

Concerns of Preservice Physical Education Teachers Participating in an Early Field Experience

Shawna Young

Abstract

The purpose of this study was to examine the frequency of concerns by type (self, task, and impact) of preservice physical education teachers participating in an early field experience. Participants (n = 52) taught three physical education lessons in a junior high school. Following each teaching episode, participants wrote concerns in their teaching journals. McBride's (1993) TCQ-PE served as a code guide for tallying journal concern statements by type. Results for separate one-way repeated-measures ANOVA with Bonferroni post hoc tests indicated a statistically significant reduction in frequency of self concerns across teaching episodes and a statistically significant increase in impact statements across teaching episodes. Independent-samples t tests indicated a statistically significant difference between genders in frequency of self concerns, with females logging a greater number than males. Results suggest that preservice physical education teachers participating in an early field experience can shift some of their concern from self to that of impact.

Frances Fuller (1969) conducted foundational research in the area of teacher concerns that led to her theoretical three-stage model of teacher development, characterizing a shift in concerns as teaching experience is gained. This three-stage model describes a progression

Dr. Shawna Young teaches at California State University Stanislaus.

of novice teachers, whose primary concerns shift from self (i.e., related to survival, such as class control, being observed/evaluated, and fear of failure), to those of task (i.e., related details such as class materials, numbers of students, and time constraints), to those of impact (i.e., outcome-oriented concerns, related to individualization of instruction, intellectual and emotional growth, and engaging all students) as experience is gained.

Much research has been conducted examining the applicability of Fuller's stages of concern model in various teacher-discipline contexts. While the model has been demonstrated in several studies to be applicable within disciplines that rely primarily on classroom-based instructional activities (Burden, 1982; Griffin-Jeansonne & Caliste, 1984; Katz, 1972; Ralph, 2004; Reeves & Kazelskis, 1985; Watzke, 2003; Yourn, 2000), there have been varying results with respect to the applicability of the model in the discipline of physical education, a relatively unique discipline that includes teaching within the dynamic cognitive, affective, and psychomotor domains. Using the Teacher Concerns Questionnaire (TCQ) (George, 1978), the original instrument based on Fuller's three-stage model designed to assess the concerns of preservice and inservice teachers, several studies have demonstrated low consistency of the task scale with a physical education population (Behets, 1990; Boggess, McBride, & Griffey, 1985; McBride, 1986; McBride, Boggess, & Griffey, 1986). Prompted by these findings suggesting that Fuller's three-stage model may not be applicable within the context of physical education as it relates to the task concern, McBride (1993) conducted research to identify task-related concerns more applicable to physical education. McBride's intent was to adapt the original TCQ and design an instrument more valid for assessing the concerns of physical educators.

As a result of his 1993 study, McBride developed the TCQ-PE (see Figure 1), an adaptation of the TCQ for the physical education setting that replaced the original five TCQ items related to task concerns. For the purpose of establishing content validity, experienced physical education teachers were enlisted for the identification of common task concerns within the context of physical education, and another sample of experienced PE teachers

**Read each statement, then ask yourself:
WHEN I THINK ABOUT MY TEACHING, HOW MUCH AM I CONCERNED
ABOUT THIS?**

- 1 = Not Concerned**
- 2 = A Little Concerned**
- 3 = Moderately Concerned**
- 4 = Very Concerned**
- 5 = Totally Preoccupied**

Circle the number corresponding with your concern level for each statement below.

- | | | | | | |
|---|---|---|---|---|---|
| 1. Lack of continuity in the yearly PE program..... | 1 | 2 | 3 | 4 | 5 |
| 2. Lack of administrative support for the PE program..... | 1 | 2 | 3 | 4 | 5 |
| 3. Doing well when a supervisor is present..... | 1 | 2 | 3 | 4 | 5 |
| 4. Meeting the needs of different kinds of students..... | 1 | 2 | 3 | 4 | 5 |
| 5. Lack of a consistent or equitable grading policy in PE..... | 1 | 2 | 3 | 4 | 5 |
| 6. Diagnosing student learning problems..... | 1 | 2 | 3 | 4 | 5 |
| 7. Feeling more adequate as a teacher..... | 1 | 2 | 3 | 4 | 5 |
| 8. Challenging unmotivated students..... | 1 | 2 | 3 | 4 | 5 |
| 9. Being accepted and respected by professional persons..... | 1 | 2 | 3 | 4 | 5 |
| 10. Working with class sizes that are too large..... | 1 | 2 | 3 | 4 | 5 |
| 11. Guiding students toward intellectual and emotional growth.... | 1 | 2 | 3 | 4 | 5 |
| 12. Whether each student is getting what he needs..... | 1 | 2 | 3 | 4 | 5 |
| 13. Getting a favorable evaluation of my teaching..... | 1 | 2 | 3 | 4 | 5 |
| 14. Poor/inadequate scheduling of physical education classes..... | 1 | 2 | 3 | 4 | 5 |
| 15. Maintaining the appropriate degree of class control..... | 1 | 2 | 3 | 4 | 5 |

PLEASE USE THIS SPACE FOR ANY ADDITIONAL COMMENTS

Figure 1. Adapted from “The TCQ-PE: An Adaptation of the Teacher Concerns Questionnaire Instrument to a Physical Education Setting” by R.E. McBride, 1993, *Journal of Teaching in Physical Education*, 12, p. 194. Champaign, IL: Human Kinetics.

averaging 10 years experience was included in the final testing of the instrument. Reliability results of a test-retest procedure resulted in an intraclass correlation coefficient of 0.94, and individual scale reliability coefficients of the following: self = 0.93, task = 0.94, and impact = 0.89.

Since the publication of McBride's instrument, there have been two published studies, with varying results, that have utilized the TCQ-PE to assess the concerns of physical education teachers. In 1996, Conkle conducted a study of 265 inservice physical education teachers in Alabama ranging in experience from one to 34 years. Conkle's results suggest that the TCQ-PE is valid and reliable for assessing the concerns of physical educators, as a shift in concern with experience from self to impact was observed among physical education teachers. Meek and Behets (1999) conducted the second published study utilizing McBride's TCQ-PE instrument. This study included 176 British and Belgian preservice physical education teachers, and 232 Belgian inservice teachers, whereby confirmatory factor analysis was conducted. Meek and Behets' results suggest that the TCQ-PE is not applicable for the assessment of physical education teacher concerns in Britain and Belgium. Low goodness of fit levels in all three domains, self, task, and impact, suggest that the TCQ-PE is not applicable for the assessment of physical education teacher concerns in Britain and Belgium.

Fuller's seminal work and the aforementioned studies related to the concerns of teachers are important, particularly as they relate to the training of teachers. Assuming the orientation of a cognitive interactionist (Bigge & Shermis, 2004), it can be beneficial to develop an awareness of preservice teachers' concerns, as they may closely be related to their personal learning goals and the motivation to achieve them. The cognitive interactionist perspective serves as a justification for wanting to know the concerns of preservice teachers, so that they can be addressed in preservice teacher training, but also so that they can be linked to other important learning goals that the students may not see as important, or be concerned with, at that early point in professional development. As perceived meaningfulness and relevancy may influence motivation to learn (Bruner, 1990), identifying preservice teachers' concerns may help teacher trainers guide them along a more expedient path toward concerns of impact and away from concerns of self.

Method

Purpose and Research Questions

No studies have yet been conducted that examine the shift of concerns of preservice physical education teachers prior to the student teaching experience. Therefore, the purpose of this study was to examine the concerns of preservice physical education teachers participating in an early field experience (EFE) in an undergraduate physical education teacher-training course. During the course, students taught individually three physical education lessons in a public junior high school. The following two questions guided the research:

- Question 1: Is there a difference in the frequency of concern statements (self, task, impact) between teaching episodes (One, Two, Three) in a physical education preservice teacher EFE?
- Question 2: Is there a difference in the frequency of concern statements, overall, and by type (self, task, impact) between female and male preservice physical education teachers participating in an EFE?

Participants

The study included 52 participants, university students (23 female, 29 male) in the fourth year of an undergraduate physical education teacher training program in California. The participants were enrolled in a senior-level physical education pedagogy course, a degree requirement for those physical education students preparing to enter a 5th-year teacher credential program. All students enrolled in the course were provided with an informed consent form that described the study. Over a period of three years, all 61 students enrolled in the course were provided with a consent form, which 52 signed, agreeing to participate.

Data Collection

Students enrolled in the pedagogy course underwent nine weeks of classroom-based instruction related to physical education pedagogical theory and methods, followed by a three-week field experience, and finally a one-week culminating debriefing seminar.

The class met three days per week, Monday, Wednesday, and Friday. Each student in the class taught one lesson per week at a collaborating public junior high school, totaling three lessons per participant. After each of a participant's three teaching episodes, the participant wrote responses to questions provided by the instructor in his/her teaching journal, a required course assignment. Participants were informed at time of consent that journals were not read for content prior to posting of course grades.

On the field experience days on which an individual participant was not teaching, the participant observed a peer and coded teacher and student behaviors, a separate course assignment. This separate assignment included two coding tasks, one on each non-teaching day. One coding task was a time analysis, whereby student-wait time, transition time, management time, activity time, and receiving-information time was tracked for the duration of the lesson. The second coding task was a feedback analysis, whereby feedback statements were tallied according to their characteristics: positive, corrective, general, and specific. This coding assignment should be considered a confounding variable, and contributes to the limitations of the study.

Responses in the participant journals were used to examine concerns of these preservice physical education teachers participating in an EFE. Among several other journal questions that the participants were required to respond to immediately following lesson delivery, the boundaries of data analysis (Miles & Huberman, 1994) were limited to responses to the following two journal questions, as they were most relevant to the research questions: 1) What were you concerned about as you prepared for your lesson?, and 2) What are you concerned about now?. The other journal questions that students responded to, and were not used for data analysis in this study, included: 1) What worked well in this lesson –how and why?, 2) What would you change if you were to do this lesson again – how and why?, and 3) Describe the most important thing(s) you learned from conducting this lesson.

Data Analysis

In order to utilize written journal responses for quantitative analyses (Miles & Huberman, 1994), a qualitative codebook

(Creswell, 2009) was developed using a combination of predetermined codes and emerging codes as indicators of each of the three types of concerns: self, task, and impact. Questions from McBride's TCQ-PE were used as a predetermined code guide for labeling journal response statements as either self, task, or impact concern statements. Items 3, 7, 9, 13, and 15 relate to self, items 1, 2, 5, 10, and 14 relate to task, and items 4, 6, 8, 11, and 12 relate to impact. Statements present in the journals that did not match McBride's TCQ-PE items were categorized, added to the codebook, and identified as either self, task, or impact concern statements. The following are the most common types of statements that emerged and were added to the codebook under the corresponding category:

Self: anxiety; feeling underprepared

Task: equipment organization; time pressure for set-up; time pressure for lesson delivery; safety issues (e.g., field conditions); resource concerns (e.g., enough equipment and space); environmental factors (e.g. wind, sun, rain, heat, cold)

Impact: Are students moving/active most of the time? Are students able to play the game successfully? Are the students engaged/having "fun"? Is my feedback being incorporated—and is it helpful? Were my verbal explanations and cues effective—did students get it? Were my visual demonstrations effective—did students get it?

Statements that were not related to teaching concerns were considered to be outside of the boundaries of the study, and therefore were not coded.

Two reliability measures (inter-coder reliability and intra-coder reliability) were employed to maximize clarity in code definitions and to minimize code drifting, as recommended by Miles and Huberman (1994). To maximize clarity of code definitions, a second coder was employed so that inter-coder reliability could be measured. After the principal investigator explained code definitions to the

second coder, each coder coded five journals separately, using the TCQ-PE as the predetermined code guide, and other codes added to the codebook as established from preliminary coding by the principal investigator. Inter-coder reliability was calculated using the following formula (Salkind, 2008): number of agreements/number of possible agreements. After the first round of coding the five journals separately, the two coders had an inter-coder reliability of 64%. The two coders then discussed discrepancies in coding, and attempted to reach consensus on coding technique. The most common discrepancy between coders was related to whether a series of sentences counted as a single statement or multiple statements, as opposed to which type of concern a statement was, thus causing differences in number of concern statements coded. Following discussion and agreement on coding guidelines, the coders coded an un-coded copy of the same five journals three days later and arrived at an inter-coder reliability score of 88%. The second coder was used in a third round of coding, whereby a new set of five journals was coded a week later, once the primary investigator had coded 35 journals. This new set of five journals was coded independently by the two coders, resulting in an inter-coder reliability score of 84%.

After the first two rounds of independent coding with the second coder were completed, intra-coder reliability was measured. This was accomplished by the principal investigator coding the first 10 journals, then three days later, coding an un-coded copy of the same 10 journals again. Using the same formula to calculate inter-coder reliability, the intra-coder reliability score was 96%.

Once all 52 journals were coded by the principal investigator, the data were analyzed using Predictive Analytics SoftWare (PASW) Statistics, version 17. To examine Question 1, three separate one-way within-subjects repeated measures analysis of variance (ANOVA) tests were used with a Bonferroni post hoc test for each dependent variable. The dependent variables were frequency of concern statements (self, task, or impact), and the factor was teaching episode (One, Two, and Three). Because there were greater than 30 participants, the normality of distribution assumption was met. However, because the participants were selected through purposive sampling, the assumption of random sampling was not

met, and should be considered a limitation of the study, reducing the generalizability of these results.

To examine Question 2, independent-samples t tests were conducted to study differences between genders in frequency of concern statements by type, as well as overall. The assumption of a normal distribution was met because there were more than 30 participants. The Levene's test for equality of variance indicated similar variance in self, task, impact, and overall concern distributions. However, because the sample was selected purposively, the assumption of a random sample was violated, thus should be considered a limitation, which reduces the generalizability of these results.

Results

Question 1

Means and standard deviations for frequency of concern statements for each teaching episode are presented in Table 1. Results for the ANOVA indicated a statistically significant difference in the frequency of self concerns across teaching episodes with a weak to moderate effect size, Wilks' $\Lambda = .65$, $F(2, 50) = 13.34$, $p < .05$, partial $\eta^2 = .35$. The Bonferroni post hoc test indicated a statistically significant reduction in frequency of self concerns from Teaching Episode One ($m = 6.52$), to Teaching Episode Two ($m = 5.92$), to

Table 1

Mean Frequency of Concern Statements for Each Teaching Episode

	Episode One	Episode Two	Episode Three
Type of concern	M (SD)	M (SD)	M (SD)
Self	6.52 (3.67)	5.92 (3.33)	5.48(3.01)
Task	6.02 (2.61)	6.48 (2.53)	6.31 (2.24)
Impact	1.94 (1.69)	2.17 (1.75)	2.48 (1.63)

Teaching Episode Three ($m = 5.48$), with an average reduction of 1 less self concern statement between the first and last teaching episode. While a linear reduction in self concerns was observed across teaching episodes, a linear change was not observed for task concerns. However, results for the ANOVA indicated a statistically significant difference in the frequency of task concerns between teaching episodes with a minimal effect size, Wilks' $\Lambda = .87$, $F(2, 50) = 3.61$, $p < .05$, partial $\eta^2 = .13$. The Bonferroni post hoc test indicated that the only shift in task concerns of any statistical significance was an increase from Teaching Episode One ($m = 6.02$) to Teaching Episode Two ($m = 6.48$). A linear increase in impact statements across teaching episodes was observed. Results for the ANOVA indicated a statistically significant difference in the frequency of impact concerns across teaching episodes with a weak effect size, Wilks' $\Lambda = .73$, $F(2, 50) = 9.44$, $p < .05$, partial $\eta^2 = .27$. The Bonferroni post hoc test indicated a statistically significant increase in impact statements from Episode One ($m = 1.94$) to Episode Three ($m = 2.48$).

Question 2

Results of the independent-samples t tests indicated no statistically significant difference between genders in task and impact concerns. However, there was a statistically significant difference found between genders in self concerns ($t_{(50)} = 4.33$, $p < .001$), with females logging a greater number of self concern statements than males, and accounted for the majority of the difference in overall concerns between genders, also found to be statistically significant ($t_{(50)} = 4.42$, $p < .001$). The effect sizes, $d = 1.21$ for the difference between genders in self concerns, and $d = 1.22$ for the difference between genders in overall concerns, are both large, which suggests that gender plays a role in frequency of self concern statements logged in journals of preservice teachers participating in an EFE. See Table 2 for frequency of concern statements according to gender.

Coding Observation

During the categorization and coding of the data to enable statistical analyses, an interesting and important observation was

Table 2*Mean Frequency of Concern Statements According to Gender*

	Self	Task	Impact	Total
Gender	M (SD)	M (SD)	M (SD)	M (SD)
Female	23.61 (8.60)	20.26 (6.90)	6.13 (5.00)	50. (10.26)
Male	13.41 (8.29)	17.66 (7.07)	6.97 (4.76)	38.03 (9.24)

Note. Female $n = 23$; male $n = 29$.

noted. The task statements were the most difficult to code. There were relatively few matches between student task concerns stated in the journals and task item statements in the TCQ-PE. For task concern statements, of 978 total coded statements identified in the student journals, 311 matched with one of the TCQ-PE task item statements (Item #10 – relating to class size), and the remaining were identified as emergent task-related statements in the student journals. For self and impact statements, however, there were far greater matches between student statements and item statements in the TCQ-PE. Of 932 total self statements, 714 journal statements matched the TCQ-PE, and of 343 total impact statements, 222 matched the TCQ-PE guide.

Discussion

Shift in Concerns

It is noteworthy that within three teaching episodes of an EFE, there was a statistically significant reduction in frequency of self concern statements, and a statistically significant increase in frequency of impact statements, though with a weak to moderate effect size. Three possible contributors/explanations, in addition to natural development that may occur among teachers, are offered for consideration.

Course content. First, it may be that the emphasis of the course influenced the concerns logged in the student journals. During the first nine weeks of the course, there was strong emphasis on lesson design and pedagogical methods that facilitate high movement time, on skill development with ample opportunity for practice, on meaningful and specific feedback delivery, and on connections between skills/activities included and corresponding learning objectives. The course content was drawn heavily from Darst and Pangrazi (2006), Kelly and Melograno (2004), Rink (2006), and Siedentop and Tannehill (2000). Given what is known about attention focus and the structure and function of memory (Magill, 2011), it could be that, given the temporal relationship between the classroom component of the course and the succeeding field experience, the exigency of these elements as presented in the first nine weeks may have influenced what participants were concerned with at the time of the EFE, and/or influenced what participants thought they should be concerned with and therefore included in the journals (despite the disclosed protocol of delayed journal reading by the instructor/principal investigator until after grades were posted).

Coding assignment. Also related to what is known about attention and memory (Magill, 2011), another factor that may have influenced a relatively early, though modest, shift away from self concerns during the EFE is the coding requirement that occurred on the days that participants were not teaching. This coding assignment involved two coding tasks, modified from Siedentop & Tannehill (2000), whereby a time analysis and a feedback analysis of a class peer was conducted. This responsibility between the teaching episodes may have influenced what the participants were concerned with during the EFE, and may have contributed to a shift away from self concerns to an increased focus on task and impact concerns, as the coding relates to those constructs. The influence of this coding assignment on concerns was not measured, and should be considered a confounding variable.

Journal writing. A third possible contributor to the shift away from self concerns toward impact concerns in this EFE may be related to the course requirement of journaling. The reflection that occurred during journal writing following each teaching episode may have fostered participants' shift in attention toward more

outcome-oriented concerns, with questions relating to elements of the lesson that worked well and elements that they would change. Dewey (1933) advocated the use of reflective thinking in teacher training, a habit he felt should be emphasized for addressing the challenges of teaching, as it suspends conclusions and stimulates inquiry for evidence of the most effective approach. It has been demonstrated in the physical education setting to have a positive effect on the development of preservice physical educators (Sebren, 1995). One of the objectives of Sebren's study was to examine the impact of reflection on preservice teachers' development. Through analysis of small group reflection sessions, interviews, and journals maintained during an EFE, it was found that reflection influenced preservice teachers' managerial decisions, subject matter and lesson planning decisions, as well as decisions about language and actions in relation to the children's perspectives. Because of the possible influence that the journaling task may have had on teacher concerns, it should be considered a confounding variable, thus a limitation of the study.

Gender Difference in Frequency of Self Concerns

Another noteworthy finding relates to the difference in frequency of self concerns between genders. Females logged significantly greater self concerns than did males. This finding is in line with other research that demonstrates differences between genders in relation to self concept. In a study that examined differences in gender in several aspects of psychological well-being, including self concept, men scored significantly higher on the self sub-scale, indicating that they perceive themselves as better equipped to cope with stressful situations (Roothman, Kirsten, & Wissing, 2003). This finding is also aligned with other research results suggesting that men have higher levels of self-reported ego (Bond, Kwan, & Li, 2000; Crose, Nicholas, Gobble, & Frank, 1992). It may be worthwhile to investigate possible contributors to this difference. Greater knowledge about this gender difference related to the self-concept may help teacher trainers more effectively support the development of both male and female preservice teachers.

TCQ-PE and the Task Construct

A third and interesting finding occurred during the data analysis phase of the study. This finding relates to the relatively low match rate between student concerns related to the task construct as articulated in the journals and the task items on the TCQ-PE. While the TCQ-PE served as the initial coding guide to direct the labeling of student concern statements in the student journals, there was relative ease in matching self and impact statements between student statements and the corresponding TCQ-PE item statements. With respect to the task construct, however, there were relatively few student statements that clearly matched task items in the TCQ-PE. This necessitated utilizing emergent themes to identify task-related statements. This exercise has shown to be especially valuable, as it supports the suggestion made by Meek and Behets (1999) that there may be a need for a separate instrument for the assessment of preservice physical education teachers, particularly in the area of task concerns. The task concerns as identified in this study from participant journals related primarily to issues such as equipment organization, environmental factors, time constraints, and large numbers of students. Only one of these categories of statements clearly matches any of the task items on the TCQ-PE, Item #10 (related to class size), and yet they do not align with the definition of self or impact concerns either. This discovery suggests, as Meeks and Behets suggest, that task-related concerns may be quite different for preservice physical educators than for inservice physical educators. Task concerns of inservice physical education teachers, as identified in McBride's 1993 study, appear to be more program-oriented, with a focus on issues of continuity in the yearly program, administrative support, equitable grading, and scheduling. But for preservice physical education teachers participating in this EFE, the pressing task-related concerns appear to be related to more immediate instructional-oriented issues, such as organization of equipment, time pressure related to set-up and delivery, safety issues, resources, and environmental factors.

Conclusion

The collective findings of this study and corresponding issues raised prompt further inquiry into preservice and inservice concerns of physical education teachers. How does coding peer teacher and student behaviors between teaching episodes impact preservice teacher concerns participating in an EFE? How does reflective journaling influence concerns during an EFE? What effect does the didactic, classroom-based, course component have on concerns expressed during the EFE component? And what contributing factors to differences in gender might be important to consider in order to best support the development of both male and female preservice teachers? More information related to these questions could provide physical education teacher education (PETE) programs with valuable information about how to most effectively design, develop, and implement EFE requirements in their programs.

Additionally, there have only been two studies published using the TCQ-PE, and findings were contradictory. Further testing of the instrument across different career points and among different populations is warranted. Results of such inquiry may inform a decision to either support or reject Meek and Behets' suggestion to consider the development of a separate instrument for the measurement of the concerns of preservice physical education teachers.

References

- Behets, D. (1990). Concerns of preservice physical education teachers. *Journal of Teaching in Physical Education, 10*, 66-75.
- Bigge, M. L., & Shermis, S. S. (2004). *Learning theories for teachers*. Boston, MA: Pearson Education.
- Bogges, T., McBride, R., & Griffey, D. (1985). The concerns of physical education student teachers: A developmental view. *Journal of Teaching in Physical Education, 4*, 202-211.
- Bond, M., Kwan, V., & Li, C. (2000). Decomposing a sense of superiority: The differential social impact of self-regard and regard for others. *Journal of Research in Personality, 34*, 537-553.

- Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Burden, P. (1982). Implications of teacher career development: New roles for teachers, administrators and professors. *Action in Teacher Education*, 4(4), 21-25.
- Conkle, T. (1996). Inservice physical educators' stages of concerns: A test of Fuller's model and the TCQ-PE. *Physical Educator*, 53(3), 122-131.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications.
- Croese, R., Nicholas, D., Gobble, D., & Frank, B. (1992). Gender and wellness: A multidimensional systems model for counseling. *Journal of Counseling and Development*, 71, 149-156.
- Darst, P., & Pangrazi, R. (2006). *Dynamic physical education for secondary school students* (5th ed.). San Francisco, CA: Pearson Benjamin Cummings.
- Dewey, J. (1933). *How we think*. Boston, MA: Heath.
- Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6(2), 207-226.
- George, A. A. (1978). *Measuring self, task, and impact concerns: A manual for use of the Teacher Concerns Questionnaire*. Austin, Texas: The University of Texas.
- Griffin-Jeansonne, C., & Caliste, E. (1984). Pupil perceptions of teachers as a function of teacher concerns. *Education*, 104, 250-257.
- Katz, L. (1972). Developmental stages of preschool teachers. *Elementary School Journal*, 73(1), 50-54.
- Kelly, L., & Melograno, V. (2004). *Developing the physical education curriculum: An achievement-based approach*. Champaign, IL: Human Kinetics.
- Magill, R. (2011). *Motor learning and control: Concepts and applications* (9th ed.). New York, NY: McGraw-Hill.
- McBride, R. E. (1986). An intensive study of a systematic teacher training model in physical education. *Journal of Teaching in Physical Education*, 4, 3-16.
- McBride, R. E. (1993). The TCQ-PE: An adaptation of the Teacher Concerns Questionnaire instrument to a physical education setting. *Journal of Teaching in Physical Education*, 12, 188-196.

- McBride, R. E., Boggess, T. E., & Griffey, D. C. (1986). Concerns of inservice physical education teachers as compared with Fuller's concern model. *Journal of Teaching in Physical Education, 5*, 149-156.
- McBride, R. E., & Griffey, D. C. (1985). The concerns of physical education student teachers: A developmental view. *Journal of Teaching in Physical Education, 4*, 202-211.
- Meek, G. A., & Behets, D. (1999). Physical education teachers' concerns toward teaching. *Teaching and Teacher Education, 15*, 497-505.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: SAGE Publications.
- Ralph, E. (2004). Interns' and cooperating teachers' concerns during the extended practicum. *Alberta Journal of Educational Research, 50*(4), 411-429.
- Reeves, C. K., & Kazelskis, R. (1985). Concerns of preservice and inservice teachers. *Journal of Educational Research, 78*(5), 267-271.
- Rink, J. (2006). *Teaching physical education for learning* (5th ed.). New York, NY: McGraw-Hill.
- Roothman, B., Kirsten, D., & Wissing, M. (2003). Gender differences in aspects of psychological well-being. *South African Journal of Psychology, 33*(4), 212-218.
- Salkind, N. J. (2008). *Statistics for people who (think they) hate statistics* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Sebren, A. (1995). Preservice teachers' reflections and knowledge development in a field-based elementary physical education methods course. *Journal of Teaching in Physical Education, 14*, 262-283.
- Siedentop, D., & Tannehill, D. (2000). *Developing teaching skills in physical education* (4th ed.). Mountain View, CA: Mayfield Publishing.
- Watzke, J. L. (2003). Longitudinal study of stages of beginning teacher development in a field-based teacher education program. *Teacher Educator, 38*(3), 209-229.
- Yourn, B. R. (2000). Learning to teach: Perspectives from beginning music teachers. *Music Education Research, 2*(2), 181-192.