

Individual and Contextual Sources of  
Beginning Physical Education Teacher Efficacy

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The retention of quality teachers has become a critical issue facing the American educational system. Unfortunately, various estimates suggest that 30-50% of teachers leave the profession within the first five years (Heyns, 1988; Ingersoll, 2001, 2002; National Commission on Teaching and America's Future, 1999; Schlechty & Vance, 1981, 1983; Smith & Ingersoll, 2004). To examine the issue of beginning teacher retention, educational researchers have focused on identifying ways of enhancing beginning teacher induction experiences (Darling-Hammond, 2003; Ingersoll 2000; McGaha & Lynn, 2000). For the most part beginning teacher induction has been studied in traditional classroom settings. However, little empirical work has been conducted within the physical education setting and on particular in the sources of teaching efficacy in the physical education setting.

Both individual and contextual factors influence beginning teacher induction experiences. From an individual perspective researchers have investigated teaching efficacy as one potential influence on beginning teacher induction and retention. In this study, self-efficacy was measured by examining an individual physical education teacher's level of confidence in their ability to be successful at a variety

of given teaching task (e.g., classroom management). Bandura contended that there are several consequences to the development, or lack of development, of high self-efficacy judgments about one's teaching (Bandura 1986, 1991). Teachers' efficacy beliefs are thought to affect both their general orientation toward the educational process as well as their ability to teach specific instructional activities (Bandura, 1986, 1991). Bandura (1991) contended that those teachers with low efficacy are more likely to take a pessimistic view of students' motivation, emphasize control of the classroom behavior through strict regulations, and rely on negative sanctions to perform a required task. Melby (1995) found that individuals with a low sense of teaching efficacy have greater classroom challenges, were stressed by students' misbehavior, were pessimistic about students, resorted more to punishment to change behavior, and reported that if they had to do it all over again, they would not chose teaching as a profession.

High efficacy is believed to predict further involvement in an activity while lower levels of efficacy are correlated with avoidant behavior or removal from that setting (Woolfolk-Hoy & Burke-Spero, 2005). It is important to understand the various sources that may influence the development of self-efficacy in beginning physical education teachers as they learn to navigate their unique environment and develop perceptions of ability and confidence about their teaching responsibilities.

In terms of sources of efficacy, Bandura (1986) identified that previous mastery experiences, modeling, encouragement or positive feedback, and physiological feedback would influence the development of task-specific efficacy.

Contextual factors were investigated in this study through an examination of the teachers' perceptions of the role and effectiveness of their assigned mentor. In previous literature these programs have been linked to improving teacher performance (Darling-Hammond, 2000), providing emotional support (Glickman, 2003), and helping to increase retention rates of beginning teachers (Moir, 2003).

The investigation of individual and contextual sources of teaching efficacy in physical education has been limited. This study sought to develop an in-depth understanding of the individual and contextual factors that influence beginning physical education teacher's self-perceptions regarding their teaching efficacy. The individual factors were represented by sources of teaching efficacy while contextual factors were examined through the perceived role and effectiveness of their mentor. Specifically the purpose of this study was twofold; first, to identify the sources of teaching efficacy identified by beginning physical education teachers; second, to identify the beginning physical education teachers perceptions of the role and effectiveness of their mentor.

### *Participants*

The participants were a sample of 15 males and females who had completed between one and three years as a beginning teacher with primary responsibilities in k-12 physical education.

### Procedures

#### *Beginning teacher interviews*

The 15 beginning teachers who confirmed their willingness to participate in one-hour, audio-taped interview conducted in-person or by phone, were sent a copy of an informed consent form. As the interviews were completed, the participants were asked to complete a teacher efficacy scale to rate themselves on their perceptions of teaching efficacy.

### Instruments

#### *Teaching Efficacy Scale*

An adapted version of the Gibson & Dembo (1984) Teacher Self Efficacy Scale (TES) was completed at the end of the teacher interview in order attain a measure of teaching efficacy from which to help interpret the interview data. According to Gibson and Dembo (1984), low efficacy scores are considered scores in the lowest scores ranging from 1-2. Medium or moderate scores were represented within the range of 3-4. High efficacy scores were reflective of a 5-6 range.

### *Interview Guide*

Each beginning teacher interview consisted of three sections. The first main section was intended as a warm-up section and included asking the participants general questions such as how they would describe themselves as a teacher, what changed from the beginning of this school year until the present, and how well prepared they were to take on their role as a teacher in their first year.

The second section of the interview contained questions that focused on the sources of perceived influence on teaching efficacy based on the work of Bandura (1986) and Gibson and Dembo (1984). Those sources include mastery experiences, modeling, verbal encouragement, and physiological feedback. Participants' responses were followed by elaboration and clarification probes where deemed appropriate by the researcher. The third section focused on the relationship with the mentor. Questions focused on beginning teachers' perceptions of the role and effectiveness of their mentor, specifically in relation to the development of their teaching efficacy.

## Analysis and Results

### Interview Analysis

An inductive content analysis served as the primary data analysis for the self-efficacy and the socialization experiences derived from the interview data

(Patton, 1990). The first step in the content analysis was the verbatim interview transcription of the interviews. Following the transcription, the primary researcher worked independently to read the transcripts to identify meaning units or quotes from the full transcription. The quotes formed the basis of the lower and higher order themes (Lincoln & Guba, 1985; Patton, 1990). Specifically, quotes of similar meaning were combined into lower order themes and given a label to represent their common meaning (higher order themes).

## Results

### *Teaching efficacy scores*

The task of creating effective classrooms rests heavily on the individual teaching abilities and efficacy of teachers (Gibson & Dembo, 1984). Teaching efficacy can be derived from previous experience, modeling, verbal encouragement/feedback, and physiological feedback (Bandura, 1986; 1991). Results from the Gibson and Dembo Teacher Efficacy Scale revealed that the teachers in this study all had moderate teaching efficacy, with an average score of 4.17/10. Importantly, this homogeneity of teaching efficacy scores did not allow for comparison across levels of teaching efficacy.

### *Sources of Teaching Efficacy*

Several sources of influence in the teachers' daily interactions had both positive and negative influence on their self-efficacy for teaching. The results revealed that the Sources of Teaching Efficacy higher-order theme included the lower order themes labeled; *Learn as you Go*, *Preferred Feedback*, *Physical Demands*, and *Observing Master Teachers*.

Together these sources impacted the beginning teachers' efficacy as well as overall induction experiences. *The Learn as you Go theme* reflected mastery experiences that built their efficacy while feeling as though they were learning as they went alone had a negative effect on their efficacy. Several teachers with moderate self-efficacy discussed how their level of confidence was developed during their college preparation. However the reality shock of teaching numerous students with a lack of necessary equipment as well as discipline problems provided challenges to their self-efficacy. The theme *Preferred feedback* reflected feedback including encouragement and discouragement from their mentor and principle. Mentor feedback provided a source that both positively and negatively influenced their teaching efficacy. Specifically, the mentors who provided specific encouragement about teaching strategies were discussed in terms of having a positive effect on teaching efficacy whereas general encouragement without specific suggestions had no effect on their teaching efficacy. Negative feedback was

discussed by two teachers. One teacher had a fear of being fired in his first year as his principle and mentor where as he said “really hard” on him about lesson plans and other planning aspects of his teaching. Bandura’s physiological feedback sources was reflected in the themes labeled *Physical Demands* which represented the different and unique aspects of teaching physical education compared to their colleagues in other content areas. Specifically, the physical demands of standing all day, being physical while teaching, as well as coaching at the end of the teaching day made several teachers question whether they had what they needed to stay in teaching. Finally, the availability of a master teacher in terms of having someone to observe in a teaching situation, with multiple years of experience, provided a positive influence on teaching efficacy. Contrary, several teachers had mentors that were not physical education teachers and they lacked a positive teaching model to observe.

#### *Contextual factors*

The lower order themes derived from the mentor effectiveness data included the following; *Mentors’ Content Area, Time Availability, and Mentor Training*. Not all mentors were helpful due to being trained in different content areas. Bob shared, “My mentor taught me a lot about paperwork, grades, attendance, etc., just not so much about different ways to teach inPE.” Practical implications include the potential need to address the mentor selection based on content area. The beginning



teachers in this study shared some of their perceptions about qualities and behaviors of an effective mentor. They described an effective mentor as one who makes time for the beginning teacher, one who takes time to observe the beginning teacher in his/her classes, and gives him/her contingent and consistent feedback based on the observed instructional techniques. The mentees were aware of the effectiveness of the mentor's training. Those mentors who had little or no training were discussed as having little or no impact on the teacher's efficacy. However, regardless of training the emotional support provided by mentor was appreciated. Specifically, the teachers highly valued the informational and emotional support provided by the mentors in terms of feeling efficacious about the general and daily tasks of becoming a teacher. Teachers built efficacy when they had a mentor who spent time with them over their first and sometimes second year. Those who had limited connection to their mentor described feeling a lack of certainty especially in their first six months.

### Conclusion

The examination of the induction experiences of beginning physical education teachers in this study focused on both individual and contextual variables. Previous research has provided evidence that the physical education context is unique in terms of isolation, marginalization, and overall perceived value within the

greater school community. These unique factors interact to form the context of the beginning physical educator's induction experiences.

It is in the examination of the self-perceptions of the beginning physical education teacher that we may begin to better understand the role of induction assistance as well as the role and effectiveness of the mentor specific to the physical education context. Due to the uniqueness of the physical education setting and the curriculum these teachers built most efficacy though having mastery experiences. Some of those experiences came from assistance from mentors while most figured it out on their own. Further exploration and research are required to verify or refute the assumed effectiveness of mentoring programs.

#### Future research

Future investigations should include the mentor's perspective on his/her own mentoring and teaching efficacy. Specifically, to understand the mentor-mentee relationship through the dual perspectives of both individuals engagement in the beginning teachers' induction experiences is warranted. Finally, there is little evidence that mentoring during these beginning years has any effect on student achievement (Patton et al., 2005). To this point future research could also investigate the influence of formal mentoring on student achievement in the mentee's classes. Thus the ability of a mentor to build another's efficacy is not a

given, but rather, could depend on a variety of factors such as the mentor's own self-perceptions of teaching or mentoring ability, their experience with the subject matter of the beginning teacher, and the initial motivation for engaging in the mentoring process.