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AUTHOR Arends, Richard I.; Rigazio-DiGilio, Anthony J.
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ABSTRACT

This paper: reviews research on beginning teacher induction programs, summarizing previous reviews of the topic; identifies various state- and local-level induction programs, analyzing best practices that exist today; makes recommendations based on the research and on best practice for state and local policy development and for program development and implementation; and analyzes current trends in regard to the future development of teacher induction programs. Research review results include such findings as: released time and/or load reduction for mentors and beginners is essential; training mentors results in higher mentor effectiveness; and active principal support and involvement is necessary. The discussion of induction practices details district-based programs, a union-supported induction system, and state-based programs. Ten recommendations for induction programs include: obtain clarity about program goals and purposes; provide a research-based, ethically sound definition of effective teaching; and develop and implement an effective evaluation component for the induction program itself. Several common policy characteristics include: clarity of purpose; appropriate time frame for implementation; and political and financial commitment at all levels. Trends in teacher induction include: renewed interest in teacher induction and connecting induction to standards, licensing, and national certification. (Contains 104 references.) (SM)

Beginning Teacher Induction:
Research and Examples of Contemporary Practice

A paper presented to the Japan - United States Teacher Education Consortium
JUSTEC
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Dr. Richard I. Arends, Professor of Educational Leadership and Dean School of Education,
Connecticut State University

and

Dr. Anthony J. Rigazio-DiGilio, Associate Professor of Educational Leadership
Central Connecticut State University

Introduction

The educational reforms of the 1980s produced a spate of beginning teacher induction programs developed mainly by state agencies. Local educational agencies (LEAs) and institutions of higher education (IHEs) also developed induction programs during this era. Reformers believed that attention paid to beginning teachers would help novices acquire the competence of experienced teacher more thoroughly and be socialized into district and school culture more quickly. These programs also aimed at increasing beginning teacher satisfaction and at reducing the high proportion of beginners who were known to drop out of teaching during the first few years on the job. These early programs have been thoroughly described elsewhere (Ashburn, 1987; Huling-Austin, 1986, 1989, 1990; Furtwengler, 1995; Thiess-Sprinthall, 1986; Gold, 1996) and do not need to be repeated here. In 1995, Furtwengler conducted a 50 state survey to determine the status of beginning teacher programs between 1983 and 1992. She found that by 1991, 31 states reported that they had, or were piloting, a beginning teacher program. She also found many of the programs developed in the 1980s were characterized by the concept of teacher mentoring assigning an experienced teacher to provide assistance to the novice.

In this paper, we attempt to accomplish four major purposes. First, we review and summarize the research on beginning teacher induction programs[1], including a summary of previous reviews of this topic. Second, we identify a variety of induction programs at the state and local levels and provide an analysis of the variety of best practices that exist today. Third, we made recommendations based on the research and on best practice for state and local policy development and for program development and implementation. Finally, we provide an analysis of what we believe to be current trends in regard to the future development of teacher induction programs.

Research on Teacher Induction

Purpose

The studies included in this overview of the research on beginning teacher induction addressed several variables, including among others the perceptions beginners have of their mentors, program outcomes, and the cost effectiveness of mentoring new teachers. We examined this research with an eye toward determining what the concerns of beginning teachers are, what effects induction programs have on participants, and what program and contextual factors influence program success.

We will first present a brief overview of previous reviews of the teacher induction literature. We follow this with a description of our search strategy and inclusion criteria. Next we discuss the research on beginning teacher concerns. The subsequent section will report the research on teacher induction programs, and describe the incidence of induction programs in the United States, the contextual factors that influence the induction process, the roles, structures,

[1] This report summarizes a larger study on Teacher Induction and Mentoring conducted by Richard Arends and Nancy Winitzky in 1999.

and processes that characterize these programs, and an analysis of the evidence of program effectiveness. We conclude this overview with a recap of the major findings.

Previous Reviews

Previous reviewers of the literature have taken a variety of approaches and perspectives to new teacher induction (see Darling-Hammond, 1995; Gold, 1996; Huling-Austin, 1990, 1992While these reviews and conceptual analyses span ten years, their conclusions are similar. The goals for induction programs have remained virtually unchanged, and there appears to be evidence accumulating that carefully constructed and managed induction programs achieve their goals. The recommendations for mentor training and for reducing the workload and stress on beginners have also been quite consistent. Does current research confirm these conclusions? Do we have a better sense of the efficacy of induction programs, and of the components needed to ensure program success? We turn now to an examination of the research literature conducted over the last 12 years to address these questions.

Methodology

For the current study, an electronic and hand-search identified 226 studies and reports on the ERIC database and from major education and teacher education journals. The criteria for including studies varied depending on the variables addressed. For example, we found in our search for program outcome studies that many reports were simple program descriptions, without supporting data, and that the majority of these were quite similar. Once we determined that we had obtained a representative sample, we excluded the remainder. (This representative sample is described elsewhere in this report.) On the other hand, we included all studies on beginning teacher concerns and problems, a total of 39 reports. Another set of articles consisted of advice to districts and schools about implementing induction programs, but reported no data and seldom cited any research. Such secondary sources were completely excluded. Only a few research studies on induction programs were excluded; this was because they didn t offer any data to support their conclusions. After excluding these weak studies, 119 studies remained (see reference list). Following a description of the only international study included in the group, a summary of the findings are reported in this paper.

One of the more interesting studies to examine program features was conducted recently by the US Department of Education, the Education Forum of APEC (Asia-Pacific Economic Cooperation), and the Pelavin Research Institute (Moskowitz and Stephens, 1996). This international study included a survey of induction practices of 11 APEC countries (Australia, Brunei Darussalam, Canada, Indonesia, Japan, Korea, New Zealand, Papua New Guinea, Singapore, Chinese Taipei, and the United States) and three in-depth case studies of induction practices in Australia s Northern Territory, New Zealand, and Japan. The three case-study sites were selected because each had well-implemented induction programs, and each represented models that varied on important variables.

Although none of the countries had induction programs that were alike, APEC researchers found all had several similarities and basic features which included:

- Mentoring: All programs had some type of mentoring system which consisted of pairing an experienced teacher with a beginning teacher. Typically, the mentoring program lasted through the beginning teachers first year. Rewards for mentors varied.

- Training: Seven of the APEC countries relied upon workshops and training sessions to as an induction strategy. These activities occurred both before and throughout the first years of teaching. Training was provided by various levels of education authority -- national, state, local.
- Goals: Across APEC countries, the goals for induction focused on the following topics which are listed in order of commonality: teaching methods, curriculum content, classroom management, advice to students, and school policies.
- Links to Higher Education: Few links were found between preservice teacher education and induction programs, although all APEC members reported the need for strong connections.
- Participation: Half of the APEC members required participation; others varied in the degree to which they allowed induction activities to be voluntary.
- Licensure: The degree to which induction programs were tied to licensure varied greatly among the APEC members.
- Duration and Timing: Most induction programs lasted one or two years, with the concentration of activities during the earliest days on the job.
- Effects of Participation: In only three nations (Japan, New Zealand, and Chinese Taipei) did beginning teachers receive lighter teaching loads and classes perceived to be less difficult.

APEC researchers summarized lessons learned from the survey information and the case studies. Researchers found that learning to teach is not any easier in one part of the world as compared to others; new teachers everywhere feel overwhelmed. (p. 1) They emphasized that every induction programs is rooted in the unique cultures of the country where they are found and programs employ a range of delivery systems and strategies. Successful program, however, have several characteristics in common.

- New teacher assignments. More successful programs viewed the professional development of teachers on a continuum and provided lighter teaching loads for beginners.
- Mentoring. Successful programs had well-defined mentoring programs. In every instance, mentors viewed this role as a professional responsibility.
- Modeling good teaching. According to the researchers, successful programs provided time for new teachers to observe experienced teachers. In the most successful induction programs, observation of teaching practices by new teachers was organic, meaning it was an integral part of the schools operation rather than a special or staged event.
- Orientations: Successful programs provided one-week to one-month orientations which included: networking between teachers and short inservice workshops on timely topics.
- Assistance and assessment. The more successful programs down played assessment and emphasized assistance and support.
- Shared responsibility. Successful programs had a culture of shared responsibility for teacher induction. All teachers in particular schools felt this

responsibility and did not begrudge the time they spent supporting new teachers. (p. 174)

- Interaction. Successful programs encouraged constant interaction between new and experienced teachers. They moved constantly between one another s classrooms and interacted with one another outside the classroom.
- Political, financial, and time commitments. Most successful programs had high political commitment which was translated into financial resources to support induction activities. Time for new teachers to participate in induction activities and for mentors to provide assistance were found to be the most important resources.
- Clearly articulated goals. Successful program were very clear about what they were trying to accomplish and these goals communicated clearly to new and experienced teachers.

Summary of Major Program Findings.

A synthesis of the findings of all included studies on beginning teacher concerns, induction program features, and outcomes suggest that:

- the teacher concerns research indicates that induction programs should address classroom management, instruction, stress and workload issues, time management, and relationships with students, parents, colleagues and administrators.
- the qualities of an effective mentor are the ability to provide emotional support, to instruct about curriculum and instruction, and to give insider information about workplace norms and procedures.
- training mentors results in higher mentor effectiveness.
- the content of mentor training programs should include adult development and learning, supervision and conferencing skills, and relationship and communication skills.
- released time and/or load reduction for mentors and beginners is critical.
- regularly scheduled meetings for mentors and beginners within a formal, systematic program are highly related to program success.
- beginners teaching assignments should be easier than veterans.
- beginners value and benefit from group discussions with peers, colleagues, and higher education faculty.
- the active involvement and support of the principal is necessary.
- claims that induction improves instructional effectiveness and promotes novices sense of well-being have strong support.
- claims that induction improves short-term retention rates have moderate support.
- there is no evidence that induction improves long-term retention rates.

Induction Practices

Methodology

To identify examples of induction practices, we employed multiple methods. Descriptions of induction programs were identified in a electronic search of the ERIC database. These were separated from the research documents and abstracts on each were collected. In addition, and most importantly, scholars and practitioners known to be interested in the topic of induction of beginning teachers were contacted by telephone (in some instances by e-mail) and were asked to be interviewed. Individuals were asked to identify states, districts, or other agencies that they thought had teacher induction programs that represented best practice as they defined them. The names of the individuals interviewed can be found in Appendix A of this report. Finally, the web pages for each state, the Council of Chief State School Officers (CCSSO), National Council of Accreditation of Teacher Education (NCATE), the U.S. Department of Education (USDE) and other relevant sites were visited. Articles or information about induction programs for beginning teachers were collected.

From those nominated or identified, we chose to find out more about several induction programs using four criteria:

(1) the program had to have been out of the pilot stage for at least three years. This had the result of not using some programs which will likely end up representing best practice in the future. For instance, aspects of state-wide programs in states such as Indiana, Minnesota and Ohio are currently in pilot stage of development.

(2) the program had to be identified by at least two individuals or sources;

(3) the program represented a particular approach to teacher induction. For instance, the search identified state-based programs and district-based programs, and within district programs, those that were associated with other agencies such as unions or universities. We sought to include a variety of approaches.

(4) the programs represented different geographic regions of the country as well as different sizes of states or districts.

District-Based Programs. It is obvious that employing agencies, such as local educational agencies (LEAs) are major stakeholders for how teachers are initiated and socialized into the schools where they will teach. Many districts were identified as having induction programs some very meager and informal, others very thorough and formal. Four district-based programs were examined indepth:

Baltimore County Schools, Baltimore, Maryland. A program run and funded by a large school system located in a metropolitan area on the East Coast.

Medford Public Schools, Medford, Oregon. A program run and funded by a relatively small school system located in a rural area on the West Coast.

Peer Assistance and Review Program. A program funded by the Columbus, Ohio, Public Schools, a large metropolitan school system in the midwest, and which is jointly governed by the LEA and the Columbus Education Association (CEA).

Teacher Fellows Program. A program funded by eight LEAs in Central Texas and jointly governed and managed by a university, Southwest Texas State University.

Almost all school districts have some type of orientation or induction program for new teachers. Some of these are very small and informal and consist of devoting a half day prior to the opening of school to orient teachers to the district or school and to explain particular policies and procedures. Assigning beginners a buddy who acts as a friend and confidant is another informal induction process employed by schools.

On the other hand, many school districts have striven over the past decade to formalize their induction programs. The Columbus, Ohio model will be described to highlight the features of such programs.

A Union-supported Induction System in Columbus Ohio. In some parts of the United States induction programs have been organized and supported by the teachers unions. One of the best examples is the Peer Assistance and Review Program (PAR) in Columbus, Ohio. Developed initially by the Toledo Federation of Teachers, the PAR Program has been expanded and enhanced by the Columbus Education Association (CEA) and today is held up as a national model by the National Education Association (NEA). It has also been featured as one of the promising practices to improve teacher quality by the U.S Department of Education (1998). Key features of the Peer Assistance Review Program in Columbus, Ohio, include the following:

Governance and Funding. PAR is governed by a seven-member panel consisting of 4 teachers and 3 administrators from the Columbus Public Schools. Funding for the program is provided entirely from the Columbus Board of Education.

Beginning Teachers. All teachers new to the Columbus Public Schools are designated as teaching interns, and they are required to participate in the Peer Assistance and Review Program. They are assigned a mentor who is called a PAR consulting teacher. During the 1997-98 school year there were 700 new teachers in Columbus and 38 PAR consulting teachers.

Support Providers. Support providers in the Columbus program are called consulting teachers. These individuals are selected from applicants who have at least five years of teaching experiences and who have demonstrated effective teaching and leadership skills. Consulting teachers are released full-time to assist and to evaluate the classroom performance of 15 to 18 teaching interns. They receive extra compensation for serving as consulting teachers, can work in the role for up to three years, and are given the right to return to their previous classroom assignment after their term is up.

Assistance Processes and Procedures. PAR consulting teachers are expected to build a close mentoring relationship with each of their interns. They are expected to visit, observe, and conference with interns at least twenty times during the intern s first year of teaching. Interim and final appraisal reports are completed for each intern using eight criteria: teaching performance, pupil relations, management activities, overall value to school program, personal characteristics, staff relations, parent-community relations and professional growth.

Professional Development for Consulting Teachers and Teaching Interns. In conjunction with The Ohio State University, PAR offers a variety of workshops and courses for consulting and intern teachers. Consulting teachers are prepared on such topics as: developmental stages of teachers, characteristics of consulting teachers, use of case studies, systematic observation techniques, dealing with difficult clients, conferencing strategies, developing supportive collegial atmosphere, the language of report writing, and evaluation standards and performance principles.

In turn, consulting teachers plan and conduct a series of workshops for intern teachers. Interns are required to attend a three-day orientation at the beginning of the school year which includes social events and processes that afford interns and consulting teachers opportunities to build positive working relationships. The orientation also offers instruction on topics such as: effective teaching strategies; technology resources; and diversity training.

Throughout the school year, consulting teachers offer a series of workshops for interns. Attendance on the part of interns is voluntary. However, interns can receive two hours of graduate credit from The Ohio State University if they participate. Topics for workshops include: creating a positive classroom culture; instructional strategies; cooperative discipline; anti-bias and diversity; individualizing instruction for students with special needs; and sessions on sharing first-year success stories.

During the middle of the school year, consulting teachers team with faculty from The Ohio State University and offer a three-hour graduate level course for interns. This class meets weekly for interns who volunteer to take it. Instruction over the semester is offered on the following topics: teaching in urban settings; effective teaching and management strategies; professional observations; dealing with anger, conflict and violence; use of resources; self assessment and reflection; professional licensure and certification.

Although systematic data is not available, the Columbus Education Association has reported that PAR has led to improved teacher performance, higher retention rates (80% still in teaching after five years), and greater beginning teacher satisfaction. (See Columbus Education Association, 1997.)

State-Based Programs. Three state beginning teacher induction programs were selected for inclusion:

Connecticut s Beginning Educator Support and Training Program (BEST). A state-mandated program in Connecticut, a small east coast state, which emphasizes the assessment aspect of induction.

California s Beginning Teacher Support and Assessment (BTSA). A state-mandated program in California, a large west coast state, which emphasizes considerable local autonomy and the assistance aspects of induction.

Oklahoma New Teacher Program. One of the oldest programs in the country and one in a geographically large midwest state that requires mentor teams and the involvement of higher education personnel.

State -Based Programs

There is clear movement toward creating a system for licensing teachers that is performance based. Leading this movement is the Interstate New Teacher and Support Consortium (INTASC). Currently, ten states are involved in performance assessments based on the content standards, and one of the leaders in this effort is the state of Connecticut.

Connecticut: State Program Tied to Licensure. Several states have teacher induction programs that include support and assessment components where the assessment component is tied to licensure. The state that has one of the oldest induction programs and one that was nominated by peers in several other states as being a good example of this type of program was Connecticut s beginning teacher program. Like the program in Columbus, Ohio, Connecticut s

induction program has been featured as one of the promising practices to improve teacher quality by the U.S Department of Education (1998).

Governance and Funding. The Beginning Educator Support and Training (BEST) Program was first implemented in 1989 but stemmed from the state s Teacher Enhancement Act passed by the legislature in 1986. BEST is a state-mandated program that has evolved from a one-year induction program in 1989 to a three-year program today. It contains both support and assessment components. For the most part, the support/mentoring aspect of the program is district based and funded. The state sponsors and funds training for beginning teachers and for individuals who serve as mentors and assessors. In its early days, the governance and funding of the BEST Program were controversial for several reasons. It was viewed by some school districts as usurping the traditional autonomy extended to New England communities, and it was viewed by many in the higher education community as regulating teacher education practices traditionally under the control of faculties. The legislation, for example, specified that cooperating teachers were to be chosen and trained by the state and local districts rather than particular universities, and that teacher candidates would be evaluated on a common set of competencies developed by the State Department of Education rather than those specified by particular faculties or particular school districts.

Beginning Teachers. All new teachers are required to participate in the BEST program. They are assigned a specially trained experienced teacher who serves as a mentor. Beginning teachers are evaluated during their first, second, and in some cases, third year by state-trained assessors.

Support Providers. The State Department of Education trains experienced teachers to serve as mentors, supervisors, and assessors of beginning teachers. Mentors or mentor teams are assigned by school districts and are expected to provide general assistance and coaching to beginning teachers on effective teaching practices. Normally, the mentor teacher is in the same building as the beginning teacher. Rewards and released time for mentors are not regulated by the state, so considerable variation exists among the 163 LEAs.

Assistance Processes and Procedures. From 1989 to 1996, beginning teachers were assessed by specially trained assessors who used an observation instrument that specified 15 competencies based on the process-product research of the 1970s and 1980s. Six observations were conducted during the first year by different assessors. Results of these observations were used to determine acceptable standards of performance and for issuing a continuing teaching certificate. Additionally, beginners were required to pass a subject matter test. Initially, subject matter tests were those that had been developed by the Connecticut State Department of Education. Recently, they have been replaced by PRAXIS II, an exam developed and administered by Educational Testing Service.

On the support side of BEST, mentors are expected to do demonstration teaching and model effective teaching practices for beginning teachers. They also provide feedback and help teachers through what is called the observation/reflection cycle. Mentors or mentor teams help beginning teachers with the assessment process and assist beginners to prepare videotapes and portfolios.

Beginning in 1996, the CSDE initiated a new system of content-specific assessment and enhanced support for beginning teachers. This new system extended the three features of the 1989 system and created an important new feature. The induction period was extended from one

to two years (three in some instances) and all beginning teachers continued to be assigned a mentor or mentor team. Beginning teachers general pedagogical skills continued to be assessed using the Connecticut Competencies Instrument (CCI) during year one, although procedures were modified to require fewer classroom observations for acceptable assessment and, later, to include videotaped lessons as an alternative to direct observations. Beginning eachers continued to have as many as six assessment opportunities to demonstrate acceptable standards of performance. In instances of unacceptable performance, teachers might be granted an extension of their initial educator certificate.

An important new feature of the BEST system has been the addition of teaching portfolios to the assessment process. Beginning teachers currently are required to complete a portfolio during their second year of teaching and these are assessed by specially trained state assessors who have been shown to be proficient and reliable.

The centerpiece of the current beginning teacher assessment system is what the state calls situated or portfolio-based assessment. The word situated is used to distinguish this assessment process, which depends on studying teaching performance within the real work context (the teacher s classroom), as contrasted to simulated situations often used in assessment centers. The official state definition of portfolio is as follows:

> deliberate collection of school-site evidence in response to a set of questions for purposes of licensure and professional development. Moreover, the portfolio is designed to evoke the knowledge, skills, and dispositions necessary to determine that professional standards are being met over time. (p. 2, Jacobson, et. al., 1997)

The teaching portfolio is completed during the second year of teaching and, unlike the CCI which is intended to measure more general pedagogical knowledge, the situated portfolio is tailored to particular grade levels and subject areas. It is intended to document individuals teaching and the learning of their students over a two to three week unit and to show one s ability to integrate specific subject matter content and pedagogy as defined by the standards developed by Interstate New Teacher Assessment and Support Consortium (INTASC) as well as content specific teaching standards developed by particular subject matter professional associations such as the National Council for Teachers of Mathematics (NCTM). Beginning teachers are expected to provide written commentary that explains and evaluates their instructional decisions related to planning, teaching, and student learning.

The Connecticut State Department of Education has taken the lead in developing the portfolio. Institutions of higher education have been involved in providing seminars on portfolio development and assessment for beginning teachers.

Content validity of portfolios has been established by asking teachers to judge portfolio tasks in relation to teaching standards in particular fields such as science, mathematics, etc. Rater reliability has been established by rating portfolios twice, each time by an independent pair of state-trained assessors and then comparing scoring agreement (see Jacobson et. al., 1997).

Portfolios are assessed during the summer following the beginning teacher s second year of teaching. Individuals receive written feedback on the portfolio performance, and are notified on the standard level they achieved and their eligibility for their teaching certificate.

Professional Development for Mentors, Assessors and for Beginning Teachers. Mentor teachers receive three days of training provided by the State Department of Education through Regional Service Centers. An additional day and one half of training is provided on how the to use the CCI for first-year teacher assessors. Two to five days of training have been provided for teachers and others who serve as portfolio assessors.

Four to six special workshops and seminars sponsored by the state department are held throughout the school year for beginning teachers. Topics for these workshops change from year to year but are selected to be germane to beginning teachers, such as classroom management and preparation for assessment. Beginning teachers attend these voluntarily. Mentors are encouraged to attend with their mentees.

For the most part, candidate feedback has been positive toward the portfolio assessment process. Similar to teachers who have discussed their experiences with the assessment process used by the National Board for Professional Teaching Standards (NBPTS), Connecticut beginning teachers have reported that they found the second-year portfolio development challenging and professionally rewarding. Exceptions to these positive accounts have been reported by some second year teachers who believe that the portfolio preparation is too demanding and takes valuable energy away from teaching students.

Recommendations and Policy Implications

Much remains to be learned about induction programs and how best to design them. However, the knowledge base is moderately strong, and there are sufficient examples of good practice at state and district levels to allow recommendations to be made. Below are the specific recommendations and policy implications we provide for agencies (states, districts, or consortia of support providers) who want to implement an effective induction program. We will list the recommendations first and then discuss the policy implications.

Recommendation #1: Obtain clarity about goals and purposes of induction programs.

The research literature and examples of current practices all point to the importance of obtaining goal clarity for particular induction programs. From previous reviews (Austin-Huling (1986, 1990; Moskowitz and Stephens, 1995) and from our own review of research and practices, five major purposes seem to prevail. Essentially induction programs are intended:

1. to improve student achievement through improving performance of beginning teachers.
2. to increase the retention of beginning teachers.
3. to promote personal and professional well-being of beginning teachers.
4. to transmit the culture of the school and school system to beginning teachers.
5. to satisfy legal requirements related to induction, most recently to evaluate fairly the work of beginning teachers so judgment can be made about employment and state licensure.

Recommendation #2: Provide a research-based, ethically sound definition of effective teaching.

A clear definition of effective teaching is critical for beginning teacher induction programs for three reasons. One, a clear knowledge base provides a means to develop tools (observation schedules and checklists) which can be used to observe beginning teachers and to provide them with feedback about their teaching based on criteria and standards. Two, a clear knowledge base

can be used to develop rubrics for assessing work found in teacher portfolios. Third, and perhaps most importantly, an identified knowledge base provides concepts, categories and words so beginners and their mentors can have meaningful conversations about teaching and what is involved in the process of learning to teach.

Recommendation #3: Provide a perspective (theory) about how individuals learn to teach and problems they are likely to encounter in the process of moving from novice to expert status.

As with definitions of effective teaching, definitions of learning to teach varied from induction program to program. Most, however, relied on the teacher concern literature and the developmental models implied in that literature. This is a research literature that is very strong and one that has held up to continued investigation for over thirty years. Having a perspective about the process of learning to teach is important for several reasons. One, it helps identify what mentors or other assistance providers should do early on in the induction year(s) and later on as the problems and concerns of beginning teachers change. Two, if staff development is to be provided for beginning, an explicit perspective about learning to teach can help identify topics that will be most salient to beginners at particular times during the induction period. Finally, all developmental models take the perspective that there is always great variation among individuals. This leads to practices, such as those found in California, where beginners develop individualized professional growth plans so they and their mentors can decide how the individual s goals can best be accomplished.

Recommendation #4: Pay a great deal of attention to the role and delivery system developed for implementing induction programs, including the relationships between the SEA and the LEAs and those among other agencies, such as universities and/or the teachers unions.

The research and the knowledge gleamed from successful induction programs illustrate how important it is to define and describe the various roles and processes in the induction program. And, as will be discussed later, these practices may defined either at the state or district level or some combination of both. Roles and relationships that need to be defined and clarified include:

- The beginning teacher. Who is specified as a beginning teacher? First year of teaching? First year in a particular school, district, or state? First five years in a particular school, district, or state?
- Mentor/support providers. What is the role of the mentor or support provider? How selected? How assigned? How trained for the role? How rewarded? What is the relationship of the mentor/support provider to other important roles such as the principal and assessor?
- Assessors. What is the role of the assessor? How selected? How assigned? How rewarded? How trained? What is the relationship of the assessor to other important roles such as principal and support provider?
- The Principal. What is the role of the principal on the support side of the induction program? On the assessment and evaluation side? In relation to employment decisions? In relation to licensure decisions? What is the relationship of the principal to other roles such as support provider and/or assessor?

As with recommendations #1-3 there is no empirical evidence to provide one set of answers to the above questions. There is evidence, however, to suggest that context is important. As Huling-Austin (1986; 1990) pointed out a decade ago and more recently by Moskowitz and Stephens (1995), a one-size fits all program for a whole state may not be effective.

Recommendation #5: Pay a great deal of attention to providing clear definitions about the delivery system for induction programs.

The research literature, plus the programs studied, all illustrate the importance of defining and developing an effective delivery system. Successful program appear to have worked out policies and agreement on the following features:

- Beginning teachers. Policies should exist about expectations in relation to their relationship with the mentor and/or assessors. Definitions should be provided about which of the induction activities are required and which are voluntary.
- Mentor/support providers. Policies and definitions should exist about how many visits and other contacts should be made with the beginning teacher. Definitions should be provided about how visits, conferences, and other interactions should be conducted, along with the particular focus of visits, at particular times of year. Further, policies need to be worked out in terms of how mentors and/or assessors are rewarded and how they are provided time to work with mentors.
- Participation. Strong arguments can be mounted for allowing flexibility in regard to participation in induction programs. Certainly some aspects of a programs will be important to some and not to others and catering to individual needs is important. For example, beginners teachers should be expected to attend orientation workshops and all other training events where desired district or school goals, curricula or approaches to instruction are covered. Similarly, they should be required to attend events where opportunities to interact with mentors or network with teachers are provided. On the other hand, new teachers who are doing superb jobs of managing their classroom need not be required to participate in workshops on classroom management held for their less successful colleagues.
- Assistance or Assessment Tools. Tools such as observation schedules, checklists, protocols and rubrics need to be developed to assist the support side of the induction program as well as for use in assessment and evaluation. These aids and devices need to be tied to and consistent with the knowledge base on effective teaching and the perspective the induction program holds about learning to teach.

Recommendation #6: Find ways to provide beginning teachers with less difficult teaching assignments and time to participate in induction activities.

Everything points toward ending the situation of giving new teachers the most difficult classes to teach and giving them the same responsibilities as experienced teachers. Effective induction programs will provide new teachers with assignments that are the least difficult and stressful, plus fewer classes, students and hard-to-teach students; They will also provide beginning teachers with schedules that allow for collaborative planning time with their mentor.

Recommendation #7: Find ways to provide mentors with reduced teaching assignments and incentives for helping new teachers.

The research literature is consistent, as is effective practice that the mentor role is critical for a successful induction program. It is important for mentors to be assigned the role as they were in all the programs, that their work be carefully defined and that their regular teaching load be modified to allow time to work with new teachers. Economic incentives, although not as important as time, should also be provided. We recognize the resource constraints of these this recommendation.

Recommendation #8: Develop an effective training and professional development component to support the induction program.

The standards and processes that guided all the programs studied, except for the one in Oklahoma, had strong and in-depth training components and Oklahoma is in the process of piloting a program to train mentors. Training or professional development activities were provided for all role groups (e.g., beginning teachers, mentors and assessors, and principals) and this practice is strongly supported by the literature review.

Recommendation #9: Don t depend entirely on formal induction procedures and processes and recognize that informal processes and school culture also play a part.

Many aspects of the socialization of new teachers in the profession of teaching and into particular schools takes place outside the purview of formal organizational structures and processes. New teachers will seek out veteran teachers and peers for emotional as well as technical support. Developers of induction programs should take care that their formal program take advantage of these informal processes and encourage them.

Recommendation #10: Develop and implement an effective evaluation component for the induction program itself.

Finally, we recommend that beginning teacher induction programs be studied and evaluated more thoroughly than they have in the past. Effective program evaluation, however, would extend beyond simple measures of participant satisfaction and strive to measure the program s effectiveness in relation to the goals held for the program: more effective teacher performance and higher student performance; higher retention rates; higher morale on the part of beginning teachers and others in the system. Further, evaluations need to be designed to test alternative hypotheses about retention. For example, to what extent is attrition the result of normal career development?

Policy Implications for SEAs, LEAs, and Particular Schools

The policy implications for the recommendations we provide are multifaceted, and they cut across the various levels of agencies who have direct responsibility for the assuring quality teachers and education: the larger teaching profession, SEAs, LEAs, and particular schools. No single induction program or set of induction practices that will fit all situations and diversity will dictate a range of delivery systems and strategies. Successful program, however, will be characterized by several common policy characteristics.

Clarity of Purpose. Recommendations 1-3 called for getting clarity about purposes of induction programs and a point of view in regard in regard to the process of learning to teach. These recommendations could be implemented at either the state or local levels, or both. This would mean that policies would be developed in regard to at least 3 important questions:

1. Does the state or district want an induction program, one it regulates, funds, and that provides training for participants?
2. If the induction program is to be statewide or district wide, is it regulated with a set of specific regulations or by a set of standards.
3. How prescriptive does the state or district want to become in terms of defining effective teaching? Very prescriptive such as the state of Connecticut or not at all such as the state of Maryland which provides support, but lets Baltimore County define their own conception of effective teaching.

There is no empirical information to answer these questions in a definitive way. Our own preference would be to adopt strong state standards that would guide and monitor local implementation allowing flexibility and diversity, but demanding accountability.

Time Frame for Implementation. To get clarity around purposes and to define effective teaching requires a considerable amount of time. Both SEAs and LEAs must anticipate the need to take several years to develop effective induction programs based on sound research and ethical standards. Most of the programs described in this paper have been around for more than a decade, went through lengthy pilot testing and were subject to continued change as new research and new conceptions of teaching and learning evolved.

Delivery System. Several of the recommendations address how the delivery system for teacher induction need to be defined and clarified. As with the issues associated with goals and purposes, this could be done either at the state or local level or some combination of both and no single approach can be recommended based on empirical evidence.

In general, we would recommend policy makers at the state and local levels: (1) to find ways to provide new teachers with assignments that are the least difficult and stressful, plus fewer classes, fewer students and fewer hard-to-teach students; (2) to provide beginning teachers with schedules that allow for collaborative planning time with their mentor; and (3) to provide mentors and assessors with released time or load reduction.

Political and Financial Support. Successful induction programs require political commitment at all levels. This commitment must be translated into financial resources for implementation. Using the examples of effective practice described in this report, resource implications can be estimated quite accurately. Resources are required to:

- release mentor teachers from their regular classroom responsibilities;
- provide time for beginning teachers to participate in induction activities;
- provide time for someone to administrate and coordinate the induction program;
- develop training materials
- develop assessment protocols and processes

Who Should Do What? The final policy implication for the recommendations we provide addresses the issue of who should do what in regard to teacher induction? Four different groups are involved: the larger profession represented by teacher organizations (AFT, NEA) accrediting bodies (NCATE) and various groups that have developed standards for effective teaching (INTASC, NBPTS, NCTM, etc). Here we provide our preferences based on our examination of the research literature and of current practice.

The larger profession. In our judgment there is a growing consensus around conception of effective teaching. This conception has evolved over the past decade through the work of INTASC, NBPTS, NCATE, and various subject matter organizations such as NCTM. We expect that this work will continue in the years ahead. As a result, there is no need for particular states or local district to start from scratch in defining effective teaching. Adapting national conceptions to local situations seem to be a better way to proceed.

State Educational Agencies. States are responsible for teacher licensure. Therefore, we view state agencies, either state departments of education or independent professional standard or credentialing boards, as the most appropriate authority to adopt statewide standards and processes for induction programs and for providing political and financial support for such efforts. It is also important for states to translate conceptions of teaching into valid and reliable assessment procedures used for insuring beginning and permanent teaching certificates. Similarly, states should contribute to the preparation of induction training materials and procedure manuals for adaptation and use by local educational units.

Local Educational Agencies. The primarily implementation of induction programs must be the responsibility of local districts and particular schools. The practices found in the Columbus and Baltimore County programs illustrate how LEAs have developed policies and procedures for the following aspects of an induction program:

- definition of roles and responsibilities for beginning teachers
- definition of roles and responsibilities for mentor teachers and principals
- development of procedure manuals which inform participants and describe acceptable operating procedures
- development of conceptions of teacher development along a continuum
- development of professional development and training activities in consortia with local universities to support beginning teachers, mentors, and principals, and
- development of materials to support professional development and training activities.

Trends in Teacher Induction and Some Cautions

Trends in Teacher Induction

Renewed Interest in Teacher Induction. Currently, there appears to be renewed interest in beginning teacher induction programs for several reasons. One, a robust economy in most parts of the nation has provided fiscal resources to again fund this type of program. Two, better economic conditions have allowed federal and state legislatures to flirt with the ideas of reducing class size. The consequences of reduced class size plus the demographics of an aging teaching force, create a situation that will find as many as 2.2 million new teachers entering the profession over the next five years (see Teacher Education Report, 1998). These factors have produced a growing interest in beginning teacher programs and mentored support for teachers as well as a fresh look at the research on this practice.

Pushing Induction Beyond Year 1. There is clearly a trend for extending support for new teachers and their assessment beyond the first year. In an interview conducted for this paper, Jean Miller of the Council of Chief State School Officers said that CCSSO was definitely

starting to think about induction processes that include at least the first three years of teaching. This opinion was echoed by several others who were interviewed.

Connecting Induction to Standards, Licensing, and National Certification. There is clear movement toward creating a system for licensing teachers that is performance based. Leading this movement are the INTASC, NBPTS, NCATE and various specialty organizations such as the NCTM. These organizations, independently and in consortia, have developed particular teaching standards aimed at defining what teachers should know and be able to do. In addition, these organizations are currently in the process of developing assessment procedures following those used by NBPTS. Moving to a performance based system has and will continue to impact the nature of beginning teacher support and assessment processes. It will require developing standards describing what teachers should know and be able to do and developing assessment procedures that can evaluate teachers attainment of the standards in fair and reliable ways. It will also requires that all candidates be evaluated on the same set of standards with assessment processes that have been standardized across settings.

Finally: A Note of Caution

In ending, we believe it is important to provide a couple of cautionary notes about induction programs. First, the literature repeatedly points out that induction is not the be-all and end-all to resolve beginning teachers problems. For example, where teacher turnover is very high, there are usually lots of problems in the school. Second, some who have studied induction (Huling-Austin, 1990; Feiman-Nemser, 1996; Feiman-Nemser, Parker & Zeichner, 1993) have made the observation that we need to be very careful about the use of mentors in induction programs because most mentors will carry and promote conventional norms and ways of doing things. This situation can have a limiting effect on states and local schools promoting wide-ranging reforms, particularly reforms that promote conceptually oriented, learner centered teaching practices incorporated into INTASC principles and NBPTS propositions. This situation also emphasizes the critical importance of mentor training.

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