, ideas expressed by others
   revises viewpoint in light of new evidence
   synthesizes the thinking of others
   identifies assumptions, beliefs and biases in state positions
   clarifies positions and actively seeks information to resolve conflict of participants

5. Demonstrates social interaction skills appropriate to achieving the task
   uses a range of task-oriented behaviors to complete the group task
   attends/responds to nonverbal messages or cues in support of task
   communicates enthusiasm for the task(s) of the group
   encourages members who withdraw
   listens to others, without interrupting, who present opposing ideas
   contributes a fair share of ideas
   reflects on strengths and areas of improvement as participant

Student Teacher Assessment Form
Alverno College

This form is to be completed twice for each placement, once near the mid-point and once at the end. The members of the three-person team (student, cooperating teacher, and college supervisor) complete the assessment.

Student _____ School _____ Check one: ___ Self-Assessment
___ Cooperating Teacher Assessment
___ College Supervisor Assessment

Cooperating Teacher _____ Subject/Level _____

College Supervisor _____ Placement Period: ___ Fall, 199__ ___ Spring, 199__
___ First placement ___ Second placement Date of Report: _____

CONCEPTUALIZATION (Circle one overall descriptor for this ability)

Strong Satisfactory Needs growth Unsatisfactory

Descriptive Evidence of Performance:

1. Shows command of subject matter
2. Uses appropriate depth of subject matter
3. Uses logic in the development of subject matter
4. Sets appropriate context for lesson
5. Plans material both to meet learners' current needs and to lead to next level of development
6. Relates today's subject matter to that of previous classes
7. Integrates a variety of learning experiences in planning instruction
8. Relates student behavior to frameworks from developmental psychology
9. Relates student behavior to understanding of cultural contexts
10. Understands the relationships between motivation and student behavior
11. Helps students to relate subject matter to real life experiences
12. Changes plans appropriately in response to the unexpected
13. Understands school structure and role relationships
14. Assesses own performance
    a. evaluating plans in relation to actual class outcomes
    b. analyzing the effect of class activities on both individuals and the class as a whole
15. OTHER specific goal

_____

_____

DIAGNOSIS (Circle one overall descriptor for this ability)

Strong Satisfactory Needs growth Unsatisfactory

Descriptive Evidence of Performance:

1. Collects information through observation of classroom interaction
2. Uses questions to refine information
3. Weighs observations against varied frameworks of student development and behavior, e.g., learning style, cultural background, etc.
4. Makes judgments about student learning needs
5. Uses assessment processes appropriate to learning outcomes
8. Evaluates student performance, using appropriate criteria and providing focused feedback
7. Integrates awareness of student needs into planning
8. Assesses own performance
   a. rethinking decisions in relationship to theoretical bases
   b. identifying needs for own ongoing professional development
9. OTHER specific goal

_____

_____

"Strong" designates outstanding performance for a beginning teacher

"Satisfactory" designates performance that meets the expected level for a beginning teacher

"Needs Growth" indicates some need for improvement, growth or development, although the overall performance meets the expected level for a beginning teacher

"Unsatisfactory" indicates that the overall performance is not acceptable for a beginning teacher

BEST COPY AVAILABLE

Student Teacher Assessment Form - page 2

COORDINATION (Circle one overall descriptor for this ability)

Strong Satisfactory Needs growth Unsatisfactory

1. Sets clear goals and objectives
2. Uses resources appropriate to learning goals
3. Uses class time appropriately
4. Structures learning environment to provide for needs of students
   a. by establishing suitable routines
   b. by creating variety in activities
5. Collaborates with other persons in providing for learning
6. Brings in and relates students' other environments to classroom environment
7. Monitors the progress of learners toward goals
8. Maintains clear records
9. Shows self-confidence through initiative and flexibility
10. Relates appropriately and effectively with parents, teachers, administrators, and school as a system
11. Assesses own performance
    a. monitoring use of resources over time
    b. planning for ways to extend links with colleagues
12. OTHER specific goal

_____

_____

Descriptive Evidence of Performance:

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COMMUNICATION (Circle one overall descriptor for this ability)

Strong Satisfactory Needs growth Unsatisfactory

1. Makes goal of class activity clear
2. Presents material in a manner which holds student attention
3. Communicates clearly through spoken words
4. Communicates clearly through written words
5. Communicates information accurately
6. Uses examples or illustrations to support learning
7. Uses environment to support learning
8. Shows enthusiasm for subject matter
9. Uses audio-visuals skillfully (e.g., chalkboard, overheads, slides, tapes, movies, charts, demonstration objects
10. Uses voice effectively through proper volume, pitch, speed, and pacing
11. Maintains eye contact
12. Reinforces ideas through posture and physical movements
13. Assesses own performance
    a. developing alternative explanations to meet student needs
    b. gaining a sense of own classroom presence and of need to modify that presence, e.g., in manner, dress, grooming, confidence, etc.
14. OTHER specific goal

_____

_____

Descriptive Evidence of Performance:

"Strong" designates outstanding performance for a beginning teacher

"Satisfactory" designates performance that meets the expected level for a beginning teacher

"Needs Growth" indicates some need for improvement, growth or development, although the overall performance meets the expected level for a beginning teacher

"Unsatisfactory" indicates that the overall performance is not acceptable for a beginning teacher

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Student Teacher Assessment Form - page 3

INTEGRATIVE INTERACTION (Circle one overall descriptor for this ability)

Strong Satisfactory Needs growth Unsatisfactory

	Descriptive Evidence of Performance:
1. Shows rapport with students 2. Shows interest in students' ideas, concerns, experiences, interests 3. Demonstrates an adequate understanding of individual differences, especially cultural and psychological differences 4. Shows respect for varied student perspectives 5. Encourages individual participation while effectively directing group activity 6. Stimulates students to question and respond 7. Gives satisfactory answers to students' questions and comments 8. Guides interstudent discussion 9. Guides pace of learning activities 10. Uses feedback to assist student to become a self-starting learner 11. Deals with range of classroom situations with confidence and calm 12. Shows ability to make decisions and to take responsibility for them 13. Assesses own performance a. dealing with individuals in a way that recognizes their personal qualities b. recognizing student's personal backgrounds and reading their nonverbal communication in order to respond appropriately c. gaining a sense of the interaction of the group as affecting learning d. designing learning to best relate to the characteristics of the group and individuals within it 14. OTHER specific goal _____ _____	

Additional Comments

"Strong" designates outstanding performance for a beginning teacher

"Satisfactory" designates performance that meets the expected level for a beginning teacher

"Needs Growth" indicates some need for improvement, growth or development, although the overall performance meets the expected level for a beginning teacher

"Unsatisfactory" indicates that the overall performance is not acceptable for a beginning teacher

student.frm/ed6

APPENDIX E: CORRELATION BETWEEN CAMPUS COURSES AND FIELD EXPERIENCES

The following represents a typical pattern from the way campus courses are linked to field experiences. This list does not include courses taken in a student's speciality area.

Semester	Field Experiences	Courses and External Assessments
3	ED210 Field Experience	CS210 Introduction to Educational Computing; ED222 Principles of Instructional Design and other courses
4	ED215 Second Field Experience	ED220 Interview Assessment; ED225 Integrating Reading Curriculum I; ED396 Introduction to the Exceptional Learner and other courses
5	ED310 Third Field Experience	ED320 Group Interaction Assessment; ED325 Integrated Reading Curriculum II and other courses
6	ED315 Fourth Field Experience	ED345 Integrated Reading Curriculum III; ED420 Portfolio/Interview Assessment and other courses
7	ED445 Student Teaching	ED453 Integrating Elementary Curriculum; ED475 Student Teaching Seminar

Learning to Become a Teacher: The Wheelock Way

BY LYNNE MILLER AND DAVID SILVERNAIL
UNIVERSITY OF SOUTHERN MAINE

I firmly believe I would not have become who I am, either professionally or personally, without the experiences I had at Wheelock.

-Wheelock Graduate

I had a very challenging classroom with many diverse needs in my first year of teaching. I feel that because of my education at Wheelock, I was able to be successful.

-Wheelock Graduate

I feel very strongly that Wheelock College prepared me to be a positive asset to any classroom.

-Wheelock Graduate

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OVERVIEW

These words capture the positive feelings that Wheelock College graduates have about their undergraduate experience and their preparation for teaching. In a recent survey, over 83 percent of the respondents reported that they thought the College had prepared them very well for a teaching career. Employers agree. As one principal, reflecting the views of many others observes, "Wheelock does a better job of preparing early childhood teachers than any place I know."

Why is Wheelock College so successful in preparing teachers? To answer this question we conducted a case study of Wheelock College—its faculty, students, and alumni. This case study depends on a variety of sources and evidence. During five site visits throughout the 1995-1996 academic year, we interviewed the president, vice president, undergraduate and graduate deans, several directors of support services, and 22 faculty members. Interviews were also conducted with 35 students, ranging from freshmen to graduate students. Classes both on campus and during field placements were observed. Observations of Wheelock graduates teaching in the greater-Boston area were also completed. In addition, survey data collected from over 150 graduates and principals were analyzed, along with committee reports, NCATE review materials, division reports, and syllabi of all courses in the teacher education programs.

We discovered that part of the answer of why Wheelock College is so successful lies in what the students encounter in the way of curriculum and field experiences. And, part of the answer lies in the shared assumptions and explicit practices of the college and its faculty.

Wheelock's president describes the institution as "A private college with a public mission . . . [We] can speak in a powerful public voice because we are in an institution unencumbered by doubt about our purpose" (Bakken, 1994).

Founded in 1888, the college has always had a clear and unambiguous focus. Its original charge was to "plant in the land of children whatever you wish to put into the life of our times," (Wheelock College, 1995), and its mission—the improvement of the quality of life for children and their families—remains unchanged today. Then, as now, it offered programs in only three areas: child life (hospital-based child services), teaching, and social work.

Wheelock College was founded by Miss Lucy Wheelock. Born in Cambridge, Vermont, in 1857, Wheelock was the daughter of Edwin

Wheelock, a minister, superintendent of schools, and state legislator, and Laura Pierce Wheelock, a teacher in a small Vermont school. While attending the Chancy-Hall School in Boston, Lucy Wheelock visited a kindergarten class, a visit which had a profound impact on her life. She later described this experience:

> A brief visit one day . . . opened a door to me into the land of childhood, a place I desired to enter and where I have always loved to stay. . . . It seemed to me that he gates of heaven were open and I had a glimpse of the kingdom where peace and love reign . . . I had found my kingdom (Wheelock, n.d.).

In 1888, the Boston school board established kindergarten as part of the public school program, and at the urging of William Ladd, principal of Chancy-Hall, Lucy Wheelock opened Miss Wheelock's Kindergarten Training School. With a year-long curriculum steeped in the tradition of Froebel and the developmental psychology of Stanley G. Hall, Miss Wheelock graduated her first class of six women in 1889.

Today, Wheelock College graduates approximately 150 students yearly from its four-year undergraduate teacher preparation programs in early childhood care and education and elementary education and another 75 students from other undergraduate programs in teaching, social work, and child life. In addition, it grants degrees to 200 students in its graduate division.

The college is still firmly rooted in a developmental point of view and holds itself to the standards set by Wheelock more than a century ago. In the words of the president:

> Everything grows from the child. You are the curriculum builders. You watch, you look, and you see, you create. You allow the child to create. Methods are not so important as the child. The child comes first. The curriculum of the college clearly reflects the commitment to a human development perspective. (Bakken, 1994)

Wheelock College is located in Boston's Riverway in close proximity to several colleges, universities, hospitals, and medical schools; the Boston Museum of Fine Arts; and the Isabella Stewart Gardner Museum.

Approximately 75 percent of the 700 undergraduates live in the college's five residence halls. The college offers Bachelor of Science and Bachelor of Arts degree programs for students preparing for teaching and child life careers and a Bachelor of Social Work degree. These 134 credit-hour degree programs are designed specifically to prepare students for entry-level professional positions in early childhood and elementary education, child life, or social work.

In addition, the college enrolls 550 graduate students in master's and advanced degree programs in child care and education; human development and family studies; and leadership, policy, and administration. Both the B.S./B.A. and M.S. degree programs are accredited by the National Council for Accreditation of Teacher Education (NCATE), and the social work program is accredited by the Council of Social Work Education.

THE UNDERGRADUATE PROGRAM IN EARLY CHILDHOOD EDUCATION CARE

The focus of this study is the undergraduate program in early childhood care and education. The program prepares students to work with children from birth to 8 years old and leads to what the Massachusetts Board of Education calls "provisional certification with advanced standing as a K-3 teacher." As the dean of undergraduate studies describes it, the program is designed to prepare teachers who are "children-centered, family-focused, and community-oriented" by combining subject-matter knowledge, study in pedagogy, and supervised clinical practice.

All of Wheelock's undergraduate teacher preparation programs have two distinct components: subject-matter preparation and pedagogic mastery. The subject-matter focus is based on the completion of college-wide courses, traditional distribution requirements, and the completion of an academic arts and science major. All students must satisfy the distribution requirement of 36 credit hours by taking courses in arts and humanities (16 credits), natural sciences and mathematics (8 credits), social sciences (8 credits), multiculturalism (4 credits), developing problem-solving skills (4 credits), visual and performing arts (4 credits), and human growth and development (8 credits). The major consists of 32 hours of coursework in one of four interdisciplinary fields: arts, human development, humanities, or mathematics and sciences.

Each of the four majors is designed to meet two ends: to provide students with common interdisciplinary experiences and to allow them to

develop individual interests and concentrations. The arts major offers multi-disciplinary studies in music, theater, and the visual arts. Students gain a broad understanding in all three areas and then concentrate in one area for deeper understanding and competence. The human development major is the most popular major in the college. Rooted in the traditional disciplines of psychology, sociology, and anthropology, it offers students a common experience in the required eight credit-hour human development course and then provides the opportunity to focus on one of three perspectives: (1) personality and individual differences; (2) life-span development; and (3) human ecology, the study of family, society, and culture.

The humanities major is organized around the disciplines of history, literature, and philosophy. Students take courses that combine at least two of these disciplines and then select from courses that focus exclusively on one of them. The mathematics and sciences major provides a basis for understanding three broad content areas: mathematics, physical sciences, and life sciences. Coursework in this major emphasizes the connections among the disciplines and their relationship to the larger world.

Though separate in disciplinary focus, all four majors are conceived in a multicultural perspective and offer a variety of multicultural courses and experiences.

Pedagogic Study

Pedagogic study takes place in a set of required courses, including Principles of Inclusive Early Childhood Care and Education, and at least one course in literacy and numeracy. Two other courses which may be taken in the sophomore or junior year, either before or in conjunction with the first of two required practica, are in multicultural teaching and learning and in the assessment of young children. Two integrated curriculum courses are required, each linked to a practicum, one with children from birth to five years old and one with children in K-3 age group. The culminating experience is a senior capstone course on the history and philosophy of education that covers pedagogy, philosophy, and advocacy. See Appendix A for a representation of the major components of the program.

The pedagogic coursework does not occur in isolation from practice. Almost all courses are intrinsically linked to supervised field placements, from the freshmen year through graduation. For instance, all students enroll in a course titled Children and Their Environments. The course goal

is to provide students with "an overview of the environmental and developmental issues relevant to understanding children and their lives" (PRO 120 course syllabus) using an ecological model of human development. Course assignments are designed to help students understand children and families from a multicultural, multisocial, and multiethnic perspective.

The course also includes a 30-hour fieldwork component, a field placement designed to help students acquire first-hand knowledge and appreciation of diversities and to help them sharpen their observation and analytical skills. This field placement is selected by the director of field placement after she interviews students and matches them to field sites. For 10 weeks, students in groups of two spend three hours each week in a field setting as participant observers and prepare weekly journal entries in response to instructor-chosen prompts. These prompts ask students, for example, to observe and write about the social and physical environment of their placement and the environment surrounding the placement, as well as their interactions with children and families, and the children's supervision. A typical assignment might be:

> What have you learned about the life of the children in your placement? What family interaction do you see? If none, discuss why you don't see family interaction. What effects do either of these have on the children? What systems in the ecological model do these questions refer to and how do you know? (PRO 120 course syllabus)

The required eight-credit course in human growth and development also makes explicit connections between theory and practice by weaving together coursework and field experience. Three credit hours each semester are devoted to helping students learn about theories and research on human development. The focus of the first semester is conception through early childhood; the second semester is middle childhood through adulthood. Students explore patterns of development using multiple theoretical frameworks: biological-motivational, environmental learning, universal constructionist, and cultural context. In addition, one credit hour each semester is devoted to field work where theory and practice are examined through guided observations, class discussions, and small tutorial meetings. Students develop a field placement journal designed to help them record and analyze children's, or their own, behav-

ior, and explicitly relate their observations to the developmental frameworks and research discussed in classes. For example, one journal assignment for the first semester focuses on awareness of race:

> Children are aware of racial differences at a very early age. Observe and record behavioral events which illustrate your focus child's (or any child's) awareness of race. Think about developmental theories and research about children's awareness of race (see Cole & Cole, 1993, Chapter 10; Derman-Sparks, Higa & Sparks, 1980; Hale, 1991; Harrison, 1985). Analyze each behavioral event record for what it shows your about the child's understanding of race. Also, analyze the ways in which your placement site responds to children's awareness of race, and develops in all children a respect for racial differences. (HD 202-03 course syllabus)

During the second semester of the course, students are given a two-part assignment dealing with the description and analysis of middle childhood experiences:

> The purpose of this paper is to help you get started thinking and writing about the kind of common, everyday experiences that developmental psychologists study. You will use "data" from the person whose development you have consistently participated in—yourself! Your task is to describe in some detail (1-2 pages) a personal experience/event that occurred while you were in the period of development we will refer to as the "middle childhood years." Study your description and the questions below, with the knowledge of development in middle childhood you've gained through reading and class discussions in your mind.
>
> To keep your focus on development, (a) think in terms of specific areas of functioning (physical, cognitive, and psychosocial); and (b) relate specific behaviors (in thought and action) of yourself and others in your story to developmental theories and concepts discussed in class and readings that are useful in explaining these behaviors. (HD 202-03 course syllabus)

Supervised Clinical Practice

The supervised clinical practice component of the program culminates in two major field placements or practica, one lasting 300 hours and the other 150 hours, in the last two years of study. By design, one of the major practica takes place in a multicultural setting. Also, at least one setting must include special-needs children.

The first practicum is actually part of an integrated core consisting of three courses that students take concurrently. These are a course in curriculum development for inclusive early childhood settings, a seminar, and the 300-hour practicum in either a birth-to-5-year setting or a K-3 setting. The integrated core is taught on a rotation basis by several faculty members each semester and uses a common syllabus. Students spend at least 27 hours each week in their field placement sites, where they assume increasingly greater responsibilities as the semester progresses for "managing the learning environment, using varied teaching strategies, facilitating play, developing an integrated curriculum, and relating to parents and other professionals" (ED 445 course syllabus).

Supervision in the practicum is by full-time faculty who teach the integrated core and who visit each student a minimum of three times during the semester. During each visit, time is allotted for a pre-conference which involves the cooperating teacher, the student, and the college supervisor. This is followed by an observation, which in turn is followed by a post-conference between the supervisor and the student.

The second major practicum is also part of an integrated core of courses. This 150-hour practicum is taken concurrently with a course in curriculum development in inclusive child care and educational settings, and a second seminar. The field placement is either in the birth-to-5-level setting or the K-3 setting, depending upon which setting was selected for the first practicum. In either the 300-hour or the 150-hour practicum, students must have some experience working with children with special needs. As in the first practicum, students are given increasingly greater responsibility over time for the preparation and management of the early childhood setting.

This overview of the early childhood program presents a brief outline of the Wheelock approach to teacher education. At first glance this approach may not appear very different from many undergraduate teacher preparation programs—core distribution requirements, a liberal arts major, professional education courses, and a series of field experi-

ences. What, then, makes the Wheelock approach different? What makes it stand out as an exemplary program? To explore these questions, we present two perspectives on teacher preparation at Wheelock College. The first is from the vantage point of the student; the second is from the point of view of the institution.

THE SHAPING OF A TEACHER: THE STUDENT PERSPECTIVE

In order to present the student perspective, we have developed a composite profile of a student we will call Angela. She represents the journey of a Wheelock student from the time she enters the college, through her four years of pre-service preparation, and into her second year of teaching, when she enters a master's degree program at Wheelock. This composite derives from interviews with students and alumni, as well as from classroom observations and document analysis.

Angela entered Wheelock as a young woman from a suburban middle-class family. A solid student with a consistent B average, she "knew from the time I was five that I wanted to be a teacher." She applied only to Wheelock College because it seemed a perfect match for her commitment to children and because, "Here they let you interact with children from the beginning. They let you work hands-on with children the first year. Most other places you have to wait," she said.

Angela was particularly drawn to Wheelock because of its mission: the improvement of the quality of life for children and their families. She commented on how often the phrase appeared in college publications and how many times it was referred to in her interview and her conversations around the college. She states, "Everywhere you go, every brochure you see has pictures of children. From the president to the janitor, everyone seemed to care about children."

Angela is fairly typical of the high school graduates who apply to Wheelock College. The director of admissions reports that a majority of applicants are from the New England area, with about 50 percent from Massachusetts, and 13-15 percent representing students of color. Most are female public school graduates who maintained a B average in high school. A majority graduated in the top half of their senior classes with combined SAT scores of 850 or above. All have had quite extensive child care experience as day-care workers, camp counselors, community club

leaders, and private tutors. Approximately 15-20 percent of the applicants are denied admission to Wheelock in any given year, principally because of weak basic skills or lack of extensive experience with children.

Once Angela enrolled as a freshman at Wheelock, she found that she was not alone in her feelings about education as a career. She met other students who shared a commitment to children and a certainty about the kind of professional life that they wanted to pursue. They were eager to start immediately on their preparation to become teachers. They were drawn to Wheelock because of its location, its size, its singleness of purpose, and its reputation. In a recent survey, over three-fourths of Angela's classmates said they selected Wheelock College because of its reputation for preparing good teachers (Silvernail, 1997). One recent graduate commented, "Wheelock College's reputation was a factor in my being hired. Both schools that I've taught at were very impressed with where I graduated from. I feel Wheelock prepared me very well for teaching."

Some students had heard about Wheelock from guidance counselors. More often, they were referred to Wheelock by a teacher or family friend. A few stumbled onto the College by browsing through a catalogue and "instantly fell in love with the place." Many, like Angela, had applied to Wheelock and nowhere else.

FRESHMAN YEAR: REFRAMING COMMITMENTS

True to their wishes, Angela and her classmates began working with children immediately upon entering Wheelock. Each student was assigned to a field placement as part of the Children and the Environment course during the first semester. These placements were specifically designed to place students in multicultural settings and to challenge them to look at their assumptions about race and class.

Angela worked with middle-school students in a Roxbury after-school center. Others worked in hospitals, community centers, Big Sister programs, and Head Start classrooms. They checked in with their instructor once a week and wrote responsive journals. Students were asked to analyze the social and physical environments of their field placements, to observe children, individually and in groups, to interview their supervisors, and to write about these things in light of class discussions and readings. A typical assignment might be:

> Look at the physical environment of the setting. Obtain an impression from your eye level, then get on your knees and look again as if you were looking from a child's eye level. What feels different? How does it feel different? What are the best and worst features of the environment, and why? Consider the space, the color, the heat, the light, and any other variables that you think are important. How does the environment affect the children? How does it affect you? (PRO120 Course Syllabus)

Students also had ample opportunity to meet with their professors individually as well as in class. These early placements were assigned by the director of field placement with no student input. At first, many students felt they were mismatched. But later, they realized that the placements were selected specifically to broaden their thinking and their experiences with children and their environments.

In fact, the director of field placement takes great care in selecting placements for students. Through a review of applications and interviews, the director, working with faculty, selects placements that fit the particular needs of students, challenge some of their preconceptions, and expand their understanding of children. For some, this may mean placement with children much older than those they have worked with before. For others, it may mean working in a community youth center, and for still others, it may be their first experience in a multicultural environment. Angela's field placement marked the first time she had been in a predominantly non-white environment. She said:

> In the beginning, I had fear about going into the neighborhood. Now I know and appreciate the strength of the community. I'm very proud of all of us. If you're going to work with children, you need to know their neighborhood. You can't be a teacher halfway.

This early immersion in an unfamiliar and personally challenging setting with children had a powerful impact on Angela and her cohort group. As one young woman put it, "There's more to teaching than I ever anticipated. I learned in Children and the Environment how all aspects [of education] affect a child's life. That raised a lot of issues I never thought about before."

Not all of the initial placements were positive. Angela had a close friend the first year who had a somewhat negative experience. She felt that she was never accepted by the children or their parents because of her privileged background. This young woman commented later in her Wheelock career, "There seemed to be a ratio of good to bad placements and I just got a bad one. But I learned something. All of the placements were learning experiences. They just wanted to get us out in the world and have us test our dreams."

Academic work in other areas reinforced the challenges that the early field experiences presented. In the course Angela took to meet the requirement on multiculturalism, Multicultural Teaching and Learning Styles, she was asked to deal with issues of identity and culture as part of her academic work. For instance, she was asked to describe in a reflective essay what she considered to be major influences that shaped her own cultural identity. Because of these kinds of academic and field experiences, Angela and the students who entered Wheelock with her underwent some powerful changes by the end of their first year. They discovered that a desire to work with children was a necessary, but not sufficient, condition for success, as Angela said,

> I used to think that teachers only have to love children. Now I see a teacher as a moral and physical presence who knows children inside and outside of the classroom and values where they come from and what they know before they ever get to school.

They learned that their own experience of school was not enough to power their careers as teachers. "I always had successful school experiences as a student. I've always loved children. Now I know that much more goes into teaching. It's just deeper than I thought," said one student.

And they learned that they had to understand and value the diversity of student backgrounds and the integrity of cultures other than their own. "This is not about political correctness. It's about being sensitive. It's about understanding children in a variety of ways. It's about being a teacher who can and should teach all children."

In many ways, the freshman year at Wheelock for Angela and her classmates began a process of reshaping beliefs and reshaping self. During the first year, they made the transition from adolescence to young adulthood and from idealizing teaching to beginning to grasp its complexity.

SOPHOMORE YEAR: EMPOWERING ONESELF

It was during sophomore year that Angela had what she termed her "pivotal experience." She had taken the Principles of Inclusive Early Childhood Education course concurrently with Literacy and Numeracy. These were, by themselves, very demanding courses. Taken together, they caused a crisis of confidence in Angela and many of her classmates. She said:

> The teachers expected so much. It was like they were weeding out who should be a teacher and who shouldn't. You really began to doubt yourself. You had to work very hard and you had to do it all yourself. As I look back, I realize it helped me become a better teacher, but there were many times I wasn't sure I had what it takes to be a Wheelock graduate.

The experience shattered many of the illusions that Angela held about herself. She realized that teaching was going to be harder work than she imagined, that she would have to stretch herself to meet the challenges that would be placed before her, that she had to rely on her own resources more than she ever expected, and that she needed to develop the ability to work well under pressure and to balance her time to get the work done. Having faced her own fragility, Angela felt she emerged from the experience with renewed strength and commitment:

> In the end, I think they re-empowered us after we almost all broke down. They re-empowered us so we could empower children. After I finished the year, I felt I could do anything that anyone asked. I felt I was ready to be a Wheelock teacher.

In addition to the principles and Literacy and Numeracy courses, all sophomores took the required eight-credit-hour Human Growth and Development course. This course was considered critical to the development of a Wheelock teacher because it was here that students were introduced in a formal way to what students call the "Wheelock Way." At Wheelock the understanding of human development extends beyond the traditional notion of individual movement through a sequence of stages. Rather, the concept is broadened to include the diverse influences that affect learning and development. Students learn to look at children in the

context of their families, communities, and cultures. They are encouraged to develop sensitivity to differences and a multicultural awareness. It was in this course that students encountered the notion of "student-centered, family-focused, community-based education" and began to understand its importance in their lives as teachers.

The course required three hours per week of field placements. As in earlier placements, the assignments were made by the director of field placements in consultation with instructors. The placements were in group settings with young children during the first semester and with older children in the second semester. Angela was assigned to a Head Start center her first semester and to a Girl Scout program the second semester. She was required to make observations and journal entries as part of the coursework. A typical assignment asked students to identify a child who would be the focus of their work and to observe and record two or more behavioral events. In each event they were to focus on the child's emotional, language, physical, social, and cognitive development.

The Wheelock emphasis on close integration of classroom learning with experience from the field placements took the form of classroom observations. Students were asked to identify examples from their placements and directly relate their observations to theories and research discussions in class. For example, after reading about different theories of physical and cognitive growth in young children and examining some of the research findings of muscle development, students were asked to observe and record at least two behavioral events of a child and analyze the events as follows:

> The goal of your analysis is to construct an understanding of your focus child's physical abilities. As you analyze your focus child's behavior, think about what you have learned about theory and research on physical development. In analyzing the behavioral-event records, use the information about theory and research on physical development discussed by Cole and Cole (1993, Chapters 5 & 6), and by Poest, Williams Witt and Atwood (1990), as well as other course materials.
>
> Here are some questions to ask yourself as you begin your analysis:
> - What do the child's locomotion and large muscle coordination show you about her or his perceptual-motor develop-

ment? What do the child's behavior and vocalizations reveal about her or his awareness of body, time, space, and direction, and visual and auditory cues? How does the child's level of large muscle control influence her or his interaction with objects and with other people? (See Cole & Cole, 1993, pp. 183-184, 213; Poest et al., 1990)

- What do the child's fine hand movements and small muscle coordination show you about her or his perceptual-motor development?
- Does the child seem to be developing "normally" in the physical domain compared with other children of the same age and gender? If so, how do the child's physical abilities differ from what would be expected of a younger child, and of an older child?
- Do you think the child's level of perceptual-motor development is due to experience or maturation, or both?

As you answer these questions, consider why you answer them as you do. What behavioral evidence do you have to support your analysis of your focus child's physical abilities? What developmental research supports your analysis? You might also consider how the child's height and weight might relate to her or his perceptual-motor coordination. (HD202-03 Course Syllabus)

In other cases, Angela and her classmates were asked to observe and analyze a child as she learned English as a second language and another child as she developed a growing awareness of race. In her journal entries, Angela had to relate her observations to developmental theories and research, and also:

> Analyze the ways in which your placement site meets this child's needs and develops in all children respect for languages differences, and . . . analyze the ways in which your placement site responds to children's awareness of race and develops in all children a respect for racial differences. (HD202-03 Course Syllabus)

The practice of helping students to become expert observers of children and their development and asking students to ground their analysis in theory and research is a hallmark of the core courses in the development

of a Wheelock teacher. And it is one of the principal reasons Angela and her classmates believe that Wheelock prepares them in child development and learning in a way that is superior to the preparation of their teaching colleagues. For example, one Wheelock graduate writes,

> Based on observing other teachers and working with these teachers and their knowledge and styles, I truly believe Wheelock College has given me the opportunity to develop an understanding and ability to teach children in a fashion that respects their background, abilities, and interests.

Further evidence of this belief may be found in the results of the survey of graduates. Approximately 94 percent of the respondents indicated that Wheelock had prepared them well in understanding "how students' social, emotional, physical and cognitive development influence learning" and 89 percent felt well prepared in understanding "how factors in the students' environment outside school may influence their life and learning" (Silvernail, 1997). This percentage was significantly higher than that reported by a comparable group of graduates from other teacher preparation programs throughout the country (see Table 1).

Angela enjoyed the Human Development course, and at the end of her sophomore year declared herself a human development major. This major is particularly suited to students like Angela who want to deepen their understanding of children and who want a more generalist liberal arts program. In the major, as well as in her liberal arts course taken to fulfill distributional requirements, Angela saw explicit links between content and pedagogy, teaching and learning. "There is some lecture, but most of the teaching is what we call good teaching," she reported.

Her liberal arts courses were characterized by an emphasis on critical thinking and on developing the ability to express oneself clearly in written language. She remarked on the quantity of written work that was required and how ill-prepared she felt for this level of scholarship and reflection. Her professors became role models for her: "I want to challenge and engage children the same way my professors have challenged and engaged me."

Another student remarked, "I like the way in which many of the professors model their classes after the teaching styles that are used in the elementary classroom." Large portions of Angela's courses were team-taught

and team-planned. She reported that her teachers were always accessible after class and that most gave out their home phone numbers at the beginning of each semester.

For Angela, the sophomore year was a time when "things began to come together." She had established a major, survived a crisis of confidence, learned to think and write critically, and stretched herself further through her field placements. She felt that she had acquired the tools and the strength to take responsibility for shaping herself as a teacher. In her freshman year she had encountered the Wheelock Way and tried it on for size. By the end of her second year, she had grown more comfortable and more confident in the wearing of the mantle.

JUNIOR AND SENIOR YEARS: TAKING CHARGE

Angela's third and fourth years at Wheelock were, if anything, more intense than the two that preceded them. Practical experience and academic work were combined in a series of companion courses. The 300-hour practicum was paired with a course in inclusive curriculum development and a three-credit seminar. The 150-hour practicum was paired with a one-credit seminar and a course in inclusive curriculum. While both practica provided students with important real-world experience, it was the 300-hour segment that provided them with the opportunity to ultimately assume responsibility for a classroom of their own.

The semester-long 300-hour practicum is an extended student teaching experience in one classroom with guided supervision from Wheelock faculty and under the auspices of a selected cooperating teacher. Angela was assigned to a kindergarten classroom with a cooperating teacher who was a Wheelock graduate. Over the course of the placement, Angela assumed increasing responsibility for planning and managing the classroom until she was fully in charge of the work.

During the practicum, her Wheelock supervisor, who was a tenured faculty member, visited her five times. During each visit, there was a three-way pre-conference involving Angela, the cooperating teacher, and the supervisor. This was followed by a 60-minute observation by the supervisor, followed by a 1 1/2 hour evening post-conference between Angela and the supervisor. This close supervision was personalized even further when Angela joined other practicum students for a four-hour combined seminar and curriculum class that was team-taught at the College.

As part of the practicum and seminar, Angela kept a reflective journal that her supervisor read and commented on. The interaction that the journal provided helped Angela clarify her thinking and come up with appropriate responses to difficult situations. Angela particularly remembered a problem she had with thinking about how to discipline children. In her journal, she had written,

> Every Thursday, I have been given the opportunity to spend the morning in another kindergarten classroom. This has given me the opportunity to see the difference in class structure, teaching styles, as well as discipline. Though I look at every child as having special needs, this kindergarten class has a range of students with noticeable special needs, including Down's Syndrome, autism, and severe behavior problems. Even though I can in no way compare this classroom to my own, the discipline taken in the other classroom is really different. My first day here I witnessed a child being dragged out of a class for hitting a boy in the face and making his nose bleed. I sat there in shock over how the behavior was treated. I do not want to make [a] false judgment because I have not been in the class long enough to do so. What I wonder about is why this one class has so many issues to deal with, while mine has minor issues. I would think that instead of putting all these special needs children in one classroom, they would be shared among the classes. That would make more of a balance.

Angela's supervisor responded with thoughtful comments in the margins. She wrote: "You are expanding your knowledge and definition of inclusive classroom." And then she queried: "How would you have dealt with the situation?" Angela replied,

> I would have set limits a long time ago, when I first entered the class. I would not allow such behavior to exist in my classroom. The children will know in advance what is expected of them and what will not be tolerated.

The supervisor asked for more detail:

> What percentage of the class represents children with special needs? Did you ask the teacher what she was trying to accomplish? Did you talk about this to your practicing teacher? Are you aware of how the school groups children in classes?

This quality of back-and-forth interaction between Angela and her supervisor continued for the duration of the practicum. It is characteristic of the interactions that occurred throughout all of her field experiences. Angela credits these conversations with providing the challenge and support she needed to become aware of school-wide issues. They also helped her develop the habit of focusing on what she could do to make her own practice better.

In addition to the journaling, Angela was expected to prepare detailed lesson plans and to share them with her supervisor, cooperating teacher, and fellow classmates for feedback and critique. Each plan had to include activity information, purpose and rationale, main ideas and concepts, learning objectives, necessary space, materials, resources, and procedures to be followed. Angela considered the development of these plans to be a tool that she carried with her into her first teaching assignment.

As a result of the practicum/seminar combination, Angela assimilated the Wheelock Way from a variety of sources: her cooperating teacher, her supervisor, and her peers. From her cooperating teacher, she acknowledged learning to listen more and talk less, to manage children's behavior, to use outside resources (especially parents), to build curriculum, to balance student needs and teacher planning, and to focus on the needs and interests of individuals. Angela especially appreciated having a Wheelock graduate as her mentor and model. "It was encouraging to see a Wheelock grad and what she can do. It made me feel that I can do it too, that here is the kind of teacher that I have the potential to become," she said.

Angela credited her college supervisor with imbuing her with a sense of professionalism, remaining child-centered, focusing on the diversity of the classroom, and getting her into the habit of reflecting critically on her work and figuring out how to make it better. She checked in with her supervisor regularly and often called her at home. Angela also learned the value of collegial interaction from her practicum/seminar. She found that meeting every week with a group of people who were experiencing the same things she was and being expected to talk with them about common issues was an important part of her formation as a teacher:

> My classmates were very supportive and I learned a lot from them. It's important to have at least someone you can talk to—other than your family. I've learned to look for one person I can share with in my school.

By the end of the 300-hour practicum, Angela believed she had truly learned the Wheelock Way. The 150-hour practicum and accompanying seminar and course in inclusive education working with pre-K children further deepened her beliefs and helped her define her thinking and her practice, as did discussions in the capstone course, taken the last semester of her senior year. Angela, like her classmates, entered the second practicum having already made the shift from student to professional. She learned to be a peer evaluator and teacher researcher—always looking carefully at her own practice.

As she prepared to graduate, she felt she could explain and demonstrate what it meant to be a Wheelock teacher. After four years, Angela could explain the Wheelock Way as having the following dimensions:

- Learning from one's students and developing curriculum from knowledge of students, families, and cultures.
- Using resources to follow-up on children's interests, scrounging the community for these resources.
- Constructing curriculum as interests and needs emerge; being flexible, responsive, and resourceful.
- Knowing how to observe and listen to children.
- Being sensitive to diversity and knowing how to teach multiculturally.
- Being professional all the time.
- Integrating curriculum across disciplines, using themes and projects to teach content.
- Being comfortable about advocating for inclusion.
- Identifying and working on student strengths.
- Working hard, planning well, researching thoroughly.

As she approached graduation, Angela said she felt ready to teach:

> I knew I was ready for my own classroom. I knew I could go into any school and teach well. Because I was taught to be articulate about where I came from, it's a lot easier. The philosophy

> was so much a part of who I was that I didn't even realize it. What I learned was not how to do reading and math, but how to articulate my beliefs, how to find the resources to build a curriculum, and how to stand for something. I compare myself to friends who went somewhere else. I honestly think I can do what's required and more.

One of Angela's classmates summed up her experience by writing, "Wheelock College was the best possible place I could have attended. I feel more prepared than most of my colleagues who went other places, especially when it comes to teaching students from backgrounds that are different from my own."

Results from a survey (Silvernail, 1997) of graduates of the seven exemplary teacher education programs included in the National Center for Restructuring Education, Schools, and Teaching (NCREST) study support the views of Angela and her cohorts about the level of preparedness they felt they had acquired at Wheelock. The survey collected data from the graduates of the seven programs that NCREST identified and their employers and compared them to a representative sample of non-NCREST identified programs. As mentioned earlier, nine out of 10 Wheelock graduates reported that they thought Wheelock had prepared them well or very well in understanding how children learn and develop, and an equal number felt prepared to develop curricula and instruction that builds on students' background, experiences, and abilities.

Table 1 reports other views of Wheelock graduates. The survey results also indicate that almost 90 percent said they learned how to use instructional strategies to promote active student learning and to help students think critically. Approximately four out of five graduates believed Wheelock had prepared them to set challenging and appropriate expectations of learning, and to help *all* students achieve high academic success. In addition, four out of five agreed that they were prepared to evaluate the effects of their actions, to modify plans accordingly, and to conduct research that informs their decisions. Finally, 85 percent stated that they believed that Wheelock prepared them to teach students from a multicultural perspective. This is particularly significant when one considers the views of graduates of other teacher education programs (comparison group), where only a little over one-half of those questioned thought they

had been prepared to teach multiculturally.

The survey asked Wheelock graduates about many other aspects of their teacher preparation program. With the exception of technology training, the oeverwhelming majority of Wheelock teachers feel well prepared. Overall, they were more than twice as likely as the national sample to say they felt *very* well prepared for teaching.

REFLECTING ON THE UNDERGRADUATE STUDENT PERSPECTIVE

Angela's story presents a description of a four-year process that shaped her and her classmates as teachers. Angela entered Wheelock with a commitment to teaching and a love of children. By her own account and those of her peers, she left with much more: an appreciation of the complexity of teaching, an understanding of her own strengths and weaknesses, a strong knowledge base in content and pedagogy, solid classroom experience, information about resources and how to get them, respect for diversity, knowledge about children, their families, and their communities, and the capacity to ask questions, build curricula, and solve problems as needs emerge.

Unlike more selective programs that screen for "the best and the brightest" in academic terms, the Wheelock experience screens for commitment to children and a willingness to learn. The college takes as its task the transformation of potentially good caregivers into competent and knowledgeable professionals. It does this by transmitting a clear message about purpose and principles. The program is grounded in themes of a developmental perspective, multicultural sensitivity, inclusive practice, family and community connections, and reflection and inquiry. The process of transformation is deliberate, intense, and comprehensive.

What is it about the Wheelock approach that works? How are students transformed into teachers over the course of four years? From Angela's point of view, we can identify seven characteristics of her undergraduate education that combined to prepare her to teach in the Wheelock Way:

There was a match between Angela's personal goals and the mission of the college. Angela was certain when she graduated from high school that she wanted to prepare to be a teacher. She chose Wheelock because it advertises itself as a place where the care and education of children is primary. As noted earlier, the college mission statement clearly and unequivocally places improvement of the lives of children and families at the center of its agenda. For

Angela, this was a refreshing change from the other colleges she considered, where the teaching profession was not so highly and explicitly promoted. As one faculty member remarked about Wheelock, "We value what is not valued in the world." As a high school senior, Angela sensed that who she was and what she wanted to be was valued at Wheelock; she was not disappointed.

Angela experienced an integrated and coherent educational program. The Wheelock program is structured to ensure that its students understand and experience an explicit connection between learning to become a liberally educated adult and learning to become a teacher. The interdisciplinary major provides a model on the college level for what Wheelock expects on the primary level: the integration of disciplines in a coherent program of study. From Angela's perspective, the study of pedagogy was not disconnected from the study of liberal arts. She was encouraged to view all of her classes as laboratories for learning about teaching. Her study of pedagogy was not limited to her courses in education. She was encouraged to study pedagogy everywhere she found it—in her courses, her field experiences, and her formal professional preparation. Theory and practice, content and process, academics and application were all intrinsically interwoven for Angela throughout her four years at Wheelock.

There was consistent modeling of good practice. Angela deemed herself fortunate that she was a witness to good teaching as a student at Wheelock. She did not experience the disconnection of many education students elsewhere, as she said: "My friends at other places complain that their teachers only lecture." At Wheelock, Angela experienced lectures, but she also spent time in group projects, field placements, seminars, hands-on design and construction, critical oral and written dialogue, independent and collaborative research, and applications of theory to practice. She commented on the time and effort her instructors put into their teaching and how hard she had to work to fulfill their expectations. She had multiple opportunities to experience team teaching and came to understand the benefits of team planning and collegial work. She, in short, learned to teach in the Wheelock Way by being taught in the Wheelock Way.

There was early, appropriate, and continuous access to challenging field placements. When Angela entered Wheelock, she was eager to begin her work with children. The college's program satisfied that desire and she was immediately placed in an after-school program with young adolescents. She commented later that she was pleased that she "didn't

have to wait to work with kids." She could begin immediately preparing for what she saw as her life's work.

Her field placements were highly structured and sequenced over the course of her program. They were designed to introduce her to diverse populations and to challenge her beliefs and assumptions while offering support for growth and learning. All were coordinated with coursework and closely supervised by full-time Wheelock faculty. There was no traditional "front-loading" of courses, no disconnected stint as a student teacher. All of the placements, from early involvement in coursework requirements to a full semester of classroom practice, were organized and assigned by a separate office of field placement. Angela received a clear message that field experiences were important and that the college spent time and resources on their design and implementation.

Angela experienced a highly personalized and personal education. The accessibility and concern of faculty was an ongoing source of support for Angela and her peers. Wheelock faculty not only held regular and extended office hours but they also posted their home phone numbers for students and expected them to call when they needed advice or counsel. Instructors knew all students by name and could comment on their strengths and the areas that they needed to improve upon. Relationships were central to instruction. Whether in classes or field placements, Angela felt that her teachers knew her well and cared about her as a person and as a professional. Much of the interaction that occurred was between a teacher and an individual student. Responsive journals, individual conferences, and one-on-one conversations in class were all ways that Angela connected with her teachers and they with her.

There was equal emphasis on acquiring knowledge and on accessing knowledge and resources. Angela often commented on how demanding she found the coursework at Wheelock, especially the expectations about writing. She was acutely aware that she was expected to acquire knowledge about her content area, about children, and about how to teach. But she was also aware that she could not know everything that she needed before she began each new lesson or unit. Wheelock taught her that while having content knowledge was important, it was not sufficient. She had to learn to find and use resources as well. She felt that in her coursework and in her placements, she was encouraged to scour the neighborhood, hunt down resources, and use them in the interests of her students.

Angela knew what kind of teacher Wheelock wanted her to become. The notion of the Wheelock Way is taken very seriously on campus. Angela referred to it as a unifying theme of her four years at the college. Earlier, we explained what Angela meant by the term. She saw it enacted in her coursework, in her interactions with faculty, and in her field placements. She heard it talked about by the president, her teachers and supervisors, and by Wheelock graduates. She saw it in print in college publications. Angela learned early on that the college stands for something—not only for the improvements of the lives of children and families but for a particular perspective on how children learn and are best taught. Her education was not based on relativism; it was based on a judgment about good teaching that is commonly held and commonly taught at the college.

BEYOND THE UNDERGRADUATE EXPERIENCE: LEARNING FROM EXPERIENCES AND GRADUATE STUDY

Upon graduating, Angela had two options. She could seek employment or she could enter a master's program. In Massachusetts, all teachers need to earn a master's degree within five years of initial certification. Angela decided to enter teaching and to postpone graduate work until she had more experience. She was successful in securing a kindergarten position at a local urban elementary school with a diverse student population. The principal who hired her had substantial experience with colleges and universities in the area and commented,

> If Wheelock College is part of someone's background, I put the application at the top of the pile. I've been connected with Wheelock since 1974 and what has always impressed me is the quality of the teaching. Wheelock is rooted in what it means to be looking at early childhood education from a developmental perspective and to build a program from that.

The principal acknowledged that there were parts of the Wheelock program he would like to see strengthened: notably technology education, the recruitment of more minority students, learning about the sociology of the school, and how to be an agent for change. Nevertheless, he continues to believe that Wheelock graduates are some of the best early child-

hood teachers he can hire. The principal was true to his word. Among his staff were four Wheelock alumni; Angela increased that number to five. Angela's experience of being hired immediately after graduation is the norm rather than the exception for Wheelock graduates.

Wheelock placement office data report that, "Within six months of graduation, 93.8% of our B.S. graduates seeking employment were working. Of that pool, 92.7% were employed within the field of teaching, social service, child life, or other related positions" (Axelrod, Geraty, and Gora, 1995).

Evidence from the survey of recent graduates indicated that approximately two-thirds of these Wheelock alumni are working in public elementary, middle and secondary schools, and over 40 percent are working in urban settings (Axelrod, Geraty, and Gora, 1995).

By the middle of her first year of teaching, Angela had created a kindergarten class that reflected her commitment to "create a culture that supports each student." Her room was very spacious, and she used the space in a variety of ways. Work tables were distributed throughout the room for small group and individual projects. She had designated learning areas for block building, listening to tapes, reading big books, writing, dress-up, arts, computers, and science/animals. There was a large carpeted area for morning meeting and whole-group instruction. She had recently installed a sand table in the arts center. Along the top of the wall was a streamer with the letters of the alphabet. Throughout the room posters with sayings such as, "This room is your room," and "Treating children equally is not teaching each child the same; it is giving each child what he or she needs", and "Children have great expectations and so should we."

Angela began each day on the carpet with a calendar activity and a guessing game. The children would sit quietly in a circle as she introduced the activities for the day. She often used student-created objects as the basis for discussion and would carefully balance student-selection with teacher direction for assignment to the learning areas. She made it a point to call on children by saying something special about them. For example, she would say, "This person has a sister named Josie," or "This person has a brother in the school," or "This person just had a birthday."

Throughout the day, Angela maintained her enthusiasm about what she taught and the children she taught. She planned for large-group, small-group, and individual work. She would demonstrate numbers by

having the children count off quantities of food. She would teach science by having children observe the classroom pets. She rarely seemed ruffled, kept a watchful eye on each student, and took time to interact with each child in the class individually. She made it a special point to acknowledge children's achievements: "I was so surprised that Teddy would make a book. He usually learns through play. I made sure to celebrate his book with him and his family. I didn't want to overlook his accomplishment. "

Angela made every effort to involve parents and community members as resources for her classroom. She had parents come in and read with children and share their special knowledge. One afternoon, she invited a parent who was a carpenter to show the children how he built a puppet theater for them. The children sat rapt as Molly's father measured and cut the wood, planned his next steps, and talked out loud about what he was doing. Angela was delighted with the result:

> This was important for the class and for Molly. The class got to see how math is used in everyday life on the job, and Molly got to see how important her dad is. She tends to be very shy, but she spoke out confidently about what he was doing. She saw that she can make a contribution and that she can be a leader.

Angela credited her preparation at Wheelock for helping her become the teacher she is. She believed that Wheelock gave her the knowledge and confidence to construct the kind of classroom she believed in. She referred to the concept of learner-centered, family-focused, community-based education she had learned at Wheelock and felt that she was just now understanding its importance and its impact.

At the end of that first year of teaching, Angela began to plan her strategy for earning a master's degree. Angela was motivated by more than state mandates. She felt a need to continue her education because she wanted to get better at teaching: "Wheelock kept telling us to be life-long learners and that is what I am." She decided to complete one more year of teaching "to get some more experience under my belt" and then return to Wheelock as a part-time graduate student.

Similar to many of the early childhood graduates interviewed for this study, Angela felt the need to expand her teaching repertoire to include the intermediate grades. She wanted to learn more about teaching in

grades four through six, so that she would have more teaching options as well as a greater understanding of the whole elementary school experience. She was particularly interested in learning more about literacy development, from its emergent stages in kindergarten through its applications in the later grades.

Since she intended to complete her studies while she continued to teach, Angela's options were limited. She could not enroll in the graduate school's internship program through the Learning Teaching Collaborative. This program, based on a professional development school model, requires full-time matriculation and is geared more to liberal arts graduates with some life experience than to recent undergraduates with an education degree. Angela chose instead to enroll in the elementary teacher (grades 1-6) program that leads to standard certification. Angela was very clear about what she needed to learn next:

> I felt I needed to know more specific techniques. In undergrad, I learned how to understand children and their learning and how to construct curriculum based on their needs. Now I wanted to learn more about teaching in the content areas of reading and writing that were not so much a focus in undergraduate. I felt that Wheelock gave me a toolbox. Now I wanted to fill it with some new tools.

These feelings were echoed by other recent graduates in early childhood education who chose the elementary teacher graduate program. One graduate student explained,

> I wanted to expand my learning, to take what I learned from my undergraduate program at Wheelock and make it even better through my graduate program, to extend my learning. I feel that I had the building blocks for teaching and that I had to find what I needed to go higher.

Others added,

> I needed to know more about math and literacy, especially early literacy, and all levels of math. I also needed to do some work in

English as a second language. I had several Vietnamese students in the past few years and while I learned a lot about how to see students whole in the undergrad program, I found I needed more specific skills to meet my student needs.

I wanted to know how to integrate what my school requires and the Wheelock Way. I realized that I was not as strong as I'd like to be in the content areas—math and science in particular. I knew how to garner resources, but I needed to know more about content than I did.

As a Wheelock alumna entering the graduate division, Angela felt immediately at home with the norms and values of her new program. The themes of developmentalism, multiculturalism, connections with families and communities, inclusive educational practice, and reflection and inquiry that so dominated her undergraduate preparation were reiterated and reinforced in the graduate program.

The Wheelock College graduate catalog used language that was familiar to her and re-emphasized the developmental foundation of the college. It states:

> The mission of Wheelock College, the improvement of the quality of life for children and their families, inspires an honorable calling to the human services professions . . . A developmental perspective informs the structure and programs of the Wheelock Graduate School (1995-96).

This developmental perspective is represented in the three-credit-hour requirement for study of human development. Courses in child development (the middle years), lifespan development (conception through adolescence), and children's cognitive development are options for candidates for the master's degree in elementary education. Since she was a human development major as an undergraduate, Angela had the opportunity to petition for a course substitution. She decided not to use her privilege. Since one of her goals in graduate work was to expand her knowledge beyond the primary years, she chose to enroll in Child Development: The Middle Years. This course promised to fill some of the gaps in her undergraduate experience.

The multicultural emphasis was made explicit in the content of the human development course as well as in the general life of the graduate program. The Wheelock graduate catalog states,

> Every individual's distinct social and cultural circumstance refines and enriches the scholarship and professional programs designed to address issues of human development and education. Each program involves the study of development and learning, as well as a critical consideration of existing knowledge. This includes reevaluation of the historical and contemporary significance of race, culture, and gender. (Wheelock, 1996)

The elementary teacher program requires at least one additional course in the area of multicultural education. Angela selected Multicultural Children's Literature: Encountering and Understanding Diversity. She enjoyed this course and felt that it helped her understand the growing number of children of color who were enrolling in her district and how to reach them through a variety of genres. Another required course in learning and teaching also emphasized the frameworks for understanding children from a multicultural perspective.

The theme of families, community, and inclusion also are emphasized in the elementary teacher program. The catalog states, "Emphasis is placed on a commitment to equity in a multiracial and multicultural society, in working partnership with families, enabling all children to participate fully in the learning environment, and collaboration with community agencies (Wheelock, 1996)."

Two courses are required in these areas. The first is Curriculum Design for Inclusive Elementary Education Program. It is designed to:

> Provide the opportunity for students to develop and evaluate inclusive environments for students. This course emphasizes meeting the needs of all children through an integrated approach to planning, implementing, and assessing instruction in all areas; developing Individual Education Plans and promoting collaboration among families, school, and communities. Service delivery systems and transitions between programs are reviewed in relation to curriculum. (ED604B Course Syllabus)

The second course, Impact of Special Needs on Learning and Development: The Middle Years, focuses on moderate handicapping conditions and their implications for children age six to 12. As in the other course, there is considerable emphasis on strategies for working with service-delivery agencies and with parents and communities.

Finally, the theme of reflection and inquiry is woven throughout the graduate experience. The catalogue is quite explicit about the division's commitment to these practices, "The Graduate School programs emphasize the interaction of theory and practice, and the successful application of knowledge and competence in the professional domain. Students acquire critical thinking skills, which are fundamental to lifelong learning (Wheelock, 1996)."

These skills are integrated into all coursework through the use of journals, case studies, and other reflective tools. In addition, there are two required courses dedicated to the development of a critical and reflective perspective. All students are required to take a research course. They are also expected to complete a clinical practicum that is offered in tandem with a reflective seminar.

Angela elected to take a research course that focused on literacy development, an area she had identified as a high priority at the beginning of her program. As a requirement of the course, she completed a research paper on a question derived from her classroom practice. She wanted to know: How do kindergartners use visual representation as an early form of literacy to express their feelings? She collected data in her classroom, read widely in the field of early literacy development, met in a small cluster group of students with common interests, and produced a paper that she hoped to publish.

Angela is halfway through her graduate program; ahead of her lie four elective courses and the final practicum and reflective seminar. Through her electives, Angela will be able to pursue her interest in the teaching of literacy, K-6, by taking courses such as Assessment of Reading and Writing; Content Area Reading and Writing; A Thousand Doors: Learning and Teaching Throughout the Arts; and Creative Dramatics. Her final practicum will involve her in another supervised teaching internship that is accompanied by a seminar designed to help her to "process her teaching experiences, problem solve with others, and analyze the roles of the teacher in schools and communities" (ED6745 Course Syllabus).

Appendix B shows the graduate program that Angela is in the process of completing. To her mind, these 39 credits of graduate study "are put-

ting the finishing touches on an excellent undergraduate experience and helping me become the kind of teacher I dreamed of becoming when I first entered Wheelock over seven years ago."

THE INSTITUTIONAL PERSPECTIVE

There is more to Wheelock's teacher education program than the composite profile of Angela reveals. Because of her limited time on campus and the unique lens through which she viewed the college, Angela could not see the institution in the long term; nor could she see it as a whole. Every institution has a "pre-history" as well as a set of "institutional regularities" (Sarason, 1996) that distinguish it as a culture. Interviews with faculty and administration provided insight into Wheelock's culture, how it developed, and how it adapted over time. Below, we examine three salient features of the Wheelock culture and how it influences the programs in early childhood education and care.

Core Values and Mission. Viewed from the vantage point of the faculty and administration, Wheelock is a tradition-rich institution that adapts to changing demands without violating its core values, beliefs, and norms. These core values are found in the writing of its founder. Over a century ago, Lucy Wheelock wrote:

> The only thing that makes life worth living is to serve a cause, and the greatest cause that can be served is childhood education. It gives to every human being the power of perception and appreciation, and in serving the best interests of the individual, we serve the greatest good of mankind. (Wheelock, n.d.)

Today, Wheelock's president, Marjorie Bakken, voices the same sentiment when she says, "America's future depends on its children. These children and their families deserve the knowledgeable support and the hopeful spirit of caring professionals. Wheelock's commitment to educating these professionals is the foundation of all our work" (Bakken, 1994).

The clarity of mission and unwavering commitment of Wheelock was apparent to the New England Association of Schools and Colleges visiting committee. In its report, the committee wrote:

> From the first day of its charter it has existed to improve the quality of life for children and their families, and that mission is

> universally seen as identical to the vision with which Lucy Wheelock founded the College in 1888. The Board of Trustees, faculty, staff, and administration all know the mission and overtly attempt to measure each institutional action against its clear, concise and consistent standard. Faculty Senate members spontaneously named the mission as the best thing about working at Wheelock. The Academic Council described the orientation of new community members to the mission as an activity equal or even superior to construction of the annual budget as it works out its agenda from year to year. (NEASC, 1995)

Although Wheelock's mission is published in all the usual and right places, in addition it informs the community so deeply that the team could not find any faculty member, administrator, staff member or student who did not know exactly what Wheelock is about. Individuals refer often and in a heartfelt manner to the mission; it even was described in one conversation as a mantra. It would be hard to imagine a deeper or more consistent fidelity by any institution to a more universal or clearly defined area of action.

The human development perspective. Closely related to the mission of the college is the foundation position of human development in its ideology. The president of the college is clear that "at the heart of the college is the Lucy Wheelock legacy—a developmental interactive point of view in which everything grows from the child." She refers to other prominent theorists whose work has influenced Wheelock over time, including Betty Ann Little, Evelyn Weber, Margery Franklin, Barbara Biber, and Edna Shapiro, and concludes,

> Methods are not so important as children are. Betty Ann Little didn't believe in courses. Today at Wheelock, the eight credit-hour experience in human development is the professional core of all of our programs. Understanding methods is secondary to understanding children (Bakken, 1994).

A long-time faculty member amplifies this position and explains,

> Methods are not at the center. A conscious decision was made to de-emphasize methods courses. We want Wheelock teachers to be strategic thinkers and planners who can understand the

> subject to be taught, understand what a child knows, have a clear idea of what a child needs to know, figure out what a child doesn't know, and develop strategies to move a child from where she is to where she needs to be.

The concept of strategic teaching is widely shared across the college. Another faculty member states,

> Once a teacher knows her students well, she can use resources and materials to teach them what the need to know. A good teacher learns to choose from a range of strategies, traditions, and resources to teach children what they need to know. A good teacher looks at the children and then pulls in the material the child will use and enjoy.

As indicated earlier in this chapter, the human development perspective is central to a Wheelock education. It is clearly understood by students because they hear it articulated and see it practiced in every aspect of their education. It is at the core of the Wheelock tradition and is the consistent and unambiguous theme of a Wheelock experience.

This is not to say that the human development perspective has remained static from the time of Lucy Wheelock. To the contrary, it has been modified and adapted to meet the needs of a more complex and multicultural society. The faculty and administration take seriously their commitment to urban children and their families. They have expanded on the traditional framing of human development as an individual unfolding of abilities and interests and have added considerations of culture, inclusion, and diversity. The human development perspective at Wheelock values the influence of families and communities on individual growth, development, and identity formation. As the undergraduate dean explains,

> Education is more than cognitive development. The paradigm has shifted to include social, emotional, and affective issues as well. We have to consider race, class, and identity. Bourdieu's cultural capital helps us have conversations that we need to have about privilege.

Wheelock's expanded concept of human development has four related components: the traditional notions on which the college was founded, the new attention to family and community, an understanding of cultural identity and privilege, and advocacy for full inclusion of diverse learners. Students in the college, as indicated earlier in this chapter, refer to this concept as child-centered, family-focused, and community-based. This phrase is quickly becoming the new mantra of the college.

The primacy of teaching and its connection to idealism. Teaching is at the center of the college. It is viewed as more important than traditional research and is deeply connected with the idea of service. Decisions about hiring, retention, promotion, and tenure all hinge on one's ability as a teacher; these abilities are widely understood. Discourse about teaching is pervasive. As the undergraduate dean explains, "The entire college is engaged in constant conversation about teaching. We strive to model teaching that integrates cognition and emotion. We just discussed this at our last faculty meeting. We stress instruction that is appropriate, active and problem-oriented."

At Wheelock, teaching rarely occurs in private. Team planning and team teaching are the norm, in both liberal arts and professional courses. Faculty plan together, teach together, and assess students together. They are in the habit of asking for and receiving feedback and critique from their peers and of holding their teaching practice up to close examination and scrutiny. As one faculty member states, "Here you can't get by with being 'good enough'. The goal is to be excellent, and you judge yourself harshly if you fall short of that goal."

Evaluation of teaching performance occurs frequently and is taken seriously by administration and faculty.

Significantly, Wheelock draws its faculty from among the ranks of experienced K-12 teachers. It does not seek to hire people who recently received a doctorate, no matter how impressive, unless they bring with them a distinguished teaching history. Traditionally, the college offers tenure-track contracts to those individuals who have taught at the college previously on a part-time or temporary basis. Tenured faculty are in the minority at the college, and tenure is not granted generously. Faculty are paid salaries that are well below those at other local institutions, and their workload is significantly higher. Yet, the faculty at Wheelock are enthusiastic, dedicated to the institution, and deeply committed to their students and to the Wheelock Way.

This phenomenon is accounted for, in part, by the kind of faculty that Wheelock attracts and the views they have of themselves as teachers and as social agents. In their interviews, Wheelock faculty consistently referred to their work as a "calling" or "vocation" or "mission." Such a view of teaching goes beyond professionalism; it is a form of idealism that is linked to principled social action. The undergraduate dean models these qualities by her involvement in the Boston school reform initiative and her explicit concerns about equity and justice. Faculty demonstrate their commitment by involvement in projects that extend beyond their work at Wheelock. Large proportions of faculty have a history of engagement in the civil rights and advocacy movements of the last decades. Most recently, they have embraced the concepts of full inclusion and multiculturalism. These commitments are not perfunctory; they appear to be deep and to pervade the work of the faculty.

A case in point is the degree of involvement that the faculty, administrators, trustees, and alumni demonstrated and supported for the Stand for Children march in Washington in spring 1996. While neighboring colleges had responses that ranged from disinterest to sporadic support, at Wheelock the Stand for Children campaign captured the attention of the entire campus. Banners and posters were displayed from windows in classroom and administration buildings, and from dormitories. Seminars and symposia were held, and the college arranged for buses to transport students and faculty to the march, funded in part by alumni and trustees. The role of faculty in the campaign was central to its success at Wheelock. This kind of involvement was considered normative. A faculty member, long committed to social causes, describes the distinctiveness of the Wheelock faculty this way:

> I was once considered odd. Now I'm part of a faculty committed to social idealism. We really believe that teaching can change the world—child by child. I am no longer the only person in a setting who is committed to developing a fully inclusive and multicultural and just society.

CONCLUDING REMARKS

We began this chapter with the question, "Why is Wheelock College so successful in preparing teachers?" We end with a deep appreciation of Wheelock College as a strongly centered institution where student aims, organizational mission, and faculty values come together in reciprocally enriching ways. What makes Wheelock successful is not so much what it *does* as what it *is*. Wheelock is a dynamic culture, grounded in a rich tradition, that encourage diversity and is capable of adapting to change without losing its integrity. It sends an unambiguous message to its students about what a teacher knows, how a teacher acts, and what a teacher is obligated to do on behalf of all her students and their learning. This message is not limited to the undergraduate Early Childhood and Care Program nor to the master's degree in elementary teacher education. It permeates both the undergraduate and graduate divisions of the college. The dean of the graduate division is describing the entire institution when he says,

> What distinguishes us is our common purpose, our belief that we are here to do the best for children, families and communities. What holds us together is our single focus, the preparation of professionals who will fulfill the college's mission. Our beliefs run deep. They are not only what we teach in classes. They are what we live in the life of the college.

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PRO 120: Children and Their Environment
HD 202-03: Human Growth and Development
ED 443: Curriculum Development for Inclusive Early Childhood Settings
ED 445: 300-Hour Practicum
ED 243: Multicultural Teaching and Learning Strategies
ED 604B: Curriculum Design for Inclusive Elementary Education Programs
ED 6763: Impact of Special Needs on Learning and Development
ED 6745: Reflective Seminar

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APPENDIX A: EARLY CHILDHOOD CARE AND EDUCATION PROGRAM OF STUDY

College Requirements . . . . . 26 credits in required courses

Distribution Requirements . . . . 32 credits in arts, humanities, and natural sciences, mathematics, social science, and multiculturalism

Major . . . . . 32 credits in one of four majors: arts, human development, humanities, mathematics/science

Professional Studies Program . . . 36 credits including individual courses in:
Basic principles of early childhood
Literacy and numeracy
Multicultural teaching
Assessment of young children
Integrated core of:
- Inclusive child care education
- Seminar
- 450-hour practicum
- Capstone

Elective . . . . . 8 credits in any discipline

APPENDIX B: MASTER'S IN ELEMENTARY EDUCATION (ANGELA'S PROGRAM)

Degree: . . . . . Master of Science
Certification: . . 1-6 standard
Total Credits: . . 39

Core Courses (9 credits required)

Human Development Elective (3 credits required)
HD 504 . . . . Child Development: The Middle Years (3)

Multicultural Elective (3 credits required)
ED 638. . . . . Multicultural Children's Literature: Encountering and Understanding Diversity (3)

Research Elective (3 credits required)
ED 722. . . . . Research in Literacy Development: Reading and Writing (3)

Department Courses (1 credit required)
ED 599. . . . . Professional Seminar (1)

Specialty or Elective Courses (12 credits required)
ED 642A . . . Assessment of Reading and Writing (3)
ED 643A . . . Content Area Reading and Writing (3)
ED 629. . . . . A Thousand Doors: Learning and Teaching Through the Arts (3)
ED 633. . . . . Creative Dramatics (3)

Standard Certificate Core (17 credits required)
ED 559. . . . . Teaching and Learning (3)
ED 6763. . . . Impact of Special Needs on Learning and Development: The Middle Years (3)
ED 604B . . . Curriculum Design for Elementary Education
ED 6765. . . . Clinical Experience 1-6 (3)
ED 6745. . . . Reflective Seminar (3)

TABLE 1: WHEELOCK GRADUATES' PERCEPTIONS OF TEACHER PREPARATION

A. Program Characteristics	Research Group (N=159)			Comparison Group (N=420)		
	Percent			Percent		
How well do you think your teacher preparation prepared you to do this?	Not at all or poorly	Adequately	Well or very well	Not at all or poorly	Adequately	Well or very well
10. Understand how students' social, emotional, physical, and cognitive development influences learning.	1	5	94	7	19	74
26. Understand how factors in the students' environment outside of school may influence their life and learning.	3	8	89	9	19	72
8. Use instructional strategies that promote active student learning.	2	8	90	5	17	78
23. Help students learn to think critically and solve problems.	2	16	82	9	29	62
3. Set challenging and appropriate expectations of learning and performance for students.	2	14	84	8	27	65
4. Help all students achieve high academic standards.	3	18	79	10	35	55
31. Evaluate the effects of their actions and modify plans accordingly.	3	19	78	11	29	63
32. Conduct inquiry or research to inform their decisions.	8	24	68	17	36	47
21. Teach students from a multicultural vantage point.	3	12	85	15	28	57
37. Overall, how well do you feel your program prepared you for teaching?	3	12	85	10	25	65

ABOUT THE AUTHORS

Lynne Miller is Executive Director of the Southern Maine Partnership and Professor of Educational Leadership at the University of Southern Maine. The Southern Maine Partnership includes 33 school districts, the University of Southern Maine, and two other institutions of higher education. Before joining the faculty in 1987, Miller held a variety of positions in public schools and universities. She has written widely in the field of teacher development and school reform and in addition to numerous articles, chapters, and papers, she has written four books with Ann Lie Berman, including the recent, *Teachers Transforming Their World and Their Work,* published by Teachers College Press. She serves as a member of the National Commission on Teaching and America's Future and on Maine's state Professional Development Design Team.

David Silvernail is a Professor of Educational Research and Director of the Center of Educational Policy, Applied Research, and Evaluation at the University of Southern Maine. His areas of expertise and work are in equity, assessment, and accountability. His most recent work is in the area of identifying best practices in high performing schools.

Ken Zeichner is Hoefs-Bascom Professor of Teacher Education and Chair of Elementary Education, University of Wisconsin-Madison. Zeichner was affiliated with the National Centers for Research on Teacher Education and Teacher Learning at Michigan State University from 1985-1995, was vice president of Division K of AERA from 1996-1998, and served as a member of the Board of Directors of AACTE from 1997-2000. His recent publications include "The New Scholarship in Teacher Education," published in *Educational Researcher;* "Practitioner Research" in the *Fourth Handbook of Research on Teaching,* (with Susan Noffke); and "Democratic Teacher Education Reform" in *Africa: The Case of Namibia* (with Lars Dahlstrom).

ABOUT THE EDITOR

Linda Darling-Hammond is currently Charles E. Ducommun Professor of Teaching and Teacher Education at Stanford University. Her research, teaching, and policy work focus on issues of school restructuring, teacher education, and educational equity. She is also executive director of the National Commission on Teaching & America's Future, a blue-ribbon panel whose 1996 report, What Matters Most: Teaching for America's Future, has been widely acclaimed as a major blueprint for transforming education so that all children are guaranteed access to high quality teaching.

Prior to her appointment at Stanford, Darling-Hammond was William F. Russell Professor in the Foundations of Education at Teachers College, Columbia University, where she was also Co-Director of the National Center for Restructuring Education, Schools, and Teaching (NCREST). Darling-Hammond is past president of the American Educational Research Association, a two-term member of the National Board for Professional Teaching Standards, and a member of the National Academy of Education and has served on many national advisory boards.

She is the author or editor of seven books, including *The Right to Learn: A Blueprint for Creating Schools that Work,* which was awarded the Outstanding Book Award from the American Educational Research Association in 1998, and more than 200 journal articles, book chapters, and monographs on issues of policy and practice. Among her other recent books are *Professional Development Schools: Schools for Developing a Profession, A License to Teach: Building a Profession for 21st Century Schools,* and *Authentic Assessment in Action.*

In 1996, the National Commission on Teaching and America's Future (NCTAF) undertook a research project to document teacher education programs that successfully prepare teachers to teach diverse learners to high standards. The study documented the successes and strategies of teacher education programs that have reputations for preparing teachers to teach in ways that are learner- and learning-centered; that is, they prepare teachers who are responsive to individual students' intelligences, talents, cultural backgrounds, needs, and interests. These programs also prepare teachers for understanding, teachers who support active in-depth learning for powerful thinking and flexible, proficient student performances. The study produced seven case studies that provide detailed descriptive evidence about the outcomes of the programs, the content they engage, and the processes they employ.

Those seven case studies are presented here. Edited by Linda Darling-Hammond, executive director of the National Commission, this three-volume series includes:

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION AT THE GRADUATE LEVEL

Where There is Learning There is Hope: The Preparation of Preservice Teachers at Bank Street College of Education, *by Linda Darling-Hammond, Stanford University and Maritza B. Macdonald, Teachers College, Columbia University*

Knowing Children—Understanding Teaching: The Developmental Teacher Education Program at the University of California-Berkeley, *by Jon Snyder, University of California-Santa Barbara*

Knitting it All Together: Collaborative Teacher Education in Southern Maine, *by Betty Lou Whitford, Gordon Ruscoe, and Letitia Fickel, University of Louisville (KY)*

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION IN A FIVE-YEAR PROGRAM

Teacher Education at the University of Virginia: A Study of English and Mathematics Preparation, *by Katherine K. Merseth, Harvard Project on Schooling and Children (Cambridge, MA) and Julia Koppich, Management Analysis and Planning Associates, San Francisco, (CA)*

Trinity University: Preparing Teachers for Tomorrow's Schools, *by Julia Koppich, Management Analysis and Planning Associates, San Francisco (CA)*

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION IN THE UNDERGRADUATE YEARS

Ability-Based Teacher Education: Elementary Teacher Education at Alverno College, *by Kenneth Zeichner, University of Wisconsin-Madison*

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