Teacher Preparation for Inclusive Settings:
A Talent Development Model

By Susan M. Benner & Sharon Lesar Judge

Efforts to create radically different routes to the teaching profession have been evident throughout the country as teacher education and K-12 education programs became the focus of repeated criticism throughout the past two decades. These efforts have included legislative action that permitted alternative licensure programs outside of teacher education and/or drastically reduced the education-related credit hours permitted in college degrees (Darling-Hammond, 1990; Warner, 1990). The adoption of alternative licensure routes has not merely been isolated in one or two radical states, but widespread as evidenced by the fact that over 40 states have put such options in place (Sandlin, Young, & Karge, 1992-93; Wise, 1994).

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Outlined on the following pages is one response to these challenges for reform developed and implemented by an interdisciplinary faculty group at the University of Tennessee. The program represents a departure from both traditional teacher education models of instruction and that of traditional academic governance and structure. A qualitative study and formative analysis of the program was embed-

ded into the program at its inception because participating faculty wanted access to data that would be available to analyze the progress of the program toward its stated goals.

Background

In the process of restructuring the College of Education, six faculty formed a new program with the intention of developing an alternative teacher education program for students seeking elementary licensure who were interested in working with all types of young children in inclusive settings. The academic backgrounds of these faculty included early childhood education, philosophy of education, gifted education, special education, and elementary education. We focused our efforts on the development of an alternative program rather than tackling the unrealistic goal of simultaneously modifying the entire teacher education curriculum and instructional approach used by all teacher education faculty within the College. The group instead set a far different agenda. We agreed to work within the existing academic and procedural structures for teacher education programs, but requested and received freedom to be divergent in our instructional and evaluative approaches. We agreed to operate within the existing elementary education framework in which students major in liberal arts, minor in education, and complete a year-long internship. Students in the alternative program would have transcripts that looked identical to other elementary education students, but the qualitative nature of their education experiences would differ as we operationalized constructivist theory. We targeted 16 credits from the education minor (out of the total of 27 credits) and the internship year through which we would implement the alternative model. It was the development of these 16 credits and the internship year to which the faculty then directed its efforts.

We began with minimal assumptions and limitations as we set about designing a constructivist-based program. Details, such as the necessity of adhering to University-approved class times or the scheduling of rooms for nontraditional time slots have all proven to be surmountable annoyances rather than justifications for maintaining the status quo. The 16 credits from the minor were reconceptualized as an integrated block that was planned and taught by the six core faculty. Students would take the block the spring semester prior to the internship year. This preinternship block became organized around three different experiences for students—*instruction, field work,* and *academic circle.* On Mondays and Fridays, students participate along with the core faculty team in instructional activities that were primarily case-based and problem-based. On Wednesdays, students split into teams that rotate to four different schools, spending three days at each site. We developed activities and assignments for the students collaboratively with teachers and administrators at each site. For example, at one site the students observe teachers engaged in an activity with a group of children with special needs. The

students then develop adaptations to that activity for a specific child within the room. That afternoon they have the opportunity to discuss their ideas with the other students, the site-based teachers and the university coordinator. The site-based teachers and university coordinator listen to their ideas, build on them with their own suggestions, and redirect ideas that are unsuitable for any reason. It is the collaborative nature of these sessions, coupled with the real classroom context behind the discussion that illustrates the power of the model.

Since we wanted students to have as their motivation for learning the desire to be prepared to be effective teachers rather than simply getting a grade, we adopted an alternative grading system. Students who completed all assignments at an acceptable level would receive a B for all credits. Any unsatisfactory work would be returned to the student marked as "not yet" and resubmitted until the student improved the work to a satisfactory level. We never use traditional grading for any assignments. However, we realized that grades and GPA do hold significant meaning for students (as well as their parents and admission counselors for graduate programs). Therefore, students wishing to earn A credit would be allowed to contract to complete a student-designed project. Throughout the term students would receive feedback regarding their efforts on these projects that can culminate in class presentations, written materials, photographic essays, or any other product conceived by the student and approved by the faculty. The exchange of weekly reflective journals between the students and faculty attempts to provide all students with an awareness of their own thinking processes.

Objectives

The program was formed with a specific commitment to a developmental constructivist perspective. Faculty within the program endorse the use of an interdisciplinary, collaborative approach to serving young children based on the assumption that children (and adults) construct their understandings in a developmental sequence. Neither children nor teachers organize their worlds by subject matter areas or disciplines. Content should mirror life and be integrated as information and experiences are in the real world. We have chosen to model the constructivist approach by *adhering* to student choices in assignments and evaluations, encouraging student participation in the planning of curriculum and evaluations, using critical thinking and active learning approaches to instruction, and allowing adjustments and flexibility to accommodate individual needs. Our alternative to a traditional examination offers an example of how student participation is fostered in the program. Around the middle of the semester we form a student committee to design an end-of-term "capstone" experience. One faculty member facilitates the committee. Their instructions are to plan an exercise that will reflect the learning that they have experienced over the course of the semester. The committee representatives take ideas from their team members, collaborate in

developing three or four ideas that are then presented to the faculty. Faculty critique the possibilities and finally the committee presents the capstone requirements to the entire class. It is tempting to adopt a well-designed capstone experience to use each year, but it would negate the constructivist aspect of the program for future students, therefore we repeat this somewhat cumbersome process each year.

The implementation of this program certainly produced numerous questions from both the faculty involved and those outside the group, some of whom questioned the wisdom of its availability as an element of competition and confusion for students making application to the elementary education program. The involved faculty, therefore, arranged for an outside researcher to observe throughout the development and first year of implementation of the program. There were two specific objectives set out for this researcher. The first was to provide formative evaluation for our alternative elementary teacher education program based on constructivist principles. The second was to critique the extent to which the program achieved the goal of facilitating the transition of the participants from students accustomed to traditional information-processing forms of learning to reflective teachers capable of constructing their own understanding of the act of teaching.

Theoretical Framework for the Model

The faculty designed the program around a talent development model, based on the concept that teaching is a talent evolving through three developmental phases: *discovery*, *discipline*, and *divergence*. Multiple sources were influential in shaping this model, including Gardner's (1983) work on multiple intelligences, Feldman's (1980) work on non-universal development, Bloom's (1985) and Csikszentmihalyi's (1993) works on talent development, and works on learning and development by Vygotsky (1962), Pestalozzi (1907), and Whitehead (1929). From these sources we conceptualized teaching as a talent, concluding that a teacher education program should parallel the development of talents. The educational experiences within our program were then arranged into components designed to be as consistent as possible with these overlapping levels of development.

Several basic ideas emerged from these theoretical perspectives that became the foundation of our teacher preparation model. We accept the notion that much of a talent is learned, and have moved forward in the development of our program accordingly. Further, we maintain that there are phases, stages, or levels of varying lengths to developing a talent that incorporate the emergence of different types of abilities and skills. The social context as well as the academic content is critical to the development of talent. An enriched environment, filled with opportunities and models relative to the talent, is a necessary condition for the development of a talent. Talents are complex and involve an interconnected set of roles, behaviors and knowledge. The instructional approach used throughout the program involves the demonstrated modeling of these principles. We attempt to create an understanding

of constructivist principles using constructivist approaches. The students are expected to engage in ongoing reflection and metacognitive analysis of our teaching to discover these principles.

Specific aspects of the environment are important for the growth of talent. In particular, the environment should: (a) be characterized by high expectations; (b) incorporate frequent monitoring of progress and feedback relevant to what is being learned relatively quickly after learning; (c) use instructional models consistent with the developing talent; and (d) vary the nature of activities according to the developing levels of the students. What is a very appropriate instructional approach for nurturing talent in one time period may not be so appropriate at a later time. For example, students participate in a discussion about inclusion with a panel of parents early in the preinternship semester, later in that semester they develop adaptive lesson plans, and during the internship year are expected to demonstrate teaching skills and that incorporate the needs of all children in their room and effective communication with parents of children with special needs. We also accept the belief that it is of benefit for the same instructors to stay with learners for extended periods of time to move to a maximum level of trust and comfort in the process of nurturing talent development.

These ideas have been incorporated into our model of *Teaching as a Developing Talent*, based on three developmental levels: *discovery*, *discipline*, and *divergence*. The general sequence of discovery, discipline, and divergence guides the content exposure and depth of content experienced by students. In the *discovery phase* new ideas are introduced, important concepts explored, and taken-for-granted assumptions challenged. Students read, discuss, debate, role-play, and practice solving real problems through case- and problem-based study. The emphasis during the *discipline phase* is on developing the knowledge, skills, techniques, and dispositions that make an effective teacher. Much of this work is done during the initial phases of the internship year. The emerging teachers are honing their teaching skills much like the young driver who moves out of the classroom simulations and empty parking lots onto the roads for the first time. Reflexive reactions, preventive classroom management, confidence in decision-making and the infinite myriad of teaching techniques are becoming a part of the new teacher's repertoire. *Divergence* involves taking what is known and creating effective adaptations that fit the needs of the individual contexts of teaching. Not all participants will reach this phase of development during their internship. However, if they internalize the nature of the talent development approach, they will see teaching as a life-long development and seek divergence as the goal of an accomplished professional.

The model assumes that students will evolve through these phases at individual rates, experiencing new discoveries throughout their teaching careers. Figure 1 presents the types of activities embedded into the model according to the various roles teachers play. The roles, which emerged from extensive discussion and debate

among the faculty, include the obvious roles of instructor, behavior manager, and parent relations manager. They also include areas that may offer less clarity of role, such as human services worker (counselor/social worker), team member, and public relations manager. Other of the roles that are particularly critical to the principles upon which the program is developed are those of self (as a teacher), professional, executive data manager and analyst, and researcher.

Application of the Model

Students who are accepted into the program enroll in the 16-credit block of courses the spring semester prior to their year-long internship. During the preinternship block students and faculty, who team teach in the block, work together to explore the knowledge and skills associated with becoming a teacher. The themes of inclusion, diversity, and developmentally appropriate practices are pervasive throughout the semester. These three themes are covered directly, embedded into other topics, incorporated into field experiences that accompany the coursework, and serve as critical variables of consideration for students when they complete the capstone experience at the close of the semester. Other topics that are included during the preinternship block are lesson planning and the development of integrated curriculum, cooperative learning, classroom management, adapting instruction for students with varying ability levels, working with parents, assessment of children, use of instructional technology, preparing for the opening week of school, and philosophies of education.

The activities and assignments used to cover these topics are predominately case-based and problem-based. For example, students may be assigned to read a 3-to-5-page case depicting either an exemplary teaching situation or a teaching scenario with a central problem. That case then becomes the focus of class discussions and relevant reading assignments, followed up with written group assignments further analyzing or attempting to resolve the case. The primary problem-based project comes two-thirds of the way through the semester. Students are given a comprehensive packet of material describing a school and neighborhood, and a roster of children. They work in groups over a one-week period on their plans for opening day, including the room arrangement, daily schedule, lesson plans, an introductory letter for the parents, and so forth. At this point each group is given additional information about the details of their situation (e.g., an anticipated teaching assistant will not be coming; an additional student is added to the roster; the lunch schedule has been changed) and given an additional week to incorporate this new information into their plans. Other instructional techniques used during the semester include compiling a photo essay of one field-based site, developing lesson plans and peer/teacher critiques of microteaching; writing reflective journals; rotations to four different field experiences; compiling a resource file on disabilities; engaging in debates regarding developmentally appro-

Figure 1:
Teaching as a Developing Talent Model

Teacher Roles	Discovery	Discipline	Divergence
Instructor	Lesson plans Teaching methods Teacher manuals Learning centers	Write long- and short-range instructional goals and objectives Write lesson plans and unit plans Form groups for instruction Use of computers for instruction Teach content	Individualization and adaptation, integration of curricula
Human Services Worker (counselor/social worker)	Identification of community resources available to assist families Awareness of child within a context	Listening skills Appropriate referrals of families to community resources Recognition of abuse/neglect and appropriate follow-up	Creativity in problem solving and resource allocations Crisis intervention
Behavior Manager	Behavior management theories Child development	Manage class time, activities Establish and implement management plans	Offer diversity and variance in behavioral outcomes based on child needs
Parent Relations Manager	Understanding of family systems theory Communications	Parent conferences Notes home Phone calls Use of parents as volunteers	Collaborative partnerships with parents Parent training programs
Public Relations Manager	Awareness of and participation in community groups	Presentations to community groups Fund-raising efforts	Initiation of new programs within the school community
Team Member	Understanding of self and culture	Team decision making	Analysis and improvement of team functioning
Self (as a teacher)	Membership in professional organizations Attendance at conferences and workshops	Self-assessment Reflective teaching	Design and implement a professional development plan
Professional	Record keeping	Responsibility within professional organizations	Plan and conduct professional workshops Assume leadership in professional organizations
Executive Data Manager and Analyst	Research principles Study research done by others	Tracking student performance Maintaining attendance records	Seek patterns in child performance and illness, absences
Researcher		Conduct supported action research projects Analyze research results	Engage in ongoing self-initiated action research projects Interpret research results and convert into classroom implications

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priate practices; role playing parent conferences; developing a professional portfolio; working in cooperative learning groups on specific content; designing computer-generated classroom layouts; and developing a HyperStudio stack.

The faculty member responsible for each topic monitors student performance on all class assignments and activities. Successful progression to the internship year is based on performance on class assignments, performance-based assessments, and a capstone project at the conclusion of the semester. We design the performance-based assessments so students demonstrate their knowledge and skill rather than take a test over content in a traditional fashion. For example, students demonstrate competence in their ability to implement cooperative learning by developing a cooperative learning activity from a lesson plan taken from a curriculum guide rather than answering questions about the principles of cooperative learning. They demonstrate observation skills by watching a video tape of a small group of children and transcribing the actions of a target child. Familiarity with and ability to implement guidelines for effective instruction are charted through written lesson plans and microteaching. At the close of the preinternship semester, we anticipate that most students will have experienced discovery, some discipline, and little, if any divergence in their development as teachers.

During the internship year, faculty team with practicing teachers to provide additional instruction in teaching methods. Assignments required as a part of this advanced methods class are linked directly to the interns' ongoing classroom experiences. Concurrently, interns participate in a seminar on teaching, and design and implement an action research project. These projects are presented at a college-wide conference at the end of the academic year. In terms of the talent development model, we expect interns to continue having some experiences at the discovery phase while primarily operating at the discipline phase of development. They should be well into acquiring the skills of an effective teacher, with occasional opportunities to experience successful divergence of their teaching practice in a classroom setting.

Method

Shortly after the formation of the Inclusive Early Childhood Education Program within the College of Education, a qualitative study of the program and its alternative elementary education program was established. An individual was hired to study the evolution of its alternative teacher education program and gather data regarding the implementation of all program components and activities. Faculty concurred that a "stakeholder" approach (Greene, 1988, 1994; Guba & Lincoln, 1989; Mathison, 1994) to the process was appropriate. Through this approach the researcher aimed to: (a) establish relationships of trust with stakeholders; and (b) obtain their perspectives about the Talent Development Model as an approach to teacher education.

Data collection included not only individual interviews, but also observations, study of artifacts, and the use of multiple focus groups. From the outset, we sought to define repeated phenomena, contradictions between points of view, and succinct expressions of widespread points of view. Interim reports were submitted by the researcher that provided formative evaluative material to the faculty. The data sources, results/conclusions, and implications presented in the remainder of this paper focus on student, mentor, and principal reactions to the initial implementation of an alternative elementary education program.

Data Sources

Stakeholders in the program included participating students, mentoring teachers, and administrators of the internship school sites. Two periods of data collection occurred. First, during the spring semester, 1994 the researcher identified themes evident in student journals from program archives, end-of-semester written feedback provided from students to faculty, transcripts of student comments during an open evaluation session, and a focus group held with three participating students from the preinternship block. These students were asked to respond to the following open-ended questions:

> What do you like? What's going well?
> What isn't going well? What needs to be improved?
> What specific suggestions do you have for making these improvements?

The second data collection period occurred during the 1995 spring term when the researcher visited four school sites used for field experience and/or internship placements. He conducted separate focus groups and individual interviews with interns, mentoring teachers, and administrators. The same questions noted above were posed to each of these groups. Two focus groups (6 and 4 interns in the groups) and two individual interviews were conducted with twelve interns. Each of the focus groups lasted approximately one hour and the individual interviews ranged between 40 and 50 minutes per interview.

Mentoring teachers and administrators were given an opportunity to respond to the same open-ended questions and were additionally asked to consider their relationship with the Inclusive Early Childhood Education (IECE) program, including the character of planning and communications; the prior preparation of interns; and the performance of interns during their internship. Two focus groups (6 and 5 in each group) and two individual interviews were conducted with thirteen mentoring teachers. The group interviews were approximately one hour a piece and the individual interviews ran from 30 to 45 minutes in length. Three principals and one assistant principal each participated in individual interviews, which lasted from 30 to 90 minutes.

Results/Conclusions

Findings from the interviews and written feedback are organized by the data collection periods. Explanations of major themes that emerged and examples that demonstrate each category are presented.

Preinternship Semester

From the first data collection period, which was focused on the preinternship block, the researcher identified two repeated themes: (a) the challenge of conceiving knowledge and learning in a new way in the discovery phase of the Teaching as a Developing Talent Model; and (b) the instructional elements of the program design. The descriptions that students provided about their experiences in the integrated preinternship block suggest that they experience contrasting epistemological points of view that influence their degree of comfort with incongruous instructional approaches and their need for structure and support. These contrasting student responses to the instructional approaches reflect the two "modes" of thinking evident in undergraduate preservice teachers as described by Sprinthall and Sprinthall (1987). For those in Mode A, the discovery phase of our constructivist talent development model can create confusion because it challenges the information-processing view of knowledge and of learning that they bring with them to the program. According to this view, knowledge consists of concrete facts; and learning involves acquisition, storage, and retrieval of these facts. In addition, for students with a Mode A perspective, there is one right way to teach and learn that is characterized by high structure, little ambiguity, detailed instructions, concrete rewards, and immediate feedback. At the end of the semester, one student expressed the still unresolved epistemological confusion of a Mode A preservice teacher:

> I was very confused about the purposes of this cohort. I thought you were going to teach me how to teach. I think this point should be explained to the next group. They may feel that after this semester they will know all they ever needed to know and that's just not true.

This quote certainly lends support to our claim to offer a constructivist approach to learning that required an adjustment on the part of the student.

Preservice teachers in Mode B embrace a constructivist view of knowledge and learning that emphasizes arranging the conditions of learning so that learners can "discover" their own knowledge. They tend to be inner-directed, more autonomous, and less conforming than Mode A preservice teachers and are better matched with the more abstract and inductive instructional methods of the discovery phase of the program.

Sprinthall and Sprinthall (1987) acknowledge that these two dichotomous modes reflect an overgeneralization. Nevertheless, they contend that faculty must be aware of the thought processes of their students and analyze the student view of

knowledge and learning if they are to promote developmental growth that stimulates an epistemological shift from Mode A to Mode B—from information processing to constructivism. While a small number of students expressed the confusion about gaining knowledge from a constructivist approach evident in the above quote, there is evidence that many other students were able to bridge the information-processing to constructivist epistemological gap. For them, the constructivist-based instructional approaches introduced during the preinternship block opened up new ways of learning and knowing. At the end of the semester, one student described experiences that reveal a transformation in her view of teaching and learning from Mode A to Mode B:

> When I began this semester, I knew that I enjoyed the act of teaching. I felt that there was a definite way (or ways) in which teachers approached their job and I would be indoctrinated into the circle, per se. Our first sessions interested me but also frustrated me because I wanted to be given more specific information about how to solve problems. The cases we studied presented a myriad of problems but offered few specific solutions, and this left me dangling—uncertain about what skills I was learning.
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> Somewhere toward the middle of the semester, or earlier, I began to realize that I needed to at least begin to formulate a personal philosophy about teaching. I became aware that I had vague and contradictory ideas about such vital issues as—what is the true role of schools in our country or what should be their role? Another issue was—Should children have choice and control over their learning and if so how much? It seemed that without clarification of my beliefs on these core questions, the specific techniques and methods were somewhat meaningless and lacked purpose.

This student's remarks offer evidence of her success at completing the developmental tasks of the discovery phase of the talent development model as she is now poised to move from discovery to discipline, to develop "the specific techniques and methods" that will make her an effective teacher.

Another theme that emerged from the preinternship data collection period was how the basic elements of the IECE program's integrated design—including collaboration between students and faculty in instructional planning and research, small group procedures, performance-based assessment, grade contracts, and narrative reporting in lieu of traditional testing—shaped the quality of students' relationship with the faculty and with each other. Comments related to specific aspects of the program design offered a combination of general evaluative information and feedback directly relevant to the unique elements of the program. The students noted that they valued the role faculty has assumed as caring co-learners, as evidenced by their behavior in the classroom, individual contacts made through email and reflective journal assignments, and small group assignments. Students also gave feedback on specific aspects of the program relating to academic circle, the capstone experience, grading, field-based experiences, and cooperative group work.

Internship Year

The researcher analyzed the content of the intern, mentoring teachers, and administrator interviews conducted during the internship year to identify repeated topics and/or succinct statements of widespread points of view.

Interns' perspective. From the interns six topics emerged from the discussions of positive aspects of the program. With the exception of one that was linked to action research projects required of all interns in the College, each of these topics represents an aspect that is at least partially unique to the alternative program. For example, the first topic was the value of the full-time year-long internship. While a year-long internship had been required for several years, the first semester had always been scheduled as a half-day program with afternoon classes held on campus. The IECE group revised this schedule to include full days in the schools and the use of six half-days throughout the semester to conduct the required classes. Additionally, these classes were conducted at a school site in collaboration with practicing classroom teachers rather than on campus. Faculty acknowledged, but dismissed the fear that our interns would resist this longer day when they realized that expectations for other interns were lower. Indeed, remarks made during the interviews indicated that for some the schedule enhanced the quality of the experience rather than triggering the negative reactions we had feared. Students expressed the view that they were getting a strong sense of reality from the very beginning of the school year and, therefore, felt themselves to be really a part of the school and classroom. Other topics were the quality of intern-mentoring teacher relationships; the preinternship block; reflective journal writing; and the "pull-out" period, during which visits to other classes are made. The comments of one intern regarding the preinternship block offered evidence that the talent development model had become a reality for at least a portion of the group:

> We wanted the professors to tell us "how to," for example, how to manage behavior. Now I see that they couldn't tell us "how to" last spring. We had to learn that ourselves during the internship.

And another:

> We've been very aware of how what we're doing is different from the "normal" program. We are pleased that we are not "mock teaching" and practicing how to set up a bulletin board.

In regard to areas needing improvement and suggestions for corresponding program alterations, five topics emerged from the data. The first, workload of the interns, is a somewhat universal complaint of student teachers, interns, and first year teachers. Nevertheless, we acknowledge that it was of significance to our participants and appears again in administrator perspectives. The second topic of concern

was the need to incorporate more coverage of special education during the integrated preinternship block. Given the focus and nature of the training program, this concern was particularly relevant to the faculty. One intern commented, "I want to be better prepared to teach in an inclusion system." Obviously, the program faculty share this sentiment and have no resistance to adopting program changes of this nature within the constructivist approach.

The third topic was related to the need of providing more guidance in adjusting to teaching environments in which alternative approaches to instructional delivery, including whole language instruction, the use of cooperative learning groups, and alternative assessments are not present or accepted. An intern aptly noted,

> We can't come in and expect to change the school.... We have to be prepared for what we see in the school.... If our students are trained to do individual seat work, then we can't suddenly do cooperative learning.

The faculty continue to debate the merits of responding to this concern by altering the content of the program or forewarning the students of the discrepancy without providing the additional instruction. This tension between a constructivist perspective in training and internship and/or an initial job that may require greater expertise in traditional teaching approaches than provided is at issue. The final two topics were: (a) preparation for the National Teachers Examination and implementation of the Tennessee Instructional Model; and (b) the need for more planning in advance to establish expectations for mentoring teachers and interns.

Mentoring teachers' perspective. Mentoring teacher discussions focused almost exclusively on the internship experience. Topics ranged from the benefits to the school provided via the internship to the hardships of having interns. The reflection of this diversity is apparent in the following seemingly contradictory statements made by different mentoring teachers:

> It's so nice to be able to work with another adult who knows children well. I can bounce ideas off her.... I should be paying UT.

While another teacher commented:

> I'm walking an adult child through the room, talking through every decision I make.... UT should be paying me.

The remainder of the topics discussed by the mentoring teachers focused on the details and mechanics of the internship (e.g., observation forms, arranging intern-mentoring teacher responsibilities), rather than unique aspects of the alternative program. Clearly such topics, both positive and negative, are relevant to the program faculty, but offer little to the present analysis.

Administrators' perspective. Much of the discussion generated by the admin-

istrators was also not directly relevant to unique aspects of the alternative program. One exception, however, was that of workload. Comments were made indicating that the current group of interns appeared to be "fussier" than previous groups, particularly when participating interns noted that interns from other programs had fewer time requirements. One principal noted, "They are masters-level students, and they need to make a commitment to the workload." Another point, somewhat parallel to the methodological issues raised by the interns themselves, was that of the need for greater feedback from program faculty to school personnel. One principal wondered,

> Are we simply imprinting our own ways, or are we hitting at our school what the interns need, what the Program is all about?... The interns might conclude that our ways of teaching and thinking about curriculum are the only ways.

The concern directly reflects that of the program faculty who hope to produce teachers capable of resisting their automatic indoctrination to existing school cultures.

Implications

Our experience in developing and implementing an alternative teacher education program has been challenging as we redefine our roles, beliefs, and commitments about teaching. Some of the major challenges we have faced include (a) reorganization of program offerings and content; (b) use of alternative forms of student assessment and grading; (c) teacher education innovation embedded in a bureaucratic university system; (d) placement of interns with mentoring teachers who demonstrate best practices in classroom instruction; and (e) state licensure requirements restricting the unification of teacher education programs. These challenges are not new for teacher educators attempting to reform personnel preparation programs (Bondy, Ross, Sindelar, & Grifin, 1995; Stainback & Stainback, 1987).

Working as an integrated, interdisciplinary team has been essential for meeting these challenges. Our team shared a fundamental assumption that course content should not be separate, offering splintered skills, but rather integrated, teaching themes that cross disciplines. The reorganization of program offerings and course content into an integrated block of courses has a specific meaning in our context. The time allocated by the university to six courses is combined into a single contiguous time period so that we can teach topics that cross arbitrary course boundaries. In effect, we have done away with the content of the old courses and created a new fluid structure that can leapfrog in multiple directions in response to the learning needs of our student cohorts in different academic years. This constructivist approach cannot be captured in traditional university guidelines for curriculum. Our solution was to create a new structure that retains the names of old courses, which are similarly named across the other teacher education programs

sharing the same state certification. We argue that change need not be universal and comprehensive to be effective. Indeed, the programmatic changes undertaken by this group voluntarily would likely have been impossible to implement universally across all teacher education programs or even all elementary education options.

There is evidence to suggest that our talent development model is a viable approach to teacher education and offers a realistic alternative to a front-loading "how to" approach. The shifting of student learning styles from information processing to constructivist analysis and synthesis was possible within the structure of this program. However, participating faculty must acknowledge that in the initial weeks students can be expected to experience dissonance and frustration as they face the challenge of altering their usual approaches to learning. Student engagement in metacognitive analysis of the behaviors and expectations of the faculty can assist them in the transition.

Long-term qualitative data gathering from program graduates will be critical to the question of indoctrination effects of conflicting school cultures, but these initial findings indicate that students are capable of adjusting to and sustaining a constructivist approach to their own learning. Evaluation of the extent to which use of the Teaching as a Developing Talent Model has enabled students to become reflective constructivist learners and teachers can not be detected with traditional measures of teacher and program efficacy such as evaluations of lesson planning, the recitation of effective behavioral interventions, or even the successful demonstration of the use of cooperative learning groups. Limitations of the present evaluative information are primarily associated with the absence of long-term teaching performance of program graduates. Outside of the internship year we have not addressed the extent to which our graduates have employed these approaches in their own teaching or continue to use reflective analysis and constructivism in their own approach to learning. Training in constructivist approaches does not ensure consistent use of the approaches in the classroom. Additionally, the theoretical validity of the model will require tracking individual students over the course of their development from preinterns to practicing teachers.

References

Bloom, B.S. (Ed.). (1985). *Developing talent in young people*. New York: Ballantine.
Bondy, E., Ross, D.D., Sindelar, P.T., & Griffin, C. (1995). Elementary and special educators learning to work together: Team building processes. *Teacher Education and Special Education*, 18, 91-101.
Csikszentmihalyi, M. (1993). *Talented teenagers: The roots of success and failure*. Cambridge, UK: Cambridge University Press.
Darling-Hammond, L. (1990). The alternative certification of teachers. *Peabody Journal of Education*, 67(3), 123-54.
Gardner, Howard. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Greene, J.C. (1994). Qualitative program evaluation: Practice and promise. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research: A practical guide* (pp. 530-544). Thousand Oaks, CA: Sage.

Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29, 75-92.

Guba, E.G., & Lincoln, Y.S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.

Feldman, D.H. (1980). *Beyond universals in cognitive development.* Norwood, NJ: Ablex.

Mathison, S. (1994). Rethinking the evaluator role: Partnerships between organizations and evaluators. *Evaluation and Program Planning*, 17, 299-304.

Pestalozzi, J.H. (1907). *How Gertrude teaches her children* (L.E. Holland & F.C. Turner, Trans.). London, UK: Swan Sonnenschein.

Sandlin, R.A., Young, B., & Karge, B.D. (1992-1993). Regularly and alternatively credentialed beginning teachers: Comparison and contrast of their development. *Action in Teacher Education*, 14(4), 16-23.

Sprinthall, L., & Sprinthall, N.A. (1987). Preservice teachers as adult learners: A new framework for teacher education. In M. Haberman & J. Backus (Eds.), *Advances in teacher education* (Vol. 3, pp. 35-56). Norwood, NJ: Ablex.

Stainback, S., & Stainback, W. (1987). Facilitating merger through personnel preparation. *Teacher Education and Special Education*, 10, 185-190.

Vygotsky, L.S. (1962). *Thought and language* (E. Hanfmann & G. Vakar, Trans.) Cambridge, MA: M.I.T. Press. (Original work published 1934).

Warner, A.R. (1990). Legislative limits on certification requirements: Lessons from the Texas experience. *Journal of Teacher Education*, 41(4), 26-33.

Whitehead, A.N. (1929). *The aims of education.* New York: The Free Press.

Wise, A. (1994). The coming revolution in teacher licensure: Redefining teacher preparation. *Action in Teacher Education*, 16(2), 1-13.