

**Abstract Title Page**  
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**Title:**

**Induction programs effect on beginning teachers' feelings of preparedness and plans to remain in teaching**

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## **Abstract Body**

*Limit 5 pages single spaced.*

### **Background/context:**

*Description of prior research, its intellectual context and its policy context.*

Teaching is a career that is notorious for its high turnover rate for beginning teachers. Smith and Ingersoll (2004) attribute this to the majority of the teaching experience occurring while the teacher is single-handedly working with the students. Over the last decade there has been an increase in the number of induction programs put in place in schools across the nation because of the challenges that a new teacher faces in the classroom. These programs aim to offer support, guidance, and orientation for the newcomers, but are significantly varied across school systems (Smith & Ingersoll, 2004). The more elaborate induction programs, which included mentoring, teacher collaboration, and common planning time with other teachers, showed the lowest turnover percentage, as well as the fewest teachers in their sample being represented. We interpret their findings to suggest that the most effective support for people new to the profession is also the rarest form of support. In an earlier study using the SASS 1999-2000 Teacher Follow-Up Survey, we discovered that this variability has contributed to the variety of outcomes for new teachers plans to remain in teaching. The current study was conducted for the purpose of reporting the possible relationships between induction programs on beginning teachers' feelings of preparedness as well as their plans to remain in teaching, using the NCES Schools and Staffing 2007-2008 restricted individual teacher dataset.

Guarino, Stanibañez, and Daley (2006) found that most people dissatisfied with teaching positions were looking for improvement in working conditions, raises in salary to reflect the value of experienced teachers, adjusted tenure, or retirement policies. Changes in these policies for schools and school districts would possibly motivate more teachers to remain in their jobs, but a stronger emphasis should be placed on more substantial retention motivators.

Guarino et al. (2006) review of the literature also concluded that teachers require more intrinsic motivators such as fostering mentoring programs, professional development, and career advancement opportunities. Kersaint, Lewis, Potter, and Meisels (2007) also advocate that professional development should be offered by the schools. This will better emphasize the importance of retaining quality teachers, rather than focusing on recruiting.

Smith and Ingersoll (2004) conducted a study on the effects of induction for teachers at the beginning of their career. Induction is defined as programs for teachers that can include any number of different purposes. For example, schools may hire teachers and require them to participate in workshops, collaborations, support systems, orientation seminars, as well as mentoring programs. The purpose of Smith and Ingersoll's (2004) study was to address the need for further research on the effectiveness of the induction programs in place, with regards to new teacher turnover. They did this by comparing attrition rates of those new teachers who participated in a variety of induction programs and those who did not, based on 1999-2000 Schools and Staffing Survey (SASS) administered by the National Center for Education Statistics (NCES). Based on a sample of 3,235 first year teachers, they found that limited induction is being offered to new teachers. The majority of induction programs used by schools are simply mentoring programs, rather than an elaborate assortment of professional development. This caused some concern because their results showed the lowest attrition rates for those new teachers that had the most comprehensive induction programs (Smith and Ingersoll, 2004). Johnson and Birkeland's (2003) small sample of 50 first and second year teachers in

Massachusetts showed significantly lacking mentoring programs being used by schools as well. For the purpose of motivating teachers to remain at a school and provide quality teaching, schools need to look into the effectiveness of their induction programs. Induction supports the teacher's efficacy by strengthening skills, supporting the teacher mentally, and increasing job satisfaction (Smith & Ingersoll, 2004). Brill and McCartney (2008) also found that the induction programs provided by the school need to be well organized programs that concentrate on assisting the new teacher.

Many of the previous studies have concentrated on a multitude of causes of teacher attrition, focusing on both those who choose to leave and those that remain in teaching. The teacher reported reasons for leaving the profession or seeking out new positions within the field include insufficient administrative support, lack of student motivation, as well as unsatisfactory salary and benefits. Smith and Ingersoll (2004) reported finding studies that found around 50% of teachers leaving the profession within the first five years of teaching. This window of time accounts for a large part of attrition as well as calls attention to the need to further investigate the needs of beginning teachers.

**Purpose / objective / research question / focus of study:**

*Description of what the research focused on and why.*

This study was conducted for the purpose of reporting the possible relationships between induction programs on beginning teachers' feelings of preparedness as well as their plans to remain in teaching. The exploration of the experiences of teachers during their first year of teaching aims to evaluate the support system they are offered during their first year of teaching. Findings from this study suggest a possible relationship between new teachers' experiences with their induction programs and feelings of preparedness.

The following research questions are addressed in this study:

1. Are first year teachers feeling more prepared to teach having participated in an induction program?
2. Does a more elaborate induction program lead to higher feelings of preparedness in first year teachers?
3. Are plans to continue teaching and participation in an induction program related for the first year of teaching?
4. What support is being offered to first year teachers?
5. Which are highly correlated with plans to remain in teaching?

**Setting:**

*Description of where the research took place.*

The Schools and Staffing Survey is a nationally representative sample survey of public, private, and Bureau of Indian Education-funded K-12 schools, principals, and teachers in the 50 states and the District of Columbia. The teacher survey was designed to support comparisons between new and experienced teachers (3 years or less of experience vs. more than 3 years of experience) at the state level for public school teachers and at the regional or affiliation level for private school teachers (SASS, 2008). NCES surveyed 47,440 public school teachers from 9,800 public schools across the United States during the school year 2007-2008 (Coopersmith & Gruber, 2009).

**Population / Participants / Subjects:**

*Description of participants in the study: who (or what) how many, key features (or characteristics).*

Participants of this study include approximately 54,001 new (less than 3 years experience) full-time public school teachers across the United States. Teachers with three years or less years experience make up 19% of the public school teachers during the 2007-2008 school year. These beginning teachers make up 19% of the elementary and secondary school teachers (Coopersmith & Gruber, 2009).

**Intervention / Program / Practice:**

*Description of the intervention, program or practice, including details of administration and duration.*

The data was narrowed to first year teaching experiences by filtering those approximately 54,001 new (less than 3 years experience) full-time public school teachers across the United States who responded positively to the question “In your first year of teaching, did you participate in a teacher induction program?”

Two new variables were created for evaluating the first year teachers. The individual teachers’ levels of preparedness were created by adding reported feelings of preparedness and then averaging each participants score for their first year of teaching. Any ‘yes’ responses were counted towards their induction program and any ‘no’ was coded as a zero.

First year teachers’ level of preparedness was defined by responses ranging from 1 to 4, (1 being “Not at all prepared”, 2 being “Somewhat prepared”, 3 being “Well prepared”, and 4 being “Very well prepared”) on six teacher responsibilities such as classroom management and assessment of the students during their first year of teaching (SASS, 2008). Their level of preparedness was assessed by calculating the average of their responses to the six items. The data for this composite were reliable (Cronbach’s Alpha = .83).

The induction programs which the participants reported taking part in were gathered from the question “Did you receive the following kinds of support during your first year of teaching?” (for example, “Reduced teaching schedule” and “Seminars or classes for beginning teachers”) (SASS, 2008). All ‘yes’ or ‘no’ responses were in regards to their first year of teaching. A sum of each form of support was tallied to indicate the amount of induction the participant received during their first year of teaching (Cronbach’s Alpha = .47).

Face validity was used initially to construct these variables but further exploratory analysis should provide construct-related validity.

**Research Design:**

*Description of research design (e.g., qualitative case study, quasi-experimental design, secondary analysis, analytic essay, randomized field trial).*

Using a secondary analysis, a more extensive statistical data analysis will be conducted using the restricted dataset SASS 2007-2008. This analysis includes appropriate t-tests, regressions, and chi-squared tests of association.

**Data Collection and Analysis:**

*Description of the methods for collecting and analyzing data.*

Using the restricted individual public school teacher dataset provided by the National Center for Educational Statistics (NCES) Schools and Staffing Survey (SASS) of 2007-08, the following questions will be analyzed, using statistical software (AM and STATA) for analyzing data from complex sample surveys, controlling for geographic region, community type, school level, student enrollment, teacher characteristics and school characteristics for beginning teachers.

### **Findings / Results:**

*Description of main findings with specific details.*

Our initial findings from the public access data of the 1999-2000 SASS are described below. We intend to expand our exploration of these initial findings through our exploration of the restricted individual public school teacher dataset provided by SASS 2007-08, using more sophisticated statistical software (AM and STATA) for analyzing data from complex sample surveys, simultaneously controlling for geographic region, community type, school level, student enrollment, teacher characteristics and school characteristics for beginning teachers.

#### *Are First Year Teachers Feeling More Prepared to Teach Having Participated in an Induction Program?*

In our initial, differences in preparedness variable based on participation in an induction program were compared using a two-sample t-test. Equal variances were assumed because the Levene's test for homogeneity of variances was not statistically significant,  $F(9518) = .082, p = .77$ . The mean difference of the samples was  $t(9519) = 8.34$  with a  $p < .001$ . Because the t-test was statistically significant, it can be inferred that there is a difference in the level of feelings of preparedness between those who completed an induction program and those who did not in the population. Though the results of this test show a statistically significant difference in the two groups, the mean differences did not actually vary a great deal (See Table 1). Those who participated in an induction program averaged higher levels of preparedness than those who did not participate, with a mean difference of only about .10.

#### *Does a More Elaborate Induction Program Lead to Higher Feelings of Preparedness in First Year Teachers?*

In order to test if a more elaborate induction program led to greater feelings of preparedness, a simple linear regression was conducted. Based on this test, there was a statistically significant, positive relationship between feelings of preparedness and a more elaborate induction program, but it was a weak relationship ( $F(1, 9518) = 133.47, p < .001, r^2 = .014$ ). This weak relationship is probably representative of the weak reliability of the variable that was created to account for the components of the induction programs offered to the first year teachers.

#### *Are Plans to Continue Teaching and Participation in an Induction Program Related for the First Year of Teaching?*

To test the relationship between future plans to remain in teaching and participation in an induction program, a chi-squared test of association was conducted. There was not a statistically significant relationship between any plans for teacher careers and participation in an induction program [ $\chi^2(4) = 3.04, p = .55$ ]. Most first year teachers reported planning on remaining in teaching "As long as I am able", with the least amount of teachers reporting "Definitely plan to leave teaching as soon as I can". Based on the results of this test, the participation in an induction program is not strongly related to plans to remain in teaching.

*Are First Year Teachers Feeling More Prepared to Teach Having Participated in an Induction Program?*

The results of this study show that a strong feeling of preparedness is associated with those who were provided an induction program. This relationship was statistically significant but the sample means are not that far off from each other. This implies that there may be some other factors more strongly influencing these variables such as personality or feelings self-efficacy, as well as the different characteristics of the induction program.

*Does a More Elaborate Induction Program Lead to Higher Feelings of Preparedness in First Year Teachers?*

Findings from the correlation between more elaborate induction programs and stronger sense of preparedness showed a positive but weak relationship. The assumption that went into this question was not directly linked to the data collected by the NCES. This weak relationship would lead us to believe there is a better way to evaluate the relationship between induction programs by focusing on the specific parts of the individual programs offered.

*Are Plans to Continue Teaching and Participation in an Induction Program Related for the First Year of Teaching?*

The weak relationship between responses to future plans about teaching and participation in an induction program further demonstrate the variability of the experiences of the teachers in the sample. If the data were to be grouped by specific indicators that categorized the induction programs beyond the specified support offered to new teachers, the relationship between the variables may have been more defined.

**Conclusions:**

*Description of conclusions and recommendations based on findings and overall study.*

An induction program can be considered costly in two ways, implementing them effectively and paying for their ineffectiveness. It is understood that a quality induction program will include the time and effort of the school to sufficiently support the new teacher through their first year or so of teaching. A completely different cost presents itself if the program put in place is not successful and a school is required to hire a new teacher with enticing hire packages or in the big picture, the cost of the teacher attrition across school districts.

As with any profession, a person who has been given the appropriate training and tools to do the job will feel more capable. Once they begin that job, they need to feel support for the in the field training they are receiving. This support should be offered to new teachers in the form of a quality induction program. These induction programs should include the most supportive forms of induction for new teachers. In order to better understand the meaning of that, future research should include data collection focused on what induction programs are being used and how effective they are for teacher retention.

## **Appendices**

*Not included in page count.*

### **Appendix A. References**

*References are to be in APA version 6 format.*

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## Appendix B. Tables and Figures

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Table 1

*Means, Standard Deviations for Participation in an Induction Program and Preparedness*

	First Year Teaching with Induction Program	First Year Teaching without Induction Program
	<i>M(SD)</i>	<i>M(SD)</i>
Level of Preparedness	2.88 (.57)	2.79 (.57)