This paper presents a general overview of the literature on beginning teacher induction as it has evolved over the last 3 decades, highlighting characteristics, extent, and perceived value of induction. The paper also describes successful programmatic features, gaps in the literature, and future trends in induction. After offering a brief history and definition of induction, the paper focuses on the basic components of induction, which include: general orientation meeting prior to the beginning of the school year; provision of printed materials regarding all aspects of school functioning; training on curriculum and effective teaching practices and opportunities to observe and be observed; mentorship; and release time and/or reduction in teaching load. Mentoring and release time are the most critical components. Evaluation and assessment of induction programs is very important. Characteristics of successful induction programs include: a coherent structure; structured mentoring; formative assessment; and sufficient fiscal resources and political support. University involvement in the post-university experiences of beginning teachers is particularly important (e.g., fifth-year internships and current induction programs), though research shows that less than half of local school systems have formal agreements for induction with schools, colleges, and departments of education. (Contains 90 references.) (SM)
Introduction

Over the last three decades, researchers have become increasingly interested in the experiences of beginning teachers and structured induction programs as a means of transitioning them into the teaching profession. This interest is often rooted in a body of research suggests that beginning teachers often suffer a type of culture 'shock' upon entering teaching contexts (Veenman, 1984). This experience is frequently associated with the common practice of assigning beginning teachers to the most challenging classrooms and expecting of them the same level of work and competency as their more experienced counterparts (Danielson, 1999; Elias, 1980). McDonald (1982, p.10) states,

"on the problems of beginning teachers the results are uniform and almost identical irrespective of the empirical method used to ascertain them, the quality of the design and analysis in particular studies, the decade when the study was done, and even the country where the study was done. This near universal agreement is either a close estimate of the true state of affairs or a widespread delusion"

The most pressing problems identified by beginning teachers and mentors alike tend to be classroom management and discipline (Arends, 1998; Darling-Hammond, 1995; Robinson, 1998; Veenman, 1984). Historically, induction programs were conceptualized as a way of ameliorating these recognized difficulties by compensating for what was seen as the
inadequacy of teacher education programs in preparing teachers for actual practice (Elias, 1980; Kling & Brookhart, 1991; McDonald, 1982).

While conceptualizations of induction, as it relates to teacher preparation, have evolved and changed with increasing interest in the topic, induction continues to be understood in broad terms as a helping mechanism for beginning teachers (Lawson, 1992). This mechanism has four primary goals: socializing the teacher into the school culture, improving teaching skills, resolving beginning teachers' predictable concerns and insuring teachers' professional development (Arends, 1998; Durbin, 1991; Maryland State Department of Education, 1987). The goals of induction tend to appear either explicitly as program goals or implicitly in the descriptions of programs. The proliferation of induction programs supported by state and district mandates has prompted inclusion of two additional goals: increasing retention among promising beginning teachers and satisfying mandated requirements related to induction and certification (Huling-Austin, 1989).

Implicit in the definition of induction is that it is a process that begins with the signing of a teaching contract, continues through orientation, and moves toward establishing the teacher as a professional (Camp, 1988; Robinson, 1998). This process has been widely understood to be facilitated by a set of planned activities or a semi-structured program of assistance. More recently, it is often considered a more structured program that incorporates some form of assessment or evaluation (Darling-Hammond, 1995; ERIC Clearinghouse on Teacher Education, 1986; Kling & Brookhart, 1991; Lawson, 1992;). Others contend however
that the induction process in actuality begins with the first exposure to teaching practice which occurs before hire (Feiman-Nemser, 1999; Huling-Austin, 1990). This view supports the notion of induction as a developmental process and also recognizes that beginning teachers begin their careers with some conception of what the practice encompasses.

Programs typically have three levels of assistance: preparation, orientation, and practice. Preparation incorporates a general orientation to the school and provides materials about the technicalities of school functioning. Orientation involves training in curriculum and effective teaching practices, opportunities to observe classrooms, and pairing with a mentor. Features of practice level of assistance include continuing interaction and exchange with an assigned mentor, released time or reduced work load, participating in professional development programs, and ongoing evaluation (Huling-Austin, 1989; Robinson, 1998).

In the last two decades, the body of literature regarding induction and the implementation and evaluation of induction programs in the United States has expanded considerably (NCES, 1999). A recent national study by Recruiting New Teachers Inc. (Fideler & Haselkorn, 1999) reports that 27 states have initiated legislation regarding induction, and 7 of these have both a state mandate and funding. NASDEC reports that in 1998 29 states had state-level beginning teacher support systems.

In addition there is a growing number of teachers who have undergone formal induction. A national survey of full-time public school teachers in 1998 reports that 34% had participated in an induction program when their first started teaching (Forgione, 1999) and
that public school teachers with 3 or fewer years in teaching, 56.4% had undergone induction in their first year of teaching (Fideler & Haselkorn, 1999). It is still the case, however, that only 1 in 5 teachers report feeling prepared to work in the modern classroom (Forgione, 1999). With the widespread implementation of induction programs and broadening of the research base this may soon be changing.

Although much of induction research is driven by case studies and, generally focuses on the mentoring component of induction, program descriptions are more detailed, and research on program effectiveness has become more prevalent (though not necessarily more rigorous) (Arends, 1998). Induction is being understood in far broader terms and there is a focal shift in the literature away from a managerial perspective which sees inductions' primary role as helping beginning teachers cope, to a more pedagogical perspective concerned with fostering excellence among new teachers. The impact of induction, is therefore, being examined beyond the individual teacher's psychological experience, and attention is being paid to how induction affects attrition rates among beginning teachers and classroom practices and behaviors. These new areas of interest have very significant implications for teacher education and may very well change the face of education as a whole.

The purpose of this paper is to present a general overview of the literature on beginning teacher induction as it has evolved over the last three decades. The review seeks to extract from the literature a synthesis of the knowledge base on beginning teacher induction, highlighting characteristics, extent, and perceived value of induction. This paper will also
attempt to describe what appear to be successful programmatic features, gaps in the literature, and future trends in induction.

History of Induction

In order to understand the diversity in early and contemporary programs of induction, it is important to trace how the concept itself evolved within the context of particular political climates and educational reform movements. As early as the 1960s the concept of induction with reference to teaching was in existence. The early conception of induction posited the first school experience or entry into the teaching profession as a linear socialization process with few contextual influences (Lawson, 1992). Change in this conception was prompted by research on beginning teachers that gave voice to their experiences, perceptions and behaviors during the first year of teaching. One of the most influential bodies of research demonstrated a discontinuity between what was learned in teacher education and actual practice and the 'shock' this disconnect inspired in beginning teachers upon entry into the profession (Lawson, 1992).

Significant practical changes in teacher education began in the late 1950s as a result of a series of grants distributed by the Ford Foundation (Elias, 1980). These grants were designed to facilitate creation of fifth year programs that would extend teacher preparation to include an internship year in which students would learn how to integrate theory and practice. These internships took two forms: alternative certification and masters programs. The first
functioned as an alternative means of certification designed for students with a bachelors degree but no academic background in education. The latter targeted certified teachers and involved a reduced teaching load and graduate level academic work resulting in a master's degree. The internship programs were and continue to be connected with institutions of higher education (Elias, 1980; McDonald, 1982).

Many proponents of fifth year programs credit J. B. Conant with beginning the discussion about extending teacher training and having been instrumental in the early effort to develop a formal program of beginning teacher induction (Durbin, 1991; Elias, 1980). Conant's 1963 report, The Education of American Teachers, highlighted the failure of school boards to provide support to beginning teachers. Conant recommended five kinds of support that in contemporary times form the basis of many existing induction programs; a reduction in teaching load, assistance in gathering instructional materials, mentorship in which mentors have a reduced work load, giving new teachers less challenging classrooms, preparing teachers so that they do not experience culture shock (Zeichner, 1979).

Similar to the Ford Foundation's support for fifth year internship programs, another impetus for teacher education change in the mid 1960s came from federal funding of Teacher Corps (Elias, 1980; Monahan, 1984). Many of the Teacher Corps projects catered to certified teachers and liberal arts college graduates. Although the distinction is not often clearly articulated, fifth year programs are not necessarily induction programs and despite ongoing
discussion about fifth year programs, at least in its early form, the internship itself did not seem to prevent or solve beginning teachers' difficulties (McDonald, 1982).

The 1970s and 80s saw a new and more complex notion of induction that was informed by the effort to codify effectiveness correlates of teaching and also by the initiation of externally mandated reforms (Lawson, 1992). This era yielded a rapid increase in the research literature, political mandates, and school reforms that all, to some extent, addressed induction.

Although Conant's work spawned increased interest in the topic of induction, the induction frenzy really began with the educational reform movement of the 1980s (Durbin, 1991; Sclan & Darling-Hammond, 1992). Unlike the United Kingdom and Australia, however, the United States of America did not display in the early 1980s a consistent interest in beginning teachers (Brooks, 1987; Tisher, 1982). A nationwide move towards the actual construction and implementation of proposed models did not truly begin in the US until the second wave of reform in the mid to late 1980s (Furtwengler, 1995). During this era a large number of pilot programs were begun. There was also a marked increase in the number of state mandates regarding induction, such that by 1992, 46 states had enacted beginning teacher evaluation programs or requirements, three states were considering these programs, leaving only two states, Nebraska and Rhode Island, without policy to address beginning teachers.

Despite the fact that the history of district and state mandated induction programs is much shorter than that of comparable programs associated with colleges and state universities,
states and districts have had much greater influence on the structure and implementation of programs than have schools, colleges and departments of education (Monahan, 1984). Reform mandates have also had a profound impact not only on the number of programs, but also on the structure and content of programs; especially if the mandate is accompanied with funding (Fideler & Haselkorn, 1999; Sclan & Darling-Hammond, 1992). The impact of reform mandates on structure is often manifested in the mentorship component, such that stipulations are made about what mentors should be paid (Fideler & Haselkorn, 1999) and, insuring that this component serves the dual purposes of teacher assistance and assessment (Griffin & Hukill, 1983; Huling, 1999; Sclan & Darling, 1992).

Although interest in induction grew in the early to mid 1990s, monetary investment dwindled and led to the dissolution of quite a few programs (Arends, 1998; Furtwengler, 1995). Even successful pilot projects that began in the mid 80s (e.g. State supported programs in Kansas, Missouri and Wisconsin) did not receive any state funding between 1984 and 1992 (Furtwengler, 1995). Due to limited fiscal resources Georgia and Virginia also eliminated what appeared to be highly researched and widely recognized programs (Furtwengler, 1995). It is worthwhile to note that of the programs that existed in the 70s and 80s, those that have tapered off have done so primarily because of a reduction or elimination of funds.

In sum, changes in the education of teachers with respect to the structure and preponderance of induction programs, have been influenced to a considerable degree by the availability of funding. However, this availability is rooted in a political agenda aimed at
reducing teacher attrition, increasing teacher recruitment and establishing new standards of excellence (Arends, 1998; Elias, 1980; Furtwengler, 1995; Tellez, 1992); thus the fortunes of induction programs often wax and wane with the political winds that have historically propelled many of them.

Defining Induction

The lack of a clearly conceptualized theoretical framework for teacher education has made it difficult to establish a framework for understanding teachers' needs and how these needs are best served (Elias, 1980; Jones, 1998). Similarly, although it has been recognized that beginning teachers experience identifiable difficulties in their first year, and that some sort of assistance during this year is perceived by them as helpful, there is absent in the literature a clear theoretical definition of induction.

The concept of teacher induction emerged to some extent from literature on professions and professionalization (Lawson, 1992). Although increasingly conceptualized as a process teacher induction tends to be constrained because it is defined only as it is realized in programs. Zeichner (1979, p.6) provides one of the more formal definitions found in the literature "a planned program which is intended to provide some systematic and sustained assistance specifically to beginning teachers for at least one school year." He further qualifies the definition in that inductees are understood as having completed all preservice requirements, received certification, acquired employment in a school and, begun their first
year of service. The definition also provides that those supplying the services (inductors) have been specifically assigned that responsibility (Zeichner, 1979). Zeichner's definition clearly delineates a distinction that is not often made between alternative certification or fifth year programs and induction programs that is, the former function as evaluation or screening mechanisms that make certification contingent upon beginning teachers demonstrating some level of skill (i.e. their jobs are actually probational or function strictly as internships) (Monahan, 1984). However, the latter are programs that provide support for beginning teachers who already have certification.

In the absence of a concrete definition supported by widespread concerns, researchers and program facilitators depend on a definition of induction embedded in the goals or components of induction programs; the definition therefore serves a more describing than defining purpose. Programs that propose the following as their goals are considered by many to be induction programs:

- Provide technical training ensuring that beginning teachers are professionally equipped to teach
- Socialize beginning teachers such that they are integrated into the school community and culture
Foster teacher development, which includes the provision of support such that teachers' specific concerns are addressed and a comfortable and rewarding professional experience is facilitated (Arends, 1998; Huling-Austin, 1990).

Huling-Austin has also identified that due to the increase in state and district involvement in induction, two additional goals are prevalent:

- Increasing the retention of promising beginning teachers in the induction period
- Satisfying mandated requirements related to induction and certification.

Because these goals are somewhat elusive, another way of defining induction has been to delineate the essential components necessary to ensure the attainment of these goals (Lawson, 1992). However, even with this approach it continues to prove difficult to distinguish between formal induction programs and other structured programs of assistance like mentoring (Feiman-Nemser, 1996). Furthermore, because induction is increasingly tied to teacher assessment and evaluation, there is an important qualitative difference, which often remains unexamined, between induction programs designed primarily to assist and those designed to assess beginning teachers (Klug & Salzman, 1991; Sclan & Darling-Hammond, 1992).
Talbert & Camp (1992) contend that the four most cited induction models are: mentoring, fifth year, alternative certification and professional development. However, the lines of demarcation among these models are blurred. Furthermore, programs can be differentiated on many levels, including the nature and origin of their resources, the institutions with whom they are affiliated, the structural forms they take and with whom lies the responsibility for running the program. Yet, despite these differences, programs generally share similar visions with respect to beginning teachers and therefore tend to incorporate similar components. Differences among programs are perhaps best understood in terms of where emphasis is placed and the relative importance assigned to each component.

Program Components

Although there exists considerable agreement on the basic components of induction, programs vary widely on how each component is implemented in practice, and implementation is not consistent across programs (Lawson, 1992). The most common components have been identified as follows (Huling -Austin, 1990; Robinson, 1998):

- General orientation meeting prior to beginning of school year (usually summer before)
- Provision of printed materials regarding all aspects of school functioning
- Training on curriculum, effective teaching practices & an opportunity to observe and to be observed
- Mentorship
- Release time and/or reduction in teaching load

These components are sometimes conceptualized in terms of steps or stages, such that the program is seen as first preparing, then orienting, and finally aiding actual practice (Robinson, 1998). Generally, however, aside from the summer orientation, which typically lasts anywhere from a couple of hours to a full week, the other four components are understood as ongoing throughout the teacher’s first or first two years of teaching. Program length varies across states, but those that are not connected to certification generally last one year (Furtwengler, 1995). With the increasing focus on induction as a part of a teacher’s developmental process, views about program length may be in the process of changing, such changes may produce of 2 to 3 years (Huling-Austin, 1999).

Of the five components mentioned above, mentoring and release time have been identified as the most critical (Bey & Holmes, 1990; Texas State Board, 1998), and their presence or absence in a program helps distinguish informal and formal programs of induction.

**Mentoring**
Mentoring is defined as "a philosophically sound process through which novices become more proficient in their profession as a result of structured and planned experiences with a veteran teacher" (Walker, 1992) or as "a formalized relationship between a beginning teacher and a master teacher that provides support and assesses teaching skills" (ECS, 1999). Despite a lack of consensus about the utility and format of mentoring, it is identified by researchers as the most critical component of induction programs and by teachers as the most helpful (Arends, 1998; Danielson, 1999; Feiman-Nemser, 1996; Ganser, 1996; Robinson, 1998). It should be noted that although mentoring is one of the most essential components of induction programs, induction ideally should not be reduced to mentoring alone (Sweeny, 1994).

Although contemporary definitions are somewhat less ambiguous than earlier ones associated with more informal programs, definitions of the mentor teachers' role continue to be vague. Even when the role is defined more precisely, it varies across programs from a list of assigned tasks to a solid theoretically based definition (Grippin, 1991; Newcombe, 1988). To a considerable degree, problems associated with clarifying and codifying the mentor role in induction programs are rooted in a complex historical tradition in teaching that demands equal status among teachers (Grippin, 1991; Little, 1990). At the preservice phase, the role of the teacher and student teacher are clearly delineated- the student learns and has little or no responsibility for what occurs in the classroom. In induction programs role definitions are a
little less clear, and generally, beginning teachers are expected to carry the same level of responsibility as their more experienced mentors.

Mentors of beginning teachers have been variously referred to as cooperating, master, expert, veteran, or consulting teachers, as well as peer coach, peer assistant (ERIC Clearinghouse on Teacher Education, 1986). The term used to describe the mentor is often in and of itself an indication of the selection criteria. For example, those referred to as experts may have been specifically selected as exceptional in their profession, whereas cooperating teacher or peer assistant may imply a more informal 'buddy' type of relationship. Not every teacher can, however, be utilized as a mentor and in programs that have weak theoretical frameworks there is great potential for selection bias on racial, gender and political grounds (Grippin, 1991).

A related issue is mentor training. In early mentoring initiatives, it was often tacitly assumed that having more experience in teaching automatically enabled teachers to be good mentors; it is now widely recognized that mentors need training to perform effectively (Bey & Holmes, 1990; Feiman-Nemser, 1996; Huling-Austin, 1992; Kling & Brookhart, 1991; Newcombe, 1988). Mentors are often the primary socializers of beginning teachers, and they transmit values that are likely to become the very values beginning teachers embrace (Sweeny, 1993). Hence, it is important that the training mentors receive reflects the best of the school culture but also provides opportunities for growth. Often mentors are selected solely on the
basis of experience and without training that addresses the latter, they may find it extremely
difficult to function as a resource for new teachers on emerging systemic school reform
initiatives (Feiman-Nemser, 1996).

The training of mentors, has yet to be examined extensively despite the fact that they
seem generally to lack expertise in essential areas their roles encompass, like observation and
critical discussion regarding classroom practice (Feiman-Nemser, 1996). Nevertheless,
mentoring is the component of induction most extensively researched. However, the research
of the 80s and early 90s focused primarily on the roles and responsibilities of mentors,
programmatic features, selection criteria and, implementation procedures (Feiman-Nemser,
1996; Hawkey, 1997; Walker, 1992). This research demonstrates that across induction
programs, there is considerable variation in the roles, activities, support, compensation, and
expectations for mentors (Danielson, 1999; Ganser, 1996). In contemporary programs, it is
standard for mentors to receive some form of compensation, usually in the form of stipends
and a reduction in work load; other forms of compensation include college credit and stipends
for supplies (ECS, 1999). The inconsistency in compensation is to some degree attributable to
the differing positions that states and districts take with regard to funding and licensure.

During the 90s a substantial number of survey-based evaluative studies were conducted.
The focused primarily on participant perceptions and satisfaction as measures of effectiveness
arose. Although research on participant perceptions and experiences continues to confirm
that mentor programs are perceived by their participants as valuable, this information saturates the literature, and there is a serious need to expand the research to examine more outcome variables (Arends, 1998). The need for outcome based research requires that mentoring programs have evaluation components.

The level at which evaluation and assessment take place in the mentorship program influences what role the mentor is expected to serve and has been the subject of some debate. There is little clarity in the literature about what should be evaluated, by whom, or how (Odell & Ferraro, 1992). Even when the certification process is not part of the induction process, programs have to evaluate their own effectiveness. However, whether this evaluation simply asks opinions of beginning teachers or involves some formal evaluation of teachers' performance varies. Programs do not typically require mentors to evaluate their mentees. Although this type of assessment has been successfully integrated into some programs, in general, researchers do not support this practice (Odell, 1992; Smylie, 1994). Studies have indicated that when the mentor plays a role in evaluation it may strain the mentor-mentee relationship (Klug & Salzman, 1991; Neal, 1992). Neal (1992, p.45) contends that "to confound the helping and assistance role of mentoring with the task of conducting formal evaluation of teaching performance is to undermine the very condition-- trust-- that is required for mentoring to flourish." Yet, it seems that if properly operationalized, an evaluative component in mentorship can actually enhance both the mentor's and the beginning teacher's
teaching practices and professional growth, as seems to be the case with the peer review and assistance (PAR) programs (Lohr, 1999).

Perhaps, due to the debate about whether mentorship should include formal evaluation of beginning teachers, research on mentorship programs is generally limited to surveys, and there continues to be a gap in the literature regarding mentorship outcomes and comparisons between different types of mentoring programs (Tellez, 1992; Walker, 1992). An exception to this is a study by that compared a structured and an unstructured induction program which differed primarily in the shape of the mentorship component (Klug & Salzman, 1991).

The literature of the late 90s does indicate increasing interest in the dynamics of relationships between mentors and mentees. There is also growing interest in mentors. Where earlier studies dealt with different aspects of mentor roles, recent research seeks to ascertain what mentor teachers derive from the mentoring experience and what they deem important in mentorship (Ganser, 1996, 1998; Wilson, 1996). Overall, however, outcomes are still examined in terms of mentee satisfaction, with only a few studies exploring specifically how having a mentor impacts on teacher practice. Schaffer, Stringfield & Wolfe (1992), is one example of an attempt to link mentorship to classroom practice.

Overall, the research reports that beginning teachers who have had a mentor in their first year of teaching feel more prepared and that there is a strong likelihood that these teachers are also more likely to be retained (ECS, 1999; Odell & Ferraro, 1992; TAMUCC,
Despite a lack of strong empirical data in this area of research, the proliferation of mentoring programs is striking, and information on mentoring is readily available across a wide range of information media including the Internet. Two website networks, that focus on mentorship are the Illinois Teacher Mentoring and Induction Network <teachersmentors.com,> <www.mentors.com,> and the Mentoring Leadership and Resource Network <www.mentors.net.>

Release Time

Durbin's (1991) review of early induction literature showed that few if any programs featured time release, but this is a common program feature of contemporary programs (Huling-Austin, 1990). However, as with mentoring how this component is implemented differs across programs (Feiman-Nemser, 1996). Release time is sometimes operationalized as a form of compensation for mentors, in which case it is subsumed under the mentoring component. Because release time here functions as compensation, it is utilized as personal time for mentors. Release time or reduced work load also functions as an actual component of induction in that specific activities are expected to occur during the time teachers are released from teaching. Released time is often allocated as a means of fostering the mentor-mentee relationship or as an opportunity for professional development, so it is used by mentors and
mentees to discuss issues, observe one another's classroom or attend in-service programs (*Promising Practices*, 1998).

This component is often neglected in the research; however, it is extremely critical and often differentiates successful and unsuccessful mentoring and induction programs. It is an aspect of programming that is especially important to the mentoring component. Release time has considerable impact because if set aside for the purpose of collaboration, between the mentor and mentee it proves to be extremely useful (Arends, 1998; Klug & Salzman, 1991).

**Program Assessment & Evaluation**

Although of great importance assessment and evaluation of induction programs is not often addressed (Durbin, 1991; Robinson, 1998). As has been previously mentioned, this shortcoming is in part attributable to the lack of a clear theory of effectiveness with respect to teaching (Sclan & Darling-Hammond, 1992). That is, part of the challenge in assessing beginning teacher competency is that "there is as yet no well-established and generally accepted canon of acceptable and unacceptable solutions to pedagogical problems (Haertal, 1991, p.17)." The problem is whether, in fact, standards of teaching can be established in the midst of differing contextual influences in schools and if such standards can be created outside of each teacher's individual experience. The concern is that having standards may disenfranchise teachers and limit their ability to serve a diverse student body because
standardized practice implies, to some extent, passivity in teaching style (Sclan & Darling-Hammond, 1992).

There is also considerable debate about whether induction should be used as a means of eliminating incompetent beginning teachers and whether there is a place for summative evaluation in programs designed to assist (Furtwengler, 1995; Johnston & Kay, 1987; Neal, 1992). The terms summative and formative evaluation have become popular in the induction literature, but the distinction, although important, is rarely articulated despite frequent mention of both (Neal, 1992). Formative evaluation is "intended to facilitate a teacher's ongoing development by providing non judgmental feedback related to aspects of performance, [whereas summative evaluation is] intended to focus on drawing conclusions about the worth and value of a teacher's performance" (Neal, 1992, p.36). Formative assessment to some degree then limits outcomes to self-reports from teachers regarding the impact of their induction experiences, and unsurprisingly this is the area of research that has proved to be most prolific. In comparison, summative assessment, which is historically tied to programs in which certification or job continuation is contingent upon performance, does not appear widely in induction programs that do not involve certification (Furtwengler, 1995).

Despite the complicated history of evaluation and assessment in induction programs and the elimination or modification of many performance measures, the increase in state participation in induction has encouraged a more focused and critical attempt at setting
standards for evaluating teacher effectiveness (Lantham, 1999; Sclan & Darling-Hammond, 1992). In a report of beginning teacher mentoring programs in 42 states, 16 explicitly have in their mentoring/induction programs a means of evaluating the program and 24 have an evaluation mechanism for the beginning teacher. The teacher evaluations take several forms, but most are formative and not summative.

Surveys are the most commonly used means of evaluation in induction. The Teacher Concern Survey is a well-validated measure that traces teacher development from novice to expert and has been widely used in California (Yopp & Young, 1999). Instruments used in the assessment of induction programs that have been studied systematically include the Effective Use of Time Program (EUTP) Model, designed to increase student achievement by changing classroom behavior patterns of beginning teachers to resemble those of highly effective teachers. This model uses Stallings Observation System (SOS) to construct a profile based on low-inference classroom observations to assess teacher performance. This method of assessment has been successfully utilized with first year teachers in North Carolina (Schaffer, Stringfield & Wolfe, 1992).

California's Formative Assessment and Support System for Teachers has expanded the research by establishing the framework for critically looking at teaching practice (Olebe, 1999). California seems to have one of the more advanced assessment systems. The system assesses participant perceptions at all levels of the program and also includes project director
surveys both examining the quality of implementation (Gitomer, 1999). In terms of assessing the impact of implementation the system includes beginning teacher observations, individual growth plans and portfolios (Riggs, 1997).

The portfolio method for assessing beginning teacher competency is gaining popularity, and a significant number of contemporary studies examine the utility of this form of assessment (Brennan, Thames & Roberts, 1999; Lyons, 1999). Other programs have built in evaluation and find that the evaluative component actually acts as one of their strengths, for example the Peer Review and Assistance Program (PAR) in Columbus, Ohio (Furtwengler, 1995; Lohr, 1999; Yopp & Young, 1999).

Regarding the wider influence of induction, outside of beginning teachers' experiences, a new literature examining the effects of induction on teaching practice and teacher retention is emerging. Although early research provided anecdotal evidence that higher retention among beginning teachers is a positive outcome of induction, Arends (1998) suggests the weakness of the studies casts doubt on the conclusions drawn. Systematic effort to demonstrate higher retention for beginning teachers who have undergone induction compared to retention rates among those who have not, is a phenomenon of the mid- to late 90s. DeBolts' (1991) review, which documents lessons learned from a cross section of mentoring programs across the United States reports that the programs he examined in New Mexico, New York State (Northern Country and East Harlem) Arizona and Colorado all show high
retention rates amongst inducted beginning teachers. Odell & Ferraro (1992) report that 96% of the beginning teachers who participated in a university-school partnership induction program, remained in the teaching profession three years after their first year. Recent statistics document that Texas A& M University-Corpus Christi's induction program showed a 94% retention rate for inductees, whereas the statewide trend is that almost 50% of beginning teachers exit the profession (Huling-Austin, 1999; TAMUCC, 1999). The Southwest Texas State University Fellows Program also shows an increased retention rate amongst inductees with after 2 years 91% of them remaining in the teaching profession (Texas State Board, 1998).

Overall, the research on induction program success is survey-based and assesses program effectiveness in terms of participant satisfaction and testimonies of effectiveness. The real limitation of the body of research evaluating individual programs is that it does little to empirically support the validity of induction as a construct (Lawson, 1992). Hence, despite the impressive volume of case studies documenting particular programs and their characteristics and successes, the lack of cross-program comparisons does little to establish a strong theoretically-based model of induction (ERIC Clearinghouse on Teacher Education, 1986). Furthermore, wide programmatic variety does not lend itself to consistent and robust research, it yields anecdotal evidence that speaks more to likely consequences than to actual practical outcomes (Lawson, 1992; Tisher, 1982).
As a construct, induction is much more solidly established abroad and relevant cross-program comparisons exist, especially in Great Britain, Australia, and Japan (Tisher, 1982; APEC, 1999; NCES, 1999). Currently, researchers in the United States appear preoccupied with examining the link between induction and teacher retention (Huling-Austin, 1999). It is the hope of researchers that this link will facilitate support for induction programs, because ultimately teacher retention can be shown to impact student achievement (Huling, 1999).

Characteristics of Successful Induction Programs

In general induction research indicates that structured that delineate clear goals and include systematic observation, produce better outcomes than do unstructured programs (Danielson, 1999; Klug & Salzman, 1991). The consensus is therefore that despite the interpersonal advantages to beginning teachers in informal programs, formal ones are more effective (Sweeny, 1993).

Successful programs have the following elements (Arends, 1998; Danielson, 1999; Feiman-Nemser, 1996; Furtwengler, 1995; Talbert, 1992):

- A coherent structure to the program that encompasses well designed activities
- A structured mentoring component that:
  - focuses on improving practice
  - provides mentors with training
> reduces the work loads or gives release time for beginning teachers and mentors

> compensates mentors with money, status, release time or graduate credit

- A means of formative assessment, that emphasizes the assistance of beginning teachers on a continuum of professional growth
- Enough fiscal resources and political support

The mentoring component is so essential to many induction programs and it is important to note that mentoring is not helpful in and of itself (Lawson, 1992). Instead, successful mentoring relationships are contingent on a number of factors including (Ganser, 1996; Kling & Brookhart, 1991; Talbert, 1992; Yopp & Young, 1999),

- provision for choice in mentors
- close proximity between mentors and their mentees
- mentors and mentees being matched on work experience, personality, grade level and subject areas

School-University Partnerships
The role of institutions of higher education are of particular importance in this review. University involvement in the post-university experiences of beginning teachers began in the 1950s in response to a national shortage of teachers and the attempt to bring students well-educated in the liberal arts into the teaching profession (Elias, 1980; McDonald, 1982). This involvement took the form of designing and implementing fifth year internship programs. These programs targeted students with little or no background in education; providing alternative, accelerated means to certification that sometimes incorporated graduate courses and the receipt of a master's degree in education as an incentive for students with bachelors degrees in the liberal arts (Colbert & Wolff, 1992; Elias, 1980). The fifth year internship expanded the usual 9-13 week practicum of student teaching to one year of practical teaching experience and evening classes designed to prevent 'shock' in the initial teaching experience, equip the intern with basic skills and integrate theory and practice (McDonald, 1982).

In contrast to modern day induction programs, these early fifth year programs were intended to fill a teacher shortage rather than to specifically ameliorate beginning teachers' difficulties in their first year or reduce attrition rates amongst them. Yet, because the fifth year internship is essentially designed to ease the transition into teaching, what occurs in these programs mirrors much of what occurs in modern induction programs. However, because these fifth year programs serve a subset of the clientele typically served in induction programs
and, because in their earliest application, these programs were almost exclusively tied to universities (Colbert & Wolff, 1992; McDonald, 1982), they were and generally continue to be different from modern day induction programs (Abdal-Haqq, p.c., 1999).

For a number of reasons the incidence of full school-university collaboration in induction is rare: 1) as has been previously mentioned, modern induction programs were initially conceptualized as compensating for the inadequacy of schools, colleges and departments of education to properly prepare beginning teachers for practice; 2) institutions of higher education traditionally are held accountable only for the pre-service portion of the beginning teachers career, and therefore tend to have little involvement once students leave the university (Johnston & Kay, 1987); 3) university-based educators have different views of education and teaching than do school-based educators and; 4) there is relatively little pay-off for university faculty unless there is a heavy research component to the program (Griffin & Hukill, 1983). Despite these hindrances, there are a number of school districts that do collaborate with local universities (e.g. Chicago, IL., Baltimore, MD., Los Angeles and San Diego, CA.). Often university involvement is restricted to offering courses that function as in-service classes for beginning teachers. Few programs boast actual university-school partnerships, and even fewer, unlike the fifth year programs of the 50s, are actually initiated by universities (Fideler, p.c. 1999). The longest standing university based program in the
United States is the Wisconsin-Whitewater's Beginning Teacher Assistance Program (Fideler & Haselkorn, 1999).

When there exists university involvement in the process of inducting beginning teachers, it usually involves faculty investment with little or no decision making power (Johnston & Kay, 1987). The most widely recognized role that university faculty play is (Brunetti, 1998):

- providing advanced course work and awarding higher degrees to members of the teaching profession

Others are as follows (Griffin & Hukill, 1983; Johnston & Kay, 1987):

- disseminating follow-up surveys of teacher education graduates
- consulting (by individual teacher educators or university faculty) as part of a school improvement or reform effort
- conducting research in schools about beginning teachers
- assisting, training and, evaluating beginning teachers as members of a mentoring or inducting team.

Of these, the most infrequent, but growing practice, is the last one in which faculty are directly involved in the induction process. Especially with respect to mentor selection and training (Johnston & Kay, 1987).
Although research has done much to examine the extent, value and impact of state involvement (Fideler & Haselkorn, 1999), little systematic effort has been allocated to a similar venture with university involvement in induction, with the exception of Johnston & Kay's 1987 study. Their study documents that only 31% of their sample reported a formal agreement for induction between an SCDE and a local school system. Furthermore, of the different roles SCDE faculty played in the induction program, consulting with others about professional development activities for beginning teachers, acting as members of a beginning teacher support team, and conducting workshops targeted as beginning teachers were the three most common. Furthermore, Furtwengler (1995) reports that only seven states (Alabama, Kentucky, Idaho, New Jersey, Oklahoma and Tennessee) had substantial involvement of higher education faculty. However, in 1995, nine projects in 8 states (New Mexico, Colorado, Connecticut, Maryland, Massachusetts, Oregon, California, Kansas) received 3 year grants under the Eisenhower Federal Activities Program to establish school-SCDE partnerships to implement initial teacher professional development projects (OERI, 1995). Although, other non-state run programs collaborate successfully with SCDEs (e.g. Southwest Texas State University and selected Texas school districts (Arends, 1998), overall there continue to be a surprisingly low incidence of university-school collaboration (Fideler & Haselkorn, 1999).
In the next decade, it is important that support for collaborative induction efforts between schools and universities grow and that faculty roles diversify, because an increasing number of beginning teachers are coming from non-education backgrounds (Figuero-Britapaja, p.c. 1999). Furthermore, as the field of induction becomes more solid, universities will play a large role in establishing the theoretical framework needed to understand the induction process and design effective program models (Checkley & Kelly, 1998). University faculty should also play a larger role in the selection and training of mentors (Brunetti, 1999).

Conclusions

The precedent for beginning teacher induction has been firmly established despite a general lack of empirical data and a weak theoretical base. The literature shows that there continues to be a close connection between research on beginning teachers and induction programs and that research is increasingly used as a basis of program design (Lawson, 1992). The research on beginning teachers that dealt with levels of preparedness, the shock factor and perceived discontinuities between what was learned in teacher education and what occurred in actual school practice, spawned a large number of pilot projects and programs, and data concerning the perceived effectiveness of such programs in ameliorating beginning teacher difficulties. Hence, the highlighting of beginning teacher difficulties and experiences has been replaced with more practical attempts to define solutions and provide help mechanisms. In
part, this more proactive approach is attributable to the increased involvement of veteran teachers in the design and implementation of programs (Promising Practices, 1998; DePaul, 1998).

An extraordinary amount of money and time has been invested in piloting new beginning teacher induction programs and showcasing existing programs; however, little effort has been put toward establishing a robust theoretical framework that is specific and tied to specific outcomes. Thus, despite the fact that beginning teachers consistently report that they benefit psychologically from the induction experience, how their psychological well-being in their first year translates into their retention in later years or into effective teaching practices remains unclear and relatively unexamined.

However, based on the extensive amount of research amassed regarding the particularities of programs and also the increased interest of states and districts in standardizing the induction process and tying it to certification, it seems reasonable to surmise that the theoretical underpinnings in this body of literature will begin to solidify over the next decade. Furthermore, with increasing investment in improving the quality of teachers, induction is likely to become of widespread national interest (NCES, 1999; Tabor, 1999).

Trends & Future Implications
National statistics show a significant rise in the number of beginning teachers who have completed 5-year extended programs and some sort of formalized induction, and this trend may become the norm in the next decade (Arends, 1998; Forgione, 1999; Monahan, 1984; NCES, 1999). Increasingly beginning teachers come into teaching through alternative certification routes. Hence, unsurprisingly, fewer beginning teachers experience traditional certification, and induction is increasingly tied to teacher certification requirements. One implication of these trends is that there will be a greater need to pay close attention to the diversity inductees. For, although induction programs, by definition, target beginning teachers, few differentiate among beginning teachers who have an academic background in teacher education and those who do not. In fact the only attempts to differentiate different subsets of beginning teachers have been cursory; comparing and contrasting the needs of rural and urban teachers. Many other subsets exist and as the population of children in the school system changes and recruitment of minority teachers becomes a national priority, it will be necessary to systematically investigate and implement programs that recognize differences between inductees, especially with respect to the induction and retention of minority teachers.

With 17 states incorporating some, if not all, of NCATE's recommendations with regards to educational standards that include some provision for beginning teachers (Darling-Hammond, 1997) we can expect to see beginning teacher induction move to operate more similarly across the nation. Greater standardization of induction increases the expectations
placed on beginning and mentor teachers. This evolution may include a shift away from traditional ways of teaching and an increasing premium placed on the use of new technological innovation, hence the use of veteran or retired teachers may decrease and the realm of expert teachers may now include newer teachers as mentors. This may also engender greater emphasis on mentor training (Feiman-Nemser, 1996). This implies that research looking at problems experienced with these standardized formats and programmatic changes to meet special needs to appear.

Most states report one year programs, but those that include certification were in 1995 mostly two year programs (Furtwengler, 1995). Monahan predicted back in 1984 that induction in the 90s would be extended beyond one or two years and would likely be a three to five year venture. Support for this position continues today and national reports are calling for induction to be regarded as a multi-year, developmental process rather than a finite set of training experiences (Furtwengler, 1995; Huling-Austin, 1999; Texas State Board for Education Certification, 1998). Yet, despite support for this position, Furtwengler's 1995 review revealed only one state with a three year program (New Mexico).

As a concept then, induction is increasingly being examined in developmental terms, such that learning to teach is seen as a process (Huling-Austin, 1999). The process seems to also be increasingly pupil focused— that is, that current research is less concerned with the psychological part of teachers experience and more with how to facilitate better results— the
assumption now being that the more comfortable teachers feel the more effective teachers they become. The link between beginning teacher induction and student achievement remains elusive, but the political climate of the late 90s prods educators to establish and demonstrate this link before substantial funding is allocated toward expanding induction programs (Austin-Huling, 1999). Recent literature includes some attempts to establish this connection using beginning teacher retention data. This approach rests on the hypothesis that greater time in service leads to greater proficiency, and ultimately to higher pupil achievement (Huling, 1999).

As the face of induction changes in the next millennium, institutions of higher education will prove to be invaluable in establishing the research base and theoretical framework for teaching practice (Griffin & Hukill, 1983; Johnston & Kay, 1987). Researchers contend that it is absolutely necessary that a cohesive model in which preservice and inservice teacher training programs can be linked (Elias, 1980; Texas State Board of Education, 1998). The best models will be those that have university partnerships (Wasserman & Emery, 1989). If university faculty involve themselves as researchers rather than reformers, they can benefit as the school site provides a good data base, and the school benefits from the material and theoretical resources of the university (Griffin & Hukill, 1983). In this fashion the link between preservice and inservice teacher education programs is maintained and there is a continuous and practical effort toward advancing educational theory and effective induction programs.


Yopp, & Young, . (1999).
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