CEME Technical Report

CEMETR-2015-01 JULY 2015

The Center for Educational Measurement and Evaluation

First 3 Induction Program Report 2015

Priscila Baddouh Richard Lambert

RICHARD LAMBERT CHUANG WANG MARK D'AMICO SERIES EDITORS

A PUBLICATION OF THE CENTER FOR EDUCATIONAL MEASUREMENT AND EVALUATION



The Center for Educational Measurement and Evaluation

First 3 Induction Program Report 2015

Priscila G. Baddouh

Richard G. Lambert

Center for Educational Measurement and Evaluation

UNC Charlotte

July, 2015

First 3 Induction Program Report 2015

Teaching is a demanding career in which 30% of teachers leave the profession in the first five years, and the turnover rate may be as high as 50% for teachers who start their career in urban schools (Darling-Hammond, & Sykes, 2003). The high turnover may reflect a lack of support and preparation for beginning teachers (Ingersoll, & Smith, 2004). As one of the First 3 Program participant mentioned, "Whatever you were taught it doesn't compare to being in that class the first day. Your education does not prepare you for being in the classroom alone. My student teaching was wonderful but it still isn't enough to prepare you." Another participant in the program describes her/his experience as a teacher as having to "teach [herself] to teach". This comment reflects the stages that teachers go through until they reach a maturity level in the profession.

Katz (1972) describes four stages for beginning teachers. Stage 1 is the survival: teachers' concerns are to endure each day, and survive their first year. Stage 2 is the consolidation: teachers are more confident in their abilities, and they start to focus more on individual students' needs, and how to differentiate their lessons. Stage 3 is the renewal: teachers become more involved with the teaching community to share ideas, increase their knowledge about teaching, and discover new teaching strategies. Stage 4 is the maturity: teachers become more reflective about both their teaching and broader discussions and issues in the field of education.

Fuller & Brown (1975) also divided the beginning of the teaching career into stages, but they use three rather than four stages (as cited in Karge, Sandlin, & Young; 1993). Stage 1 is the Self: similarly to Katz (1972), teachers are concern with themselves and their own survival. Stage 2 is the Task: teachers are concern with their obligations. Stage 3 is the Impact: teachers are concern with students, and how they learn. In both Katz (1972) and

Fuller & Brown (1975), teachers go from a focus on themselves in their first year to a focus on their students and broader issues in Education after their third year. First 3, the induction program evaluated in this report, is designed based on these stages of teaching.

Description of First 3

First 3 is an induction program that aims to help beginning teachers, in their first three years in the career, to learn what they need to excel. Year one is called the "Year of Survival", and it goes through the five phases that teachers normally experience in their first year: anticipation, survival, disillusionment, rejuvenation, and reflection. Year two is called "Looking Through Varied Lenses", and focuses on North Carolina Professional Teaching Standards. Year three is called "Creating a Professional Learning Community", and focuses on being a part of a professional learning network. The program has two groups of teachers, off-campus, only first-year teachers, and on-campus, only second- and third-year teachers. First 3 also offers professional development seminars for preservice teachers at the University of North Carolina at Charlotte. These seminars are called Teacher Toolbox Tuesday.

First 3 focuses on areas that tend to be challenging for beginning teachers, such as balancing personal and professional life, classroom management, instruction planning and differentiation, use of technology and other resources, and establishing relationships with students, parents, and peers. This report uses both quantitative and qualitative methods to analyze and summarize the findings from The First 3 Beginning Teacher Support Program Induction Practices Questionnaire, focus groups, and surveys that evaluated specific seminars for both beginning and preservice teachers. The main objective of this report is to identify the strengths and areas for improvement of the program based on the opinions and assessment from the participants.

First 3 Beginning Teacher Support Program Induction Practices Questionnaire

At the end of the Spring 2015, teachers answered "The First 3 Beginning Teacher Support Program Induction Practices Questionnaire". The instrument is divided in five parts: Induction Program Assistance Received in Teaching and Non-Teaching Areas (Section I), Induction Program Support Received (Section II), Demographic Information, General Perceptions as a Beginning Teacher, and open-ended questions. In Section I and II, the beginning teachers answered with "yes" or "no" if First 3 assisted them in specific areas that are challenging in the beginning of the teaching career. At the end of each of the sections, the teachers rated from 1-5 the overall help from First 3 in the areas included in the section, being on a 1-5 scale with 1 "highly ineffective" and 5 representing "highly effective". The rating provided the scores for each section. The total scores are the addition of both sections; as such, the total score is from 1-10.

The "General Perceptions as a Beginning Teacher" section includes questions about the program, the profession, and the teachers' intention to continue in the career. Finally, the open-ended questions are about how the program impacted teaching, balance between personal and professional life, and student learning. This part of the questionnaire ends with a request for suggestions to improve the program. The same questions, in addition to others, were used in the focus groups that followed the survey administration.

Participants

The program divides teachers in two groups: on-campus and off-campus. The two groups are in different stages of the teaching career, and have demographic differences. There were 60 teachers in the program, 37 were in the off-campus group, and 23 in the on-campus group. Most of the teachers in the off-campus group were female (63.64%), Caucasian (88.89%), teaching high school (71.43%) in a rural school (100%), and started in

the career as a standard professional (61.76%) rather than a lateral entry teacher. 5.56% were Teaching Fellows (a state funded scholarship program for undergraduate education majors). Most of the teachers in the on-campus group were female (90.58%), Caucasian (56.52%), teaching elementary school (56.52%) in a suburban school (56.52%), and started in the career as a standard professional (90.91%) rather than a lateral entry teacher. 13.04% were Teaching Fellows (see Table 1).

Table 1 Descriptive Statistics

Descriptive Statistics				Total
		Off-Campus (%)	On-Campus (%)	$(^{0}/_{0})$
		n=37	n=23	n=60
Gender	Female	63.64	90.48	74.07
	Male	36.36	9.52	25.93
Race	African American	5.56	26.09	13.56
	Caucasian	88.89	69.57	81.36
	Hispanic	0.00	0.00	0.00
	Other	5.55	4.35	5.08
Level	B-Kindergarten	0.00	13.04	5.17
	Elementary School	17.14	56.52	32.76
	Middle School	11.43	26.09	17.24
	High School	71.43	4.35	44.83
Urbanicity	Rural	100.00	8.70	65.00
	Suburban	0.00	56.52	21.67
	Urban	0.00	34.78	13.33
Licensure Type	Standard Professional	61.76	90.91	73.21
	Lateral Entry	38.24	9.09	26.79
Year	1	100.00	0.00	58.33
	2	0.00	56.52	25.00
	3	0.00	43.48	16.67
Teaching Fellow		5.56	13.04	8.47

The main differences between the two groups are the quantity of males, African Americans, urbanicity, being a Teaching Fellow, and year. All first-year teachers were also off-campus, while all third-year teachers and second-year teachers were on-campus. Table 2 shows the crosstabulation for being off-/on-campus and the year.

Table 2

Crosstabulation between Off-/On-Campus status and Year

		Year 1	Year 2	Year 3
Off-campus	N	35	2	0
	0/0	100%	13.33%	0%
On-Campus	N	0	13	10
	0/0	0%	86.67%	100%
Total	N	35	15	10

Note: Pearson Chi-square: 52.668, df=1, *p*-value: 0.000

Quantitative Data Analysis

The scores for Section I, Section II, and the total score that includes both sections were used in the main analysis. Teachers used two scales from 1-5 to rate both sections: scores 1 and 2 were ineffective, score 3 was in the middle of scale, and scores 4 and 5 were effective. A t-test, in which total scores were the dependent variable, and campus status was the independent variable, was used to determine if there is a difference between the total scores means for the two groups. Then, Hedges's *g* was used to find the effect size. The last part of the quantitative analysis consists of the percentages of positive answers to specific areas each section, and to the General Perceptions as a Beginning Teacher section.

Results

Scores for Section I and II. Each section ended with a scale from 1-5. Section I asked teachers to rate the overall assistance received in both teaching and non-teaching areas, and Section II asked them to rate overall support. Table 3 shows the percentage of scores in the effectiveness scale for each group. Both in Section I and 2, the majority of oncampus teachers (95.65% and 71.51 respectively) considered that First 3 assistance was highly effective. While off-campus teachers were mostly divided between those who have a

more neutral position towards First 3 assistance in both Section I and II (54.29% and 40% respectively), and those who considered First 3 as highly effective (42.85% and 57.14 respectively).

Table 3
Scores

		Section I (%)	Section 2 (%)	Both (%)
Off-Campus	Ineffective	2.86	2.86	2.86
	In-Between	54.29	40.00	47.15
	Effective	42.85	57.14	49.99
On-Campus	Ineffective	4.35	4.35	4.35
_	In-Between	0.00	24.14	12.07
	Effective	95.65	71.51	83.58

Section 1: Overall assistance received in teaching and non-teaching areas by the First 3 program

Section 2: Overall support received by the First 3 program

Both: this is the average of section I and II

Rating Scale (1-5): 1 and 2: Ineffective, 3: In-Between, 4 and 5: Effective

Total Scores. Since total scores were the addition of two scales at the end of Section I and II, they varied from 1 to 10. Table 4 shows the mean total score for each group: 6.84 (off-campus) and 9.13 (on-campus). The t-test reveals that the difference between the two means is statistically significant (*p*-value: 0.000). The effect size (Table 5) is also consistent with the t-test since the mean total score for the off-campus group is 1.158 standard deviations lower than for the on-campus group, suggesting that the off-campus group rated First 3 as less effective compared to the on-campus group.

Table 4
Off-Campus and On-Campus T-Test

	N	%	*Mean	Std. Error	Std. Dev.	(95% Con	f. Interval)
Off-campus	37	61.67	6.84	0.34	2.06	6.15	7.53
On-Campus	23	38.33	9.13	0.37	1.77	8.37	9.89
Combined	60		7.72	0.29	2.24	7.14	8.30

Notes: t=-4.4168, df=58, result: difference between the two means is statistically significant. *p*-value: 0.000

^{*}Mean was based on total scores, and the scale is 1-10.

Table 5
Effect Size Between Total Scores for Off- and On-campus Groups

	Off-Campus	On-Campus				
	n=37	n=23				
	a	b				
	Mean	Mean	Effect Size	Effect Size:	95%	T-test
	SD	SD	a vs. b	Conf. Inter	val	
Total Score	6.84	9.13	*-1.158	-1.708 -0	.598	-4.42***
	0.34	0.37				

*Hedges's g

Specific areas of Section I and II. Teachers answered with a "yes" or "no" if First 3 helped them in specific areas in section I and II (see Tables 6 and 7). Although both off-and on-campus groups agree that First 3 helped them in most of the areas, some areas for improvement for the off-campus groups are: administrative paperwork (25% positive answers), relations with parents (29.73%), and assistance in dealing with stresses encountered during first year(s) in the classroom (48.65%). On-campus group also agrees that administrative paperwork (60.87%) is an area of improvement for First 3. Some areas in which First 3 excels for the off-campus group are effective use of different teaching methods (94.59%), feeling welcomed as a part of a learning community (94.59%), assistance in setting classroom procedures and routines (94.44%), assistance in establishing positive relationships with your students (91.89%), and assistance through resources (97.30%).

On-campus teachers answered positively in the majority of the areas in Sections I and II, with most of the areas having 100% of agreement. Both groups considered that First 3 provided overall assistance. Some areas of disparity between off-campus and on-campus opinions were: relations with parents (29.73% and 91.30% respectively), and assistance in dealing with stresses encountered during first year(s) in the classroom (48.65% and 95.65%).

Table 6 Section I: Assistance Received in Teaching and Non-Teaching Areas

	% of Positive Answers		
	Off-campus	On-campus	Both
Classroom discipline	67.47	100.00	83.74
Organization of classroom and classwork	62.16	91.30	76.73
Dealing with individual differences	81.08	100.00	90.54
Motivating students	86.49	100.00	93.25
Administrative paperwork	25.00	60.87	42.94
Understanding of organizational structure and rules	86.49	86.96	86.73
Effective use of different teaching methods	94.59	100.00	97.30
Determining the learning levels and styles of your students	86.11	100.00	93.06
Time management	70.27	95.65	82.96
Relations with parents	29.73	91.30	60.52
Assessing student work	75.68	82.61	79.15
Planning for instruction	78.38	86.96	82.67
Incorporating research-based instructional strategies into curriculum	67.57	95.65	81.61
Dealing with student issues, related or unrelated to instruction	72.22	95.65	83.94

Table 7.
Section 2: Induction Program Support Received

	% of Positive Answers			
	Off-campus	On-campus	Both	
Orientation before beginning of school year	86.49	95.65	91.07	
Treatment as a respected colleague	83.78	91.30	87.54	
Welcomed as a part of a learning community	94.59	100.00	97.30	
Safe and open environment	91.89	100.00	95.95	
Assistance in meeting the challenges of your beginning teaching assignment	83.33	100.00	91.67	
Assistance in making a smooth and effective transition into the teaching profession	83.78	100.00	91.89	
Assistance in dealing with stresses encountered during first year(s) in the classroom	48.65	95.65	72.15	
Assistance in differentiating instruction	70.27	100.00	85.14	
Assistance in implementing research-based instructional strategies	72.97	100.00	86.49	
Assistance in selecting and delivering content in ways meaningful to students	81.08	100.00	90.54	
Assistance in setting classroom procedures and routines	94.44	100.00	97.22	
Assistance in establishing positive relationships with your students	91.89	100.00	95.95	
Assistance in establishing positive relationships with parents	48.65	100.00	74.33	
Assistance through resources provided (handouts, books, etc.)	97.30	100.00	98.65	
Provided with overall support	94.59	100.00	97.30	

General Perceptions as a Beginning Teacher. Teachers were asked about their perceptions about the program and the career. Teachers had the options of answering as "yes", "undecided", and "no". Table 8 shows the actual questions, and the percentage of positive answers. Both off-campus and on-campus teachers had positive answers about First 3 assistance, if they would still choose teaching as career, and their intention of continuing in the career. On-campus teachers had a slightly higher percentage of positive answers about

First 3 help. Still, 28 out of 37 off-campus teachers (75%) considered that First 3 assistance was sufficient during their first year(s) in the profession (Table 8).

Table 8.

General Perceptions as a Beginning Teacher

	% of Positive Answers		
	Off-campus	On-campus	Both
Overall was the induction assistance you received thus far from First 3 sufficient for you to experience success during your first year(s) of teaching?	75.00	100.00	87.50
Knowing what you now know about teaching, would you still choose teaching as a career?	75.00	73.91	74.46
Do you intend to remain in the position of classroom teacher after this year?	94.44	95.65	95.05

Focus Groups and Open-Ended Questionnaire

All 23 on-campus teachers participated in the focus groups, but none of the focus groups were conducted with off-campus teachers. In this activity, on-campus teachers were divided in three groups, where they discussed about their experience as teachers, how First 3 helped them to face the challenges of their first two or three years, and in what areas the program needs improvement. Although off-campus teachers did not participate in the focus groups, both on-campus and off-campus groups answered an open-ended questionnaire, which was a shorter version of the questions used in the focus groups. The data from both focus groups and open-ended questionnaire was coded using NVivo, and quotes were organized in two main areas: strengths of the program and suggestions for improvements. Each area has subareas that reflect the most common themes discussed in the three focus groups and in the open-ended questionnaire.

Strengths of First 3

Learning Community. The teachers stated that First 3 is a space where they can learn and share experiences, and this is one of the aspects that they enjoy—the sense of community that the program brings to them, and the sense that their experience and struggles are not unique, but part of starting in the teaching career. This quote from an oncampus teacher exemplifies their opinions:

"It's sort of nice hearing from the different districts, the different schools because you think it's greener on the other side or you think it's the end of the world, you know that it's happening at other schools too because everyone is dealing with it and has been in the same shoes where you are."

Impact on Personal Life. Discussions with other teachers and workshops have helped teachers in diverse areas. In their personal life, the program has helped them to conciliate their lives, and the demands of a profession in which work does not end when class is over, as the following quote from an on-campus teacher exemplifies:

"I remember one of the very first meetings we ever had, we had someone that had been in First 3 before talking to us. She said that in her first year she would sleep five hours, but then she decided to stop that and give herself at least one night a week. Eventually you just have to leave the papers behind, you will not get everything done. That made such a big impact on me because at that point I was already really stressed out about trying to get everything done. So absolutely just have that permission to not feel guilty for just having a personal life really has helped."

Impact on Professional Life. In their professional life, several of the teachers agree that First 3 helped them especially in two areas: differentiation and resources. An off-campus teacher explained that First 3 helped her to "recognize the demands of students outside of

the classroom", and "tailor instruction to needs of learners". While, an on-campus teacher told that the program assisted her specifically with her/his ESL students:

"I took away a lot of differentiation strategies, I had a high ESL case load in my class this year, and I had never worked with ESL students before, so just looking into different ways to differentiate things in the classroom to impact the students who may speak another language at home. I thought that that was really really helpful."

First 3 also introduced teachers to several technological resources, "My participation in First 3 has especially impacted my students learning through the use of technology. First 3 has taught me to use many free resources that are easy to use, effective and engaging." (oncampus teacher). An off-campus teacher also agrees that the program has helped her through resources, "I have been given many resources to help me monitor and adjust my teaching practices throughout the year." The focus groups and open-ended questionnaire suggest that the main strengths of First 3 are the sense of community, helping teachers to balance personal and professional life, teaching differentiation strategies, and resources.

Suggestions for Improvements

Both off- and on-campus teachers agree that they need more assistance in developing relationships with the administration in their schools and parents, and in classroom management, as the following quote from an on-campus teacher exemplifies:

"How to deal with really challenging students; not just day to day but in the long run how do you deal with it. Like I have no idea what to do with some of mine, and they've been a problem since day one. I can send one of them to her class for the day, that doesn't solve the problem, or after lunchtime they come back; you can't send them to the principal every day because that's not an option so how do you reach those kids?"

Several teachers from both off-/on-campus groups asked for more information and assistance especially for their relationship with students who have ADHD or an IEP.

Seminars

First 3 offers seminars for beginning teachers, starting with a one day Summer Institute in August. After the last Summer Institute in 2014, off-campus teachers answered an open-questionnaire to evaluate it. Their answers were compiled and divided in three areas: strengths, suggestions, and concerns. The main strengths of the Institute were: classroom ideas, first day activities, network with other beginning teachers, resources, and classroom management. Teachers suggested that the Institute include more ideas for lateral entry teachers without teaching experience, more breaks, and more grade/ subject specific tools. Their main concerns were lesson planning and differentiation.

First 3 offered 9 seminars for participants of the program. After each seminar, participants answered a survey to evaluate it. Some surveys were only open-questionnaires, while others had a scale from 1-4 or 1-5, being 1=poor and 5=excellent. The scales were used to evaluate different aspects of the seminar, and at the end, teachers gave an overall rating to each seminar. Ratings 4-5 are considered positive answers in this report. Table 9 shows that most of the teachers gave positive ratings to all seminars. Two of the seminars are not included in this table because they were evaluated using only open-questionnaires. Yet, in the evaluation of both of these seminars, Active Engagement Strategies and Formative Assessment, teachers offered generally answers. However, they suggested that both seminars include more activities focused on what they were learning.

Table 9.

First 3 Seminars

First 3 Seminars		
Seminar	Number of	Overall Rating 4 or 5
	Participants	
Year 1		
Motivating the Unmotivated	20	100.00%
Hoagie Effect	20	100.00%
Strategies for Middle and High School	10	100.00%
NC Teacher Evaluation	12	100.00%
Special Ed in the Regular Ed. Classroom	16	100.00%
Average Participation	16	
Year 2		
Motivating the Unmotivated	7	100.00%
Hoagie Effect	5	100.00%
NC Teacher Evaluation	3	100.00%
Special Ed in the Regular Ed. Classroom	3	100.00%
Average Participation	5	
Year 3		
Motivating the Unmotivated	3	100.00%
Hoagie Effect	2	100.00%
NC Teacher Evaluation	1	100.00%
Special Ed in the Regular Ed. Classroom	1	100.00%
Average Participation	2	
-		
All years		
Social/ Networking	44	97.80%
Disillusion	64	98.44%

Seminars for Preservice Teachers

First 3 also offered professional development seminars for preservice teachers. The program had a total of 20 seminars in which 356 preservice teachers attended: 11 seminars in the Fall 2014 (attendance = 193), and 9 seminars in the Spring 2015 (attendance = 163). After each seminar, the preservice teachers rated the experience using a 1-5 scale (1=poor

and 5=excellent) to evaluate the length, usefulness, clarity, how interesting was the seminar, whether there were plenty of examples, and a final overall rating. Table 10 shows the percentage of positive answers, 4 or 5 in the scale, for the overall rating for all seminars. The results show that preservice rated all seminars highly, and the majority of the seminars had 100% of positive answers.

Table 10.

Teacher Toolhox Tuesday

Teacher Toolbox Tuesday Seminar	Number of	Overall Rating 4 or 5
0.000	Participants	3 / 4-111 1111-1-8 / 4-1
Fall 2014	-	
The Profession of Teaching	22	95.45%
Active Teaching Strategies I-A	7	100.00%
Active Teaching Strategies I-B	15	100.00%
Smart Goal Setting	26	100.00%
What Would You Do? Working with Parents I	16	100.00%
Creating a Resume	26	96.15%
Reflective Writing I-A	23	78.26%
Reflective Writing I-B	2	100.00%
What Would You Do? Working with Parents II	22	100.00%
eďTPA	18	88.89%
Literacy Strategies	16	100.00%
Total	193	
Spring 2015		
Strategies for Working with ELLs I	30	100.00%
Strategies for Working with ELLs II	14	92.86%
B-K: What You Need to Know	7	100.00%
Foldables	22	100.00%
Integrating Science	10	100.00%
Summarization Strategies	18	100.00%
Differentiation	32	100.00%
How to Get the Teaching Job You Really Want	9	100.00%
Stress Management	21	100.00%
Total	163	_

Discussion and Final Considerations

The "First 3 Beginning Teacher Support Program Induction Practices Questionnaire", the focus groups, and the individual surveys for each seminar suggest that the program has helped teachers in both teaching and non-teaching areas by offering a time where teachers can learn and share experiences, introducing teachers to several resources, helping them to plan and differentiate, and assisting them with time management strategies. Preservice teachers also gave high rates to the seminars. These findings agree with previous evaluation reports (Baddouh & Lambert; 2013, 2014a, 2014b). Although both off- and oncampus groups rated First 3 high in overall effectiveness in the "First 3 Beginning Teacher Support Program Induction Practices Questionnaire", the results indicate that on-campus teachers are more satisfied with the program than off-campus teachers. This may happen because the two groups were different in their composition, and participation for on-campus teachers was voluntary, while off-campus teachers were required to participate in First 3.

All first-year teachers were off-campus, while the on-campus group only had secondand third-year teachers. In addition, teachers in both groups teach different rating levels (the
majority of the off-campus group is of high school teachers, while the majority of the oncampus is of elementary school teachers), and urbanicity (all off-campus teachers are in rural
schools; the majority of on-campus teachers is in a suburban school). Such differences are
likely to create different teaching experiences between the two groups, changing their
perception about the profession and the program. Therefore, more information is needed
about the needs of off-campus teachers, how their experience differs from on-campus
teachers, and how First 3 can better assist them. Both groups, however, indicated that they
would like to have more information and assistance about how to develop relationships with

school administration and parents, and classroom management focusing on students with ADHD and an IEP status. It will be helpful for the program staff to reflect for future planning about the unique benefits of on-campus program, as well as the similarities and discordances between on- and off-campus groups.

References

- Baddouh, P., & Lambert, R. (2013). First 3 Induction Program 2013 Report. The Center for Educational Measurement and Evaluation Technical Reports. Retrieved from:

 http://ceme.uncc.edu/sites/ceme.uncc.edu/files/media/First%203%20Report%202
 013.pdf
- Baddouh, P., & Lambert, R. (2014a). First 3 Induction Program 2014 Report. The Center for Educational Measurement and Evaluation Technical Reports. Retrieved from:

 http://ceme.uncc.edu/sites/ceme.uncc.edu/files/media/Report%202014-2%20%281%29.pdf
- Baddouh, P., & Lambert, R. (2014b). First 3 Effectiveness Report. The Center for

 Educational Measurement and Evaluation Technical Reports. Retrieved from:

 http://ceme.uncc.edu/sites/ceme.uncc.edu/files/media/Final%20Report%20%20First%203%20Effectiveness%20Evaluation.pdf
- Darling-Hammond, L., & Sykes, G. (2003). Wanted, A national teacher supply policy for education: The right way to meet the" highly qualified teacher" challenge. education policy analysis archives, 11, 33.
- Fuller, F. F., & Brown, 0. H. (1975). Becoming a teacher. In K. Ryan (Ed.), Teacher education (74th yearbook of the National Society for the Study of Education, Part 11, pp. 2552). Chicago: University of Chicago Press.
- Ingersoll, R. M., & Smith, T. M. (2004). Do teacher induction and mentoring matter?.

 NASSP bulletin, 88(638), 28-40.
- Karge, B. D. (1993). Analysis of Beginning Teacher Concern Data To Restructure PreserviceTeacher Education, paper presented at the Annual Meeting of the AmericanEducational Research Association, Atlanta, GA, April.

Katz, L. G. (1972). Developmental stages of preschool teachers. *The Elementary School Journal*, 50-54.