DOCUMENT RESUME

ED 442 639 SE 063 604

AUTHOR Riggs, Iris M.
TITLE The Impact of Training and Induction Activities upon Mentors as Indicated through Measurement of Mentor Self-Efficacy.
PUB DATE 2000-00-00
NOTE 14p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Beginning Teacher Induction; Elementary Secondary Education; *Inservice Teacher Education; *Mentors; *Self Efficacy; Teaching Methods

ABSTRACT

Developing mentor support can become a major financial investment for a school district. Inservice programs must be implemented to develop the mentors. Additionally, in order to serve new teachers, the mentors must be released from their classroom duties through the use of substitute or full-time replacements. To protect the investment of district funds and mentor time, mentor preparation programs must be able to develop effective mentors. The ultimate benefit of mentor effectiveness is increased effectiveness of beginning teachers, which has long-term payoffs for districts and their students. While much attention focuses on the retention of teachers as a measure of induction success, mentor teachers and their abilities have received little recognition. There appears to be no research that studies the impact of mentor preparation programs on specific mentoring abilities. Those developing mentor preparation programs in addition to those districts utilizing them have a need for additional measures of program effectiveness. This paper reports on the impact of induction on mentors as indicated through the measurement of mentor efficacy beliefs. The Mentor Efficacy Scale is included. (Contains 13 references.) (CCM)

The Impact of Training and Induction Activities upon Mentors as Indicated through Measurement of Mentor Self-Efficacy

by
Iris M. Riggs

THE IMPACT OF TRAINING AND INDUCTION ACTIVITIES UPON MENTORS AS INDICATED THROUGH MEASUREMENT OF MENTOR SELF-EFFICACY

Iris M. Riggs, California State University, San Bernardino

Induction programs are being developed and implemented in response to state policy, like that of California, which calls for support and assessment of new teachers. This is in response to the alarmingly high attrition rate of teachers. For California, the need for induction is made more complex by legislation which encourages decreased class size, thereby increasing the demand for teachers. In fact, it is predicted that in order to meet the demand for teachers, 20,000 new teachers are necessary. This is far beyond the annually credentialed 5,000 teachers.

Trends like that in California make induction a critical component of new teacher development. While a typically prepared new teacher benefits from support through the induction years, those new teachers who have circumvented the traditional preservice program in states' efforts to staff classrooms may be in more desperate need of support.

To address the need for induction, often times the mentor teacher is turned to as the support provider. Teachers seen as experts within the classroom are often selected to serve as mentors to new teachers at their own or other school sites. However, expertise within one's own classroom does not guarantee the ability to support others in their professional growth. Thus, mentor preparation programs are needed to develop mentoring abilities for the purpose of induction.

Developing mentor support can become a major financial investment for a school district. Inservice programs must be implemented to develop the mentors themselves. Additionally, in order to serve new teachers, the mentors must be released from their classroom duties through the use of substitute teachers or full time replacements.

To protect the investment of district funds and mentor time, mentor preparation programs must be able to develop effective mentors. The ultimate benefit of mentor effectiveness will be

more effective for beginning teachers--which has long term payoff for districts and their students.

While much attention focuses on retention of teachers as a measure of induction success, mentor teachers and their abilities have received little investigation. There appears to be no research which studies the impact of mentor preparation programs on specific mentoring abilities. Those developing mentor preparation programs in addition to those districts utilizing them have a need for additional measures of program effectiveness. This paper reports on the impact of induction on mentors as indicated through the measurement of mentor efficacy beliefs.

The Mentor Efficacy Scale (Riggs, 1997) was utilized within this study to measure the self-efficacy and outcome expectancy beliefs of mentor teachers. Investigation of teacher beliefs is vital to a more complete understanding of teacher behavior. Koballa and Krawley (1985) defined belief as "information that a person accepts to be true" (p.223). This is differentiated from attitude which is a general positive or negative feeling toward something. Attitudes may be formed on the basis of beliefs, and both attitudes and beliefs relate to behavior.

An example based upon Koballa and Crawley's (1985) description, can be made to demonstrate the relationship between beliefs, attitudes, and behavior with regard to the mentor teacher context. A mentor teacher judges his/her ability to be lacking in regard to new teacher support (belief) and consequently develops a dislike for interacting with assigned new teachers (attitude). The result is a teacher who avoids the mentoring process if at all possible (behavior). In other words, mentors with the highest mentor self-efficacy would predictably devote more time and attention to their mentoring responsibilities. This strong interrelationship of beliefs, attitudes, and behavior dictates the inclusion of belief measurement within mentor teacher research.

Theoretical Framework

Beliefs have been closely linked to behavior with respect to phobics and self-efficacy (Bandura, 1977). Bandura suggested that people develop a generalized expectancy about action-

outcome contingencies based upon life experiences. Additionally, they develop specific beliefs concerning their own coping abilities. Bandura called this self-efficacy. Behavior, for Bandura, is based upon both factors. Behavior is enacted when people not only expect certain behaviors to produce desirable outcomes (outcome expectancy), but they also believe in their own ability to perform the behaviors (self-efficacy).

Behavior might be predicted by investigating both types of expectancy determinants. Bandura (1977) hypothesized that people high on both outcome expectancy and self-efficacy would act in an assured, decided manner. Low outcome expectancy paired with high self-efficacy might cause individuals to temporarily intensify their efforts, but will eventually lead to frustration. Persons low on both variables would give up more readily if the desired outcomes were not reached immediately.

Related Research

When applied to the study of mentor teacher effectiveness, Bandura's theory might cause one to predict that mentors who believe new teachers can be positively influenced by effective mentoring (outcome expectancy beliefs) and who also believe in their own mentoring abilities (self-efficacy beliefs) should invest more time and effort with their new teachers than mentors who have lower expectations regarding their ability to influence new teacher growth (Gibson & Dembo, 1984). These beliefs are defined herein as mentor teacher efficacy beliefs and refer to the extent to which mentor teachers believe they have the capability to positively affect new teachers' professional growth.

These definitions have origins within the teacher efficacy belief literature. Within these works, two dimensions of teacher self-efficacy, that of Teaching Efficacy (Outcome Expectancy) and Personal Teaching Efficacy (Self-Efficacy) have been defined and utilized in subsequent studies. Several studies suggest that these teacher efficacy beliefs may account for individual differences in teacher effectiveness (Armor, Conroy-Osequera, Cox, King, McDonnel, Pascal, Pauley, & Zellman, 1976; Berman & McLaughlin, 1977; Brookover, Schweitzer, Schneider,

Beady, Flood, & Wisenbaker, 1978; Brophy & Evertson, 1981). Student achievement has also been shown to be significantly related to teacher efficacy belief (Ashton & Webb, 1982).

In previous studies, the dimension of "Personal Teaching Efficacy" has been used to predict teacher behavior with most accuracy (Ashton, Webb, & Doda, 1983). Yet, the dimension of Personal Teaching Efficacy as defined within the teacher efficacy belief literature differs from Bandura's original description of self-efficacy and outcome expectancy as distinct variables. Researchers have defined this dimension as a combination of both self-efficacy and subsequent contingencies between performance and outcomes (outcome expectancy). Some items inadvertently contained a combination of both dimensions. This confused the analysis, and resulted in a heterogeneous scale. If teachers score low on such a scale, the reason might be due to their belief that they cannot teach or their belief that students can not learn even given effective teaching or a combination of the two.

While teacher efficacy may be helpful when investigating teachers' beliefs about their abilities to influence student learning, a mentor specific instrument would be more informative when studying teachers with regard to mentoring. A specific measure of mentor teacher efficacy beliefs should be a more accurate predictor of mentoring behavior and thus more beneficial to the change process necessary to improve the induction process. It is also consistent with Bandura's (1981) definition of self-efficacy as a situation specific construct.

Purpose

The purpose of this study was to analyze the impact of a mentor training program on mentors involved within a state-funded teacher induction program.

Method

Mentors involved within the Inland Empire Beginning Teacher Support and Assessment Program (IE-BTSA) were a major part of the sample assessed (N= 95). These mentors completed a year-long intensive program to better support their induction of new teachers. Additional mentors, not involved in IE-BTSA, were also assessed (N=127). Although these mentors might

have taken extensive mentor training from their own district, they had not received any of the IE-BTSA training at the time their assessment.

The Mentor Efficacy Scale (MES) a self-report measure of 30 items was utilized to assess mentors' beliefs in regard to mentoring. The MES (see figure 1) consists of 2 subscales which measure both the outcome expectancy and the self-efficacy of mentors with regard to mentoring. Both scales demonstrate an adequate reliability: Self-Efficacy Subscale alpha= 0.87 while the Outcome Expectancy Scale alpha=0.77.

The MES asks mentors to reflect upon their mentoring abilities in 4 skill areas: personal, instructional, professional, and assessment. The first 3 of these areas are derived from current literature on mentoring (Field, 1994; Enz, 1992). Personal behaviors are defined as those which the mentor used to develop a trusting relationship and offer emotional support to the new teacher. Instructional behaviors refer to the mentor's ability to plan and implement instruction while also being able to reflectively analyze instruction and promote these same abilities in others. Professional abilities refer to the mentor's ability to promote understanding of teachers' responsibilities, especially as they relate to policies and procedures.

The final skill area included was that of assessment, which refers to the mentor's ability to effectively assess the new teacher's strengths and weaknesses through a variety of means. The mentor then shares the information garnered with the novice teacher in a manner which promotes his/her own reflection and goal setting. Related dialogue should result in a professional goal and specific action plans for both the mentor and the new teacher. The assessment area was included since funded BTSA projects are expected to train and support mentors in their use of assessment to promote growth of new teachers.

Response Format and Scoring

The MES utilizes a Likert scale format. The response categories are "strongly agree", "agree", "uncertain", "disagree", and "strongly disagree". Scoring was accomplished by assigning a score of five to positively phrased items receiving a "strongly agree" response, a

score of four to "agree" and so on throughout the response categories. Negatively worded items were scored in the opposite direction with "strongly agree" receiving a score of one. Item scores of each dimension were summed to calculate two separate scale scores for each respondent.

Results

IE-BTSA trained teachers were significantly more likely to have high self-efficacy with regard to their own ability to mentor (mean=77.32; t=5.50; $p < .00$) than were those teachers who had not participated in the training (mean=71.57). The outcome expectancy of these teachers did not differ.

When attention is focused on only those items which deal with assessment as a mentor skill, the difference between IE-BTSA mentors and mentors who have completed other trainings is quite evident. The following item results demonstrate a marked difference:

Item: I am able to use assessment to assist beginning teachers in observing their own professional growth.

	Mean	t value	p value
IE-BTSA mentors	4.32	7.97	< .00
Non-IE-BTSA mentors	3.50		

Item: I don't know how to use assessments to facilitate beginning teachers' own reflection for growth.

	Mean	t value	p value
IE-BTSA mentors	4.27	8.97	< .00
Non-IE-BTSA mentors	3.22		

Item: I'm not sure how to work with beginning teachers to identify a starting point for their professional growth.

	Mean	t value	p value
IE-BTSA mentors	4.36	5.57	< .00

Non-IE-BTSA mentors	3.67		

Item: When I observe a beginning teacher's lesson, I find it difficult to analyze what is happening.

	Mean	t value	p value
IE-BTSA mentors	4.31	3.50	< .00
Non-IE-BTSA mentors	3.98		

Conclusions

Results in this study indicate that a mentor trained within the IE-BTSA program is more likely to have higher self-efficacy with regard to their own ability to mentor new teachers. This is especially true with regard to their belief in their ability to use assessment as a means to promote new teachers' professional growth.

This outcome should cause others who are responsible for induction programs to seriously consider their own monitoring of their mentors' beliefs. Past research efforts in the area of self-efficacy have demonstrated this construct's relationship to performance. Within this study, we might predict that those mentors with the highest mentor self-efficacy would be most likely to spend time and effort on mentoring responsibilities, with more successful results.

Additionally, those who implement training programs for mentors or support providers could utilize the Mentor Efficacy Scale as one indicator of their program's effectiveness. One would hope that mentors completing a training program would have higher or at least comparable mentor self-efficacy to that with which they began the program.

The lack of difference in outcome expectancy beliefs of IE-BTSA and non IE-BTSA mentors is not alarming at this point. Other research efforts have also reported difficulties in impacting this construct through training efforts. While the self-efficacy sub-scale appears to be the most useful at this point in time, researchers are encouraged to continue assessment of mentor outcome expectancies. The result may be increased understanding of this belief area and its impact on mentor teacher behavior.

Acknowledgement

Note: The author wishes to acknowledge the support of the Inland Empire Beginning Teacher Support and Assessment team in this effort—Linda Childress, Ruth Sandlin, Linda Scott, Doug Mitchell, Pam Post, Tim Edge, and Robin Tuck.

References

Armor, D., Conroy-Osequera, P., Cox, M., King, N., McDonnel, L., Pascal, A., Pauley, E., & Zellman, G. (1976). *Analysis of the school preferred reading programs in selected Los Angeles minority schools* (Rep. No. 2007-LAUSD). Santa Monica, CA: Rand Corp.

Ashton, P. & Webb, R. (1982, March). *Teachers' sense of efficacy: Toward an ecological model.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Ashton, P., Webb, R., & Doda, C. (1983). *A study of teachers' sense of efficacy* (Final Report, Executive Summary). Gainesville, FL: University of Florida. (Eric Document Reproduction Service No. ED 231 833).

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1981). Self-referent thought: A developmental analysis of self-efficacy. In J. H. Flavell & L. Ross (Eds.), *Social cognitive development frontiers and possible future* (pp. 200-239). Cambridge, England: Cambridge University Press.

Berman, P. & McLaughlin, M. (1977). *Federal programs supporting educational change: Vol. 7. Factors affecting implementation and continuation* (Rep. No. 1589/7-HEW). Santa Monica, CA: Rand Corporation.

Brookover, W. B., Schweitzer, J. J., Schneider, J. M., Beady, C. H., Flood, P. K., & Wisenbaker, J. M. (1978). Elementary school social climate and school achievement. *American Educational Research Journal, 15*, 301-318.

Brophy, J. & Evertson, C. (1981). Student characteristics and teaching. New York: Longman. (Ed.), *Handbook of Multivariate Experimental Psychology.* Chicago: Rand McNally.

Enz, B. J. (1992). Guidelines for selecting mentors and creating an environment for mentoring. In T. M. Bey & C. T. (Eds.), *Mentoring: Contemporary Principles and Issues.* Holmes, Association of Teacher Educators.

Field, B. (1994). The new role of the teacher--Mentoring. In *Teachers as Mentors: A Practical Guide* (pp. 63-77). Falmer Press.

Field, B. (1994). The past role of the teacher--Supervision as Socialization. In *Teachers as Mentors: A Practical Guide* (pp. 46-62). Falmer Press.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569-582.

Koballa, T. R. & Crawley, F. E. (1985). The influence of attitude on science teaching and learning. *School Science and Mathematics, 85*, 222-232.

Figure 1.

The Mentor Efficacy Scale

1. If a new teacher is struggling, it is most often related to lack of effective mentoring.	SA A UN D SD
2. I have problems facilitating my beginning teachers' understanding of their responsibilities as new teachers.	SA A UN D SD
3. I can easily articulate the beliefs which underlie my teaching practices when I talk with beginning teachers.	SA A UN D SD
4. The inadequacy of a new teacher's instructional program can be improved through good mentoring.	SA A UN D SD
5. I'm not sure how to work with beginning teachers to identify a starting point for their professional growth.	SA A UN D SD
6. I can connect my beginning teachers with ample educational resources.	SA A UN D SD
7. When conferencing, I am able to promote the beginning	SA A UN D SD

teachers' own problem solving through good use of questioning.

8. When my beginning teachers have district-related concerns, I am able to facilitate their understanding and problem solving. SA A UN D SD

9. I wonder if I have the necessary skills to be an effective mentor. SA A UN D SD

10. The inadequacy of a beginning teacher's management system can generally be addressed through good mentoring. SA A UN D SD

11. I am able to use assessment to assist beginning teachers in observing their own professional growth. SA A UN D SD

12. I can use my knowledge of the development nature of teaching in my support of beginning teachers. SA A UN D SD

13. I am continually finding better ways to be a mentor to my beginning teachers. SA A UN D SD

14. When conferencing with beginning teachers, I usually welcome their questions. SA A UN D SD

15. When I observe a beginning teacher's lesson, I find it it difficult to analyze what is happening. SA A UN D SD

16. When beginning teachers talk with me, I use good listening skills. SA A UN D SD

17. New teachers' instructional effectiveness is directly related to their mentors' coaching abilities. SA A UN D SD

18. I don't know how to use assessments to facilitate beginning teachers'own reflection for growth. SA A UN D SD

19. Mentors are generally responsible for the professional growth of their new teachers. SA A UN D SD

20. I am not very effective in monitoring my beginning teachers' professional growth. SA A UN D SD

21. If a principal comments that the new teacher is well-acquainted with school policies an procedures, it would SA A UN D SD

probably be due to the performance of the teacher's mentor.

22. I struggle when I try to acknowledge the accomplishments of my beginning teachers. SA A UN D SD

23. When conferencing with my beginning teachers, I can communicate how our consultations have promoted my own professional growth. SA A UN D SD

24. I have difficulty managing my time so that I am available to my beginning teachers. SA A UN D SD

25. When a beginning teacher does better than usual in lesson planning, it is often because the mentor exerted a little extra effort. SA A UN D SD

26. Effective mentoring can help beginning teachers make developmental progress. SA A UN D SD

27. A new teacher's understanding of school policy can be developed through good mentoring. SA A UN D SD

28. Every new teacher can make incremental steps toward being a professional, given effective mentoring. SA A UN D SD

29. If new teachers are unaware of their accomplishments, it may be due to inadequate mentoring. SA A UN D SD

30. Mentors haven't done their job if their assigned new teachers have little understanding of school procedures. SA A UN D SD

Riggs, May, 1997

MES Scoring Instructions

Step 1. Item Scoring: Score items as follows: Strongly Agree = 5; Agree = 4; Uncertain = 3; Disagree = 2; and Strongly Disagree = 1.

Step 2. The items listed below must be scored in reverse. Reverse scoring of the following items will result in high scores for those high in self efficacy and outcome expectancy beliefs and low scores for those low in self efficacy and outcome expectancy beliefs.

Item 2	Item 18
Item 5	Item 20
Item 9	Item 22
Item 15	Item 24

Step 3. Items for self-efficacy and outcome expectancy beliefs are randomly scattered throughout the MES. The following items are designed to measure beliefs of self efficacy:

Item 2	Item 13
Item 3	Item 14
Item 5	Item 15
Item 6	Item 16
Item 7	Item 18
Item 8	Item 20
Item 9	Item 22
Item 11	Item 23
Item 12	Item 24

The following items are designed to measure beliefs of outcome expectancy:

Item 1	Item 25
Item 4	Item 26
Item 10	Item 27
Item 17	Item 28
Item 19	Item 29
Item 21	Item 30

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
[Image] [Image]
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

Reproduction Release
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: The Impact of Training and Induction Activities upon Mentors as Indicated through Measurement of Mentor Self-Efficacy

Author(s):

Corporate Source: Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
[Image]	[Image]	[Image]
Level 1	Level 2A	Level 2B
[Image]	[Image]	[Image]
Check here for Level 1 release, permitting reproduction and dissemination in	Check here for Level 2A release, permitting reproduction and dissemination in	Check here for Level 2B release, permitting

microfiche or other ERIC microfiche and in reproduction and
archival media (e.g. electronic media for dissemination in
electronic) and paper ERIC archival collection microfiche only
copy. subscribers only
Documents will be processed as indicated provided reproduction quality
permits.
If permission to reproduce is granted, but no box is checked, documents
will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Iris M. Riggs Printed Name/Position/Title: Iris M. Riggs, Associate Dean, Teacher Educ.

Organization/Address: California State University 5500 Univ. P Kway San Bernardino, CA 92382

Telephone: 909 880 5614 Fax: 909. 880. 7522

E-mail Address: iriggs@csusb.edu Date: 7/14/00

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598
Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)