What Does Research Say about Teacher Induction and IHE/LEA Collaborative Programs?

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Unlike countries such as Japan and Germany, the United States has no consistent national induction model with guidelines for teacher induction (Fideler & Haselkorn, 1999). Although the Interstate New Teacher Assessment and Support Consortium (INTASC) has published standards for beginning teachers, INTASC standards have not been utilized uniformly across the United States to establish induction programs (Humphrey, Finnegan, & Shields, 1998). How one transitions from student of teaching to teacher is largely determined for each novice teacher by the state, district, and school in which she or he is employed. New teachers' first teaching experiences vary enormously, and there is an inconsistent patchwork of induction programs across the U.S. Although the number of teacher induction programs fluctuates due to legislative initiatives and funding allocations, to date over 30 states have induction programs, six of which are tied to credentialing and/or employment requirements.

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Given the anticipated need for thousands of new teachers in this decade due to K-12 teachers' retirement and attrition (Hirsch, 2001), one might posit that this lack of uniformity in induction programs is related to a paucity of information about their nature and value. However, teacher induction has been extensively researched for the last twenty years. There is general agreement that induction represents a step in a developmental continuum of educators' professional skills (Hall, 1982; Brooks, 1987; Huling-Austin, 1990). Early induction research focused mostly on descriptive studies of new teachers' needs (Ryan, 1980; Veenman, 1984) and mentors' roles (Gehrke & Keys, 1984; Gray & Gray, 1985). Induction research from the 1990s through 2001 has focused primarily on qualitative studies of local induction programs (Gehrke & Keys, 1984; Feiman-Nemser & Parker, 1992; Moir & Stobbe, 1995; Wood, 2000). There have been a few quantitative studies (Kilgore & Kozisek, 1989; Estes, Stansbury & Long, 1990; Mitchell, Scott, Hendrick & Boyns, 1998) and a mix of internal and external program evaluations of existing state-initiated teacher induction programs (Fideler & Haselkorn, 1999).

In California, Olebe (2001) points out that teacher induction represents a unique fusion of state policies, induction research, and K-12 educators' practices. California beginning teacher induction evolved from the California New Teacher Project (CNTP), a state-sponsored research and development pilot project that explored novice teacher support and teacher assessment across 37 local programs, of which several were collaborative IHE/LEA projects. Findings from the 1988-1992 *CNTP* are documented in *Success for Beginning Teachers: Final Report of the California New Teacher Project* (1992). These findings formed the basis of Senate Bill 1422 (Bergeson, Chapter 1245, Statues of 1992), which created the Beginning Teacher Support and Assessment Program (BTSA).

California induction programs must be grounded in the California Standards for the Teaching Profession [CSTP] (California Commission on Teacher Credentialing [CCTC] and the California Department of Education [CDE], 1997a) and the California Content Standards and Frameworks for K-12 Public Schools. They must also include a state-approved, CSTP-based, formative assessment system of new teachers' knowledge, skills, and abilities. The majority of California induction programs utilize the California Formative Assessment and Support System for Teachers [CFASST] (CCTC & CDE, 1997b); others use their own, locally-designed but Commission-approved, integrated support and CSTP-based formative assessment systems.

Provisions of Senate Bill 2042 specify that California will transition from a grant-funded, voluntary teacher induction program to a state-mandated, induction and credentialing program once sufficient funds are

available in the state budget. The BTSA program standards that have guided California teacher induction for almost a decade, Standards of Quality and Effectiveness for Beginning Teacher Support and Assessment Programs (CCTC & CDE, 2001) will soon be replaced by Standards of Quality and Effectiveness for Professional Teacher Induction Programs (CCTC, 2001). These latest standards emphasize performance assessment of novice teachers and provide that every local education agency (LEA) be in a collaborative relationship with at least one institution of higher education (IHE) (CCTC, 2001).

The purpose of this article is to provide insight into IHE/LEA collaborative teacher induction programs. What do we know from past and more recent research? Where are the gaps in our knowledge? What have we learned about IHE/LEA collaborations in teacher induction? While this paper looks at IHE/LEA induction collaborations nationally, throughout I place emphasis on the local California experience.

What Do We Know about Teacher Induction?

Two decades of research have revealed empirical and theoretical findings about beginning teacher induction. These findings include: (1) its significance, (2) induction goals, (3) induction components, and (4) funding as a key factor in program viability. It is well documented that large percentages of teachers without an induction program leave the teaching profession (Schlechty & Vance, 1983; CCTC & CDE, 1992; National Commission on Teaching and America's Future, 1996). Research also indicates that often it is the most academically talented that leave teaching in the greatest numbers (Schlechty & Vance, 1981; Darling-Hammond, 1984).

In 1992, fifty percent of California teachers in hard-to-staff urban and rural schools left the profession within the first five years of their teaching career, and thirty percent abandoned teaching within the first three years (CCTC & CDE, 1992). Upon receiving legislative and financial support for California's BTSA induction program, teacher retention rates soared. Today those rates are estimated at 92 percent statewide (Olebe, 2001), with some urban school districts reporting even higher retention rates (Wood, 2000).

Although modified by particular local contexts, commonly accepted goals of teacher induction have remained consistent over time (Schlechty, 1983; Fox & Singletary, 1986; Huling-Austin, 1984; Odell, 1986; Hegler & Dudley, 1987). The purposes of induction programs include goals to:

- Improve new teachers' teaching performance.

- ◆ Increase novice teacher retention.
- ◆ Provide a coherent system of new teacher performance assessment.
- ◆ Smooth the transition year(s) into the profession.
- ◆ Provide strategies for the beginning teacher to acquire additional knowledge and skills.
- ◆ Satisfy mandated requirements related to induction and certification.

To date, California's induction goals include all except the last one. When Senate Bill 2042 goes into effect in July, 2003, the last induction outcome will become part of California induction goals, linking teacher induction to teacher certification in a tiered, statewide learning-to-teach system. In addition, California has an additional broad goal for teacher induction: to improve the teaching of students from diverse backgrounds. With a typical California classroom comprised of one-quarter of the students under the U.S. poverty level, one-third whose first language is not English, and one-half who are members of underrepresented groups (Darling-Hammond, LaFors & Snyder, 2001), this latter goal is imperative. California's new induction standards emphasize teachers' skills in English language development, differentiated instruction for students with special needs, technology, and using the contextualized factors of learning to maximize individual student achievement.

Similarly, state-initiated research studies have identified a rather stable set of program components that comprise effective teacher induction programs (Friske & Combs, 1986; Rossetto & Grosenick, 1987; Bartell, 1995; Olebe, Jackson, & Danielson, 1999). These components include:

- ◆ New teachers "mentored" by experienced support providers or coaches.
- ◆ Systematic observations of novice teachers by trained support providers.
- ◆ Teaching standards form the basis for induction.
- ◆ Collaborative coach and new teacher reflections on teaching practices.
- ◆ New teachers' ongoing collection of evidence of teaching practices.
- ◆ Integrated support and formative assessment systems that use performance assessments of new teachers' skills and abilities.

Empirical evidence on the effectiveness of teacher induction programs has shown that the key determinant of successful induction is a strong relationship between the novice teacher and an assigned and trained mentor teacher (Feiman-Nemser & Parker, 1992). Experienced teachers, specifically trained in cognitive coaching and standards-based teacher assessment, take on roles of support providers to new teachers.

Coaches or support providers teach novice teachers reflective teaching skills and teach them how to become thoughtful practitioners. New teacher support providers encourage novice teachers to plan, teach, revise and apply what they have learned to future classroom lessons (Olebe, Jackson & Danielson, 1999). New teachers collect evidence about their teaching throughout the year and use it to self-assess their standards-based teaching practices (Wood, 2000).

The last common element of teacher induction programs across the United States is the issue of funding. Long-lasting induction programs have been those that have experienced relatively stable and adequate funding. The Teacher Induction Program at the University of Oregon is one such program. It was the first IHE/LEA collaborative induction program in the United States, established in 1963 (Henry, 1989) but no longer in existence due to state funding cuts. In 1977, Florida sponsored the first state-initiated teacher induction program. Later, it was disbanded due to funding issues. This is a familiar theme for teacher induction.

The lack of funding resources has contributed to the slow expansion of induction programs. In 1986, seventeen states had teacher induction programs and 14 more states were in planning stages of implementation (Huling-Austin, 1989). A decade later in 1996, 25 states had state-level induction programs. Among those 25, fifteen states and the District of Columbia had mandatory induction programs with funding (National Association of State Directors of Teacher Education & Certification [NASDTEC], 1996). The other ten states had mandatory induction programs with no funding.

Historically, California IHEs were innovators in initiating induction programs with LEAs. However, when civil litigation (CTA vs. Gould, 3 Civil CO 18447) shifted funding to LEAs, it forced the state's reassessment of policies and changed the IHE role in teacher induction. Olebe (2001, p. 76) comments, "An unintended outcome of this policy shift was that in effect local education agencies (LEA), and not universities, became the lead players in the design and delivery of induction for beginning teachers in California." Consequently, there are currently fewer California IHE/LEA collaborative induction programs than there were in the 1990's. Not only does the amount of funding influence induction programs, but the legislative configuration for allocations impact them also. With the institution of California's Professional Teacher Induction Standards, IHE/LEA collaborative induction programs that receive public funds will be created in situations in which only the LEAs control the budget.

What do We Still Need to Know about Teacher Induction?

Despite the steady but slow expansion of U.S. teacher induction programs across the United States, there are still some key unknowns about IHE/LEA collaborative teacher induction programs. Of the remaining issues, three seem critical: (1) funding strategies to maximize induction effectiveness, (2) the effects of teacher induction on student achievement, and (3) ways to design and implement effective IHE/LEA collaborations in the induction process.

The first two issues require more extensive research. Historically, many induction programs have been dismantled or severely limited due to lack of funding and/or funding patterns. Cost-benefit research needs to be conducted on existing induction programs, as well as on the exploration of creative funding resources for collaborative induction programs. Cost-benefit studies of local and state induction programs that identify contextualized funding issues, resources and solutions would be very helpful for the design and implementation of future IHE/LEA collaborative induction programs.

Similarly, educational renewal research has begun to delineate the relationship between teacher quality and student achievement (Darling-Hammond, 1997; Hargreaves & Fullan, 1992; Little, 1990). Ferguson (1991) tells us that 43 percent of student achievement is related to teacher qualifications (licensing, examination & experience). Greenwald & Laine (1996) demonstrate that students' test score units are increased most by teacher education and teacher experience. However, to date, there are virtually no studies that definitively link student achievement to IHE/LEA teacher induction programs.

Addressing the third unknown about teacher induction is feasible because of the suggestions grounded in past and present research on collaborative IHE/LEA induction programs. Table 1 contains examples of LEA/IHE collaborative induction programs that have published or conducted presentations on research about their collaborations.

Table 1
Collaborative IHE/LEA Teacher Induction Programs

Institution of Higher Education (IHE)	Induction Program Name	Researcher(s)/Date
* University of Oregon	CollaborativeTeacher Education Project	Rossetto & Grosenick, 1987
University of Texas, Austin	School Teacher Induction Program	Huling-Austin, 1990
* University of Wisconsin, Whitewater	Teacher Induction Program (TIP)	Varah, Theune, Parker, & Marookie, 1984
University of California, Santa Cruz	New Teacher Center	Moir & Stobbe, 1995 Moir & Gless, 2001
* University of Nebraska, Concordia College, & Doan College	Teacher Induction Program (TIP)	Kilgore & Kozisek, 1989
University of California, Riverside	Beginning Teacher Support & Assessment (BTSA)	Mitchell, Scott, Hendrick, & Boyns, 1998
* Indiana State University	Certification Renewal Experiment To Improve Teaching (CREDIT)	Summers, 1987
* University of New Mexico	APS/UNM Teacher Induction Program	Odell,1986
University of Minnesota	Patrick Henry Professional Practice School	Minnesota Board of Teaching, 1995
* University of Oklahoma	Entry-Year Assistance Program	Friske & Combs, 1986
California State University, San Bernardino	RIMS BTSA	Sandlin & Feigen, 1995

Note: ** indicates a name change and / or the discontinuation of the program since research publication or presentation.*

What Have We Learned About IHE/LEA Collaborations in Teacher Induction?

From these studies, four themes emerge that address continuing challenges. First, the use of a multiple support or triad model of support can be powerful (Varah, Theune, Parker & Marookie, 1984; Summers, 1987). Triads can consist of mentor support, peer support from other novices, and university faculty support. Providing opportunities for novice teachers to experience all three can be achieved by integrating the activities of each one. Faculty can function as support providers, and K-12 teachers can teach university courses. Similarly, with experience and training, peer support teachers can be transformed into mentor support personnel for induction.

The triad support might also consist of administrative support, support provider assistance, and peer coach support. Research tells us that the principal is a very important person in the life of the new teacher (Kurtz, 1983; Brock & Grady, 1997). IHE/LEA induction collaborations can provide administrator training in induction concepts integrated with other professional development opportunities for site administrators. Induction programs like RIMS use site administrators as critical members of their new teacher support teams. They count on administrators to communicate school-level procedures and policies to all participants (Sandlin & Feigen, 1995).

A second theme is the unique opportunities that professional development schools offer for collaborative IHE/LEA induction programs (Minnesota Board of Teaching, 1995). As Olebe (2001, pp. 82 - 83) suggests, at a PDS ". . . experienced teachers might receive a core training that provides the necessary knowledge and skills to work as a field supervisor, cooperating teacher or induction support provider." The PDS setting lends itself to differentiated support of novice teachers through the use of multiple coaches at the same site. Based on the concept of cohort groups, peer support is paramount to help that can be provided to novices at professional development schools.

Patrick Henry High Practice School was the first professional practice school (PPS) in Minnesota. It started as one of seven Teacher Residency Programs (TRP) across the state as a model for the support and assessment of novice teachers. To enhance the intersegmental collaborations between the partners sponsoring this PPS, a University of Minnesota faculty member serves as the Co-Director of the program. Grounded in INTASC standards, the school functions to involve all

university students, student teachers, and credentialed teachers in reflective teaching practices and careful observations and assessments of standards-based teaching. Participants who work together in this learning community say that it enhances the continuum of teacher development across all stakeholders (Minnesota Board of Teaching, 1995).

A third theme is summed up by Reinhartz (1989, p. 6), who comments that teacher educators are in a key position "to smooth the transition between what is taught to those planning to teach and what they can expect as first-year teachers." I would suggest that university supervisors might carry on their mentoring role into the induction process by becoming coaches or induction support providers for former student teachers when they enter their induction years of teaching. This possibility is strengthened by the induction program's commitment to IHE/LEA collaboration. The spiraling of university supervisors' support of preservice teachers through the induction process as support providers for novice teachers would help facilitate this kind of collaboration.

According to Huling-Austin (1989, p. 50), the assignment of an appropriate support provider ". . . is likely to be the most powerful and cost-effective intervention in an induction program." What better use of the acquired knowledge about specific student teachers than to place former university student teaching supervisors with the same students as they enter the induction process? Who knows the novice teachers as well and can consistently provide continuity of support from preservice through the completion of induction professional development experiences?

Finally, more emphasis needs to be placed on collaborations with site administrators who have novice teachers at their site. IHE faculty and K-12 teachers need to share their knowledge base about effective induction practices with administrators (Kilgore & Kozisek, 1989) who make daily site-level decisions on new teachers' assignments, non-instructional responsibilities, and class enrollments. These administrative decisions are often the very reasons that new teachers feel overwhelmed and contemplate leaving teaching (Ryan et al, 1980; Wood, 2000). Yet, it is vitally important to collaborate with site administrators without imposing additional burdens on principals or vice principals who already have staggering workloads. IHE/LEA induction programs might take what is already known about training administrators about teacher induction (California School Leadership Academy, 1998) and develop strategies that help site administrators meet their own professional goals while they are being educated about their induction roles and responsibilities.

Kilgore & Kozisek (1989) give practical advice for others establishing future IHE/LEA collaborative programs when they urge college faculty to "restructure" their roles in induction. They add, "One idea would be to

put more emphasis on working with principals and faculty to share the knowledge base concerning induction practices. Time could be spent in training principals and mentor teachers to work more effectively with first-year teachers" (1989, p. 112). From past and current research, the same advice is given. Either IHE faculty, K-12 teachers and site administrators work together or pieces of knowledge about novice teacher support are missed or overlooked. It is a timeless message.

Conclusion

Much is known about the significance, goals, and program components of effective induction programs. Both past and current research on IHE/LEA induction programs offer ideas for program implementation that promote deep and meaningful IHE/LEA collaborations. However, their continued existence and possibilities for replication are seriously affected by funding issues. Cost-benefit studies of state and local induction programs and funding resources are direly needed. Similarly, in this age of accountability, more research is needed on the impact of induction programs on student achievement to convince legislators and local education boards that such induction programs make a difference in the lives of children.

Grounded in theory and research, IHE/LEA collaborative induction programs help novice teachers utilize their real-life classroom experiences to develop reflective teaching practices and employ formative assessment strategies to analyze both their own standards-based teaching and their students' learning. Through observations and dialogue with peers, coaches, site administrators, and university faculty involved in these programs, beginning teachers design and implement plans for professional growth. Past and recent research on IHE/LEA induction programs offers key ideas for program development and administration that promote deep and meaningful IHE/LEA collaborations.

References

Bartell, C. A. (1995). Shaping teacher induction policy in California. *Teacher Education Quarterly, 22(*4), 27-43.

Brock, B. & Grady, M. (1997). *From first year to first-rate: Principals guiding beginning teachers*. Thousand Oaks, CA: Corwin Press.

Brooks, D. (Ed.). (1987). *Teacher induction: A new beginning*. Reston, VA: Association of Teacher Educators.

California Commission on Teacher Credentialing (2001). *Standards of quality and effectiveness for professional teacher induction programs*. Sacramento,

CA: Author.
California Commission on Teacher Credentialing and the California Department of Education. (1992). *Success for beginning teachers: Final report of the California New Teacher Project.* Sacramento, CA: Author.
California Commission on Teacher Credentialing and the California Department of Education. (1997a). *California standards for the teaching profession.* Sacramento, CA: Author.
California Commission on Teacher Credentialing and the California Department of Education. (1997b). *Standards of program quality and effectiveness for the beginning teacher support and assessment program*. Sacramento, CA: Author.
California Commission on Teacher Credentialing and the California Department of Education. (1999). *California formative assessment and support system for teachers.* Sacramento, CA: Author.
California School Leadership Academy. (1998). *Support beginning teachers: The principal's role.* Hayward, CA: Author.
Darling-Hammond, L. (1984). *Beyond the commission reports: The coming crisis in teaching.* Santa Monica, CA: The Rand Publication Series.
Darling-Hammond, L. (1997*). Doing what matters most: Investing in quality teaching.* Kutztown, PA: National Commission on Teaching and America's Future.
Darling-Hammond, L., LaFors, J., & Snyder, J. (2001). Educating teachers for California's future. *Teacher Education Quarterly, 28(*1), 9-55.
Estes, G., Stansbury, K. & Long, C. (1990). Beginning teacher assessment activities and developments in California. In A. Morey & D. Murphy (Eds.), *Designing programs for new teachers: The California experience* (pp. 97-106). San Francisco: Far West Laboratory.
Feiman-Nemser, S. & Parker, M. B. (1992*). Mentoring in context: A comparison of two U.S. programs for beginning teachers.* East Lansing, MI: National Center for Research on Teacher Learning.
Ferguson, R. (1991, Summer). Paying for public education: New evidence of how and why money matters. *Harvard Journal on Legislation, 28*, 465-498.
Fideler, E.F. & Haselkorn, D. (1999). *Learning the ropes: Urban teacher induction programs and practices in the United States.* Belmont, MA: Recruiting New Teachers, Inc.
Fox, S. & Singeltary, T. (1986). Deductions about supportive induction. *Journal of Teacher Education, 37*(1), 12-15.
Friske, J. & Combs, M. (1986). Teacher induction programs: An Oklahoma perspective. *Action in Teacher Education, 7*(2), 67-74.
Gehrke, N. & Keys, R. (1984). The socialization of beginning teachers through mentor-protégé relationships. *Journal of Teacher Education, 35*(3), 21-24.
Gray, W. A. & Gray, M. M. (1985). Synthesis of research on mentoring beginning teachers. *Educational Leadership, 42*(3), 37-43.
Greenwald, L. & Laine, R. (1996). The effect of school resources on student achievement. *Review of Educational Research, 66*(3), 361-396.
Hall, E.H. (1982). Induction: The missing link. *Journal of Teacher Education,*

33(3), 53-56.

Hargreaves, A. & Fullan, M. (Eds.). (1992). *Understanding teacher development*. New York: Teachers College Press.

Hawk, P. & Robards, S. (1987). Statewide teacher induction programs. In D. Brooks (Ed.), *Teacher induction—A new beginning* (pp. 33-44). Reston, VA: Association of Teacher Education.

Hegler, K. & Dudley, R. (1987). Beginning teacher induction: A progress report. *Journal of Teacher Education, 6*(1), 53-56.

Henry, M. (1989). Multiple support: A promising strategy for effective teacher induction. In J. Reinhartz (Ed), *Teacher induction* (pp. 74-80). Washington DC: National Education Association.

Hirsch, E. (2001, August). Impact of teacher quality. Paper presented at Teacher Quality Matters—Transitioning to New Standards, New Roles, New Assessments: Title II Summer 2001 Workshop: Focus on SB 2042. San Diego, CA.

Huling-Austin, L. L. (1989). *Beginning teacher assistance programs: An overview*. Reston, VA: Association of Teacher Educators.

Huling-Austin, L. (1990). Teacher induction programs and internships. In W.R. Houston (Ed.), *Handbook of research on teacher education* (pp. 535-548). New York: Macmillan.

Humphrey, D., Finnegan, K. & Shields, P. (1998). *The consistency and coherence of standards for California teachers*. Menlo Park, CA: SRI International.

Kilgore, A. & Kozisek, J. (1989). The effects of a planned induction program on first-year teachers: A research report. In J. Reinhartz (Ed), *Teacher induction* (pp. 93-113). Washington DC: National Education Association.

Kurtz, W. (1983). How the principal can help beginning teachers. *NASSP Bulletin 67,* 42-45.

Little, J. (1990). The mentoring phenomenon and the social organization of teaching. *Review of Research in Education, 16*, 297-351. Washington DC: American Educational Research Association.

Minnesota Board of Teaching. (1995). *A request for proposals for a grant to plan and implement a first-year teacher research and development site*. St. Paul, MN: Author.

Mitchell, D., Scott, L., Hendrick, I. & Boyns, D. (1998). *The California beginning teacher support and assessment program: Statewide evaluation study*. Riverside, CA: California Educational Research Cooperative and University of California, Riverside.

Moir, E. & Gless, J. (2001). Quality induction: An investment in teachers. *Teacher Education Quarterly, 28*(1), 109-115.

Moir, E. & Stobbe, C. (1995). Professional growth for new teachers: Support and assessment through collegial partnerships. *Teacher Education Quarterly, 22*(4), 83-91.

National Association of State Directors of Teacher Education & Certification [NASDTEC]. (1996). *Manual on certification and preparation of educational personnel in the United States and Canada, 1996-1997*. Dubuque, IA: Kendall/ Hunt Publishing Company.

National Commission on Teaching and America's Future [NCTAF]. (1996). *What*

matters most: Teaching for america's future. New York: Author.
Odell, S. (1986, Summer). A model university-school system collaboration in teacher induction. *Kappa Delta Pi Record*, 47-69.
Odell, S. & Ferraro, D. (1992). Collaborative teacher induction. In G. DeBolt (Ed.), *Teacher induction and mentoring: School-based collaborative programs*. Albany, NY: State University of New York Press.
Olebe, M. (2001). A decade of support for California's new teachers: The beginning teacher support and assessment program. *Teacher Education Quarterly, 28*(1), 85-109.
Olebe, M., Jackson, A. & Danielson, C. (1999). Investing in beginning teachers—The california model. *Educational Leadership, 65*(8), 41-44.
Reinhartz, J. (Ed.). (1989). *Teacher induction*. Washington, DC: National Education Association.
Rossetto, C. & Grosenick, J. (1987). Effects of collaborative teacher education: Follow-up of graduates of a teacher induction program. *Journal of Teacher Education, 38*(2), 52-56.
Ryan, K., Newman, K., Mager, G., Applegate, J., Lesley, T., Fora, R. & Johnston, J. (1980). *Biting the apple: Accounts of first year teachers*. New York: Longman.
Sandlin, R. & Feigen, S. (1995). Collaboration between the university and school district: Can it work? *Teacher Education Quarterly, 22(*4), 75-82.
Schlechty, P. & Vance, V. (1981). Do academically able teachers leave education? The North Carolina case. *Phi Delta Kappan, (5),* 106-112.
Schlechty, P., & Vance, V. (1983). Recruitment, selection and retention: The shape of the teaching force. *The Elementary School Journal, 83*(4), 468-87.
Summers, J. (1987). *Summative evaluation report: Project CREDIT*. Terre Haute, IN: Indiana State University School of Education.
Varah, L. ,Theune, W. & Parker, L. (1984). Beginning teachers: Sink or swim? In J. Reinhartz (Ed), *Teacher induction* (pp. 81-92). Washington, DC: National Education Association.
Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54* (2), 143-178.
Wood, A. (2000). Teaching portfolios: Tools for reflective teaching in inner city teacher induction. In D.J. McIntyre & D. Byrd (Eds.), *Research on effective models for teacher education: ATE teacher education yearbook VIII*. (pp. 111-126). Thousand Oaks, CA: Corwin Press.