

PEDAGOGY**Perceptions of the Impact of
a PEP Grant on Elementary
Physical Education Programs
in One School District**

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Abstract

A school district received a Physical Education for Progress grant (PEP). PEP grants are part of the Carol M. White Program and are administered by the U.S. Department of Education. These grants are available to local educational agencies to initiate, expand, or improve physical education (PE) programs. The purpose of this study was to determine the perception of the impact of the PEP grant on PE programs of four elementary schools in one school district through interviews with teachers and principals. Qualitative data analysis procedures were used to explore views on how the PEP grant had impacted PE programs. Several themes emerged during the interviews, including (a) the development of an expanded and innovative curriculum, (b) the inclusion of children with special needs, (c) increased motivation levels in students and teachers, (d) a focus on interdisciplinary teaching, (e) increased use of technology, and (f) the PE teachers becoming leaders in the school and district.

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Physical Education for Progress Grants, otherwise known as PEP grants, are part of the Carol M. White Physical Education Program and are administered by the U.S. Department of Education (USDE). PEP grants are available to local educational agencies and community-based organizations to initiate, expand, or improve physical education (PE) programs, including after-school programs, to help students meet state standards for PE (Office of Safe and Drug-Free Schools, 2009).

In 2010, the Obama Administration proposed a reauthorization of the Elementary and Secondary Education Act, which would eliminate six programs and consolidate the other 38 funding mechanisms into 11 new authorities (USDE, 2010). For the physical educator, this means the end of the PEP grant. The Carol M. White Physical Education Program originated in 2001, when the U.S. Congress appropriated \$400 million over a 5-year period. Since that time, Congress has appropriated funds to support student progress toward meeting state standards, which may be done by (a) providing equipment and other support to promote physical activity in PE and (b) providing professional development (USDE, 2009). If the proposals the Obama Administration has made are enacted, the PEP grant will be consolidated with five other programs into the new “Successful, Safe, and Healthy Students” authority (USDE, 2010). Although specific details explaining how the new authority will operate have not been provided, the new consolidation comes with a proposed budget of \$410 million, which is more than the six current programs combined (Kun, 2010).

The goals of the original PEP grant program were aligned with the standards movement, which coincided with curricular reform in PE. Over the past decade, the focus of PE programs has shifted from team sport and competition-oriented activities to the development of a physically active lifestyle and other positive health behaviors. Studies have shown that curricular reform focusing less on team sports and more on fitness education have increased students’ motivation to be physically active in PE classes (Chen & Ennis, 2004; Mowling, Brock, Eiler, & Rudisill, 2004).

Motivation plays an important role for students, as it initiates, directs, and sustains behavior over time (Murphy & Alexander, 2000; Pintrich, 2003; Schunk, 2000; Stipek, 2002). Research conducted on PE programs has suggested that socioecological factors can play a role in students’ motivation (Mowling et al., 2004). During the early 2000s, faculty at The Ohio State University conducted

professional development activities to initiate PE programmatic changes in Columbus (OH) public schools. When writing about the challenges of implementing change in a particular context, Ward and O’Sullivan (2006) emphasized the importance of understanding “the conditions that students, parents, teachers, and administrators experience(d) are a product of the economic, political, and social influences that impact the day-to-day operation of urban schools” (p. 348). Rural schools often face conditions that are more challenging. In rural areas, students suffer from other poor health outcomes due to the disparities in resources available in the school and the local community (Cornwell, Hawley, & Romain, 2007). Research has supported the associations between poverty levels and reduced levels of physical activity (Gordon-Larsen, Nelson, Page, & Popkin, 2006). Federal funding made possible by the reception of PEP grants can address gaps and disparities that exist in schools today and provide the instructional equipment, materials, and professional development needed to enhance school programs.

“In the Zone” Funded PEP Grant

A school district in rural southeast Georgia received PEP grant funding for its project *In the Zone*. The process began with a brainstorming session where the grant writing team comprised of teachers, administrators, central office personnel, and local university faculty agreed that many students are turned off by traditional PE approaches that emphasize team sports and competitive activities. The grant proposal focused on the need to increase student motivation for physical activity by incorporating high interest cooperative activities into the elementary and middle school PE curriculum. All activities described in the proposal were linked to student learning outcomes from the state PE curriculum (McCollum et al., 2005). Figures 1 to 5 show equipment funded by this grant.

The project had three goals:

1. to initiate, expand, and improve, existing PE programs to encourage a diverse population of students to develop cognitive, psychomotor, social, and emotional skills and long-term healthy lifestyles and behaviors;
2. to increase professional expertise of PE teachers and community program staff;

3. to further develop the collaboration among the school district, the Boys and Girls Club, and the County Parks and Recreation Department by increasing the physical activity opportunities provided by after-school and other community programs. (McCollum et al., 2005, p. 47)



Figure 1. PlayStation Cycling Equipment



Figure 2. Dance Dance Revolution



Figure 3. Climbing Wall

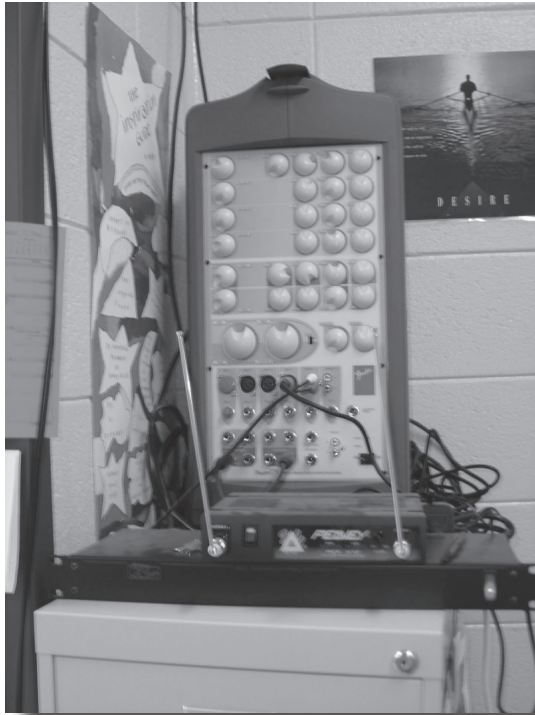


Figure 4. Music System



Figure 5. Skates

In light of the proposed reauthorization of the Elementary and Secondary Education Act, documenting outcomes or changes in attitudes toward physical activity that have resulted from projects funded by PEP grants is important. Positive outcomes of the PEP grant program provide evidence to highlight the need for continued support by Congress and for the Carol M. White Physical Education Program to maintain its integrity as an independent funding mechanism. Although funding to “initiate, expand, and improve physical education programs” (U.S. Department of Education, 2013) is temporary, the purpose of the program is to promote lasting change. Stakeholders must view the programs funded by the grant as positive and impactful. The purpose of this study was to explore the perceptions of the impact of the PEP grant on the PE programs of four elementary schools through interviews with teachers and principals.

Methods

Description of Participants

The eight participants were selected from four elementary schools that had recently received funding from a PEP grant. The participants were (a) four teachers (see Table 1) and (b) four principals (see Table 2). They were selected by a purposeful sampling technique. Purposeful sampling seeks information-rich cases that can be

studied in depth (Patton, 2002). To collect data for this study, the protocol was reviewed and approved by the researcher’s University Institutional Review Board and by the participating school district. Consent forms were collected from all of the participants.

Table 1

Participants (Principals)

Principal Identifier	Gender/Age	Experience	Size of School	Days of PE Per Week
P1	Male/45	Three years as Principal. Four years as Assistant Principal.	460 students	3
P2	Female/54	Thirteen years as Principal. Five years as Assistant Principal.	523 students	3
P3	Female/47	Five years as Principal. Two years as Assistant Principal.	489 students	3
P4	Female/39	Two years as Principal. One year as Assistant Principal.	625 students	3

Table 2

Participants (Teachers)

Teacher Identifier	Gender/Age	Teaching Experience	Education
T1	Male/38	Fifteen years all at K–5 level.	BA Physical Education
T2	Female/28	Two years at K–5 level. Two years at 6–8 level.	BA Physical Education
T3	Male/58	Thirty-four years all at K–5 level.	MED Physical Education
T4	Female/27	Five years at K–5 level.	BA Physical Education

Data Collection

The purpose of the data collection phase was to collect in-depth descriptive information from the eight participants on their perceptions of how the PEP grant funding has changed their teaching and PE programs. Information was collected through interviewing each participant separately in a private office with all distractions eliminated for an average of 60 min per participant. Researchers followed certain guidelines when compiling interview questions. Specifically, the questions were open-ended, nonthreatening, and followed by probes, not leading (Bogdan & Biklen, 2006), and were

arranged in a logical order (Patton, 2002). The interviews were recorded and then transcribed.

Following the interview, member checking occurred by researchers asking each participant to read his or her transcribed interview. Participants were invited to clarify, elaborate, or suggest changes to their original responses (Lincoln & Guba, 1985), but none of the participants requested any changes be made to their transcribed interviews. The researchers, trained and experienced in qualitative research techniques, met throughout the study to discuss the interviews. Discussions between the researchers focused on methodological issues, the analytical process, the nature of the questions asked of the participants, and the interpretations of the data. The use of multiple analysts helped to reduce the potential bias that comes from a single person collecting all the data and provided a means to assess the reliability and validity of the data obtained.

Method of Analysis

Qualitative data analysis procedures were used to explore participants' perceptions of the impact of the PEP grant. The constant comparative method of analysis (Glaser & Strauss, 1967) was applied to the individual transcripts to code and categorize the data and to summarize the findings in meaningful ways. This process involved multiple and careful examinations of the data to identify key linkages, themes, and patterns that were used to analyze and interpret the qualitative data (Lincoln & Guba, 1985).

The analysis of the interview data began with an individual case analysis of each principal, followed by a within-group case analysis of all the principals. This involved inducing categories from the answers of one principal and comparing them to the answers from the other principals. Themes and patterns drawn from the four individual cases were compared and contrasted for similarities and differences. The synthesis of the within-group cross-case analyses represented a descriptive and interpretive framework of the four principals' perceptions of the impact of the PEP grant and curricular reform process in their schools. The same process was repeated for the four teachers in the study. The next step involved comparing the themes and patterns found in the principals' answers to those found in the teachers' answers.

Results

Following the tradition of the phenomenological perspective, the researchers attempted to present the major themes regarding the impact of the PEP grant from each participant's perspective. Each individual expressed varying viewpoints, and the myriad of topics discussed were featured as their stories. After the researchers extensively studied participants' stories, they synthesized and inserted into a table format each case. This preliminary analysis was done so that topics of conversation could be scanned from each person's interview. The first researcher approached the task of categorization with this question in mind: What major categories do I see here? The first researcher was able to discern the major categories that he believed depicted the essence of what was reflected in the principals' interviews and the major categories that he believed depicted the essence of what was reflected in the teachers' interviews. The second researcher completed the same tasks as the first researcher during the analysis phase of these qualitative data. Specifically, the second researcher selected her own categories for both sets of participants.

In general, the categories that the two researchers selected were similar to each other. The differences between the categories that the two researchers identified were discussed, and the final categories were selected. The final step in the analysis process involved comparing and contrasting the categories from the two sets of participants, which resulted in the final categories (Table 3). These final categories, in no particular order, are described in the following section.

Table 3

Selection of Final Categories

Principals	Teachers	Final Categories
Teachers have revamped the curriculum	Can now teach nontraditional activities	The development and implementation of an expanded and innovative curriculum
Full inclusion	Equipment allows for modifications	The inclusion of children with special needs
Energized teachers	Fun to teach new activities	Increased motivation levels in students and teachers

Table 3 (cont.)

Principals	Teachers	Final Categories
Increased collaboration between PE teachers and classroom teachers	More possibilities for interdisciplinary teaching with new equipment	A focus on interdisciplinary teaching in PE
The gym has the most technology of any classroom	New technologies expand teaching opportunities	Increased use of technology
PE teachers have become leaders in the school and district	Involvement in convention presentations with University faculty	The physical education teachers becoming leaders in the school

Development and implementation of an expanded, innovative physical education curriculum. The most common theme that emerged from the interviews was that the PEP grant had enabled PE teachers to incorporate a variety of activities into their curriculums that would not have been possible without the PEP grant. Large group traditional games that lacked individualized learning was replaced by cooperative and fitness education activities that enabled students to be physically active at a level appropriate for them. T1 commented,

We'd heard about new innovative PE programs and now we had the chance to be one of these programs... we purchased climbing walls, roller blades, PlayStations with exercise bikes, Dance Dance Revolution pads, and pedometers and heart rate monitors. Instead of team sports like soccer, floor hockey, and basketball, we now use the adventure education model to turn kids on to physical activity.

The different and innovative approach to PE in the four schools was also confirmed by the principals. All the principals expressed how proud they were of their expanded PE programs. P3 stated,

I love walking into the gym now. I used to cringe when I saw dodgeball and games where the girls were not playing, but now I see students using jump ropes that count how many jumps they have done, or students riding bikes and watching a TV screen showing them in a race, or students working together to help spell words on the climbing wall. It is just fantastic.

P4 was excited about the transformation of the PE program in her school. She stated, “We have been stressing the importance of all of our teachers creating a positive learning environment and PE has been able to do that so well with their new individualized approach to helping each child succeed.”

Inclusion of children with special needs. All eight of the participants talked about how the new equipment and approach to PE had allowed them to more successfully include students with special needs into their classes. According to T3,

When we bought equipment we made sure we could modify it for our students with special needs. We got adjustable pull-up bars whereby someone could lay down to do pull-ups, we got balls with bells in them for our students with visual problems, and we installed horizontal climbing walls that allowed everyone to use them.

T2 pointed out that it was not only the new equipment that led to the renewed emphasis on making all students successful in their classes, but also the teachers’ attitudes and new curriculum. T2 said,

The whole approach changed to helping individuals rather than team games, so it was only natural for us to extend this to our students with physical and mental disabilities. The heart rate monitors and pedometers allowed us to push them at their own level, and I think most of these students went from hating PE to really enjoying it.

Based on the responses of all four of the teachers, it is apparent that prior to the grant, all four of the schools were not practicing full inclusion for students with special needs into PE. This changed as a result of the grant. P3 stated,

The PE teachers came to me and said they would like all our of special education students mainstreamed into their age-appropriate class. This concerned me at first as I was worried if that would be safe for all the students, but after a few trial weeks I fully supported this new practice. We do provide support from the teacher assistants but our PE teachers do a really good job of individualizing activities so that students of all ability levels, including those with disabilities, can have fun and perform the activities.

Increased motivation levels in students and teachers. It was evident from the interviews that the grant had increased motivation levels in the students and the teachers. T4 described how the PEP grant had increased student motivation:

The PEP grant enhanced our program unbelievably. We have kids that now participate that used to be wallflowers; we have kids that used to fight and argue that are no longer a problem. We are now able to focus on individual health and help them understand the importance of exercise and the relationship it has on overall wellness.

All of the teachers and principals talked about how excited the students were about attending PE classes. For example, T2 reminisced that one student ran up to her on bus duty one morning yelling, “PlayStation! Can we do PlayStation again today in PE? I want to ride the bikes!”

Another interesting theme that emerged was connected to the motivational impact of the grant. P1, P2, and P4 pointed out that the new focus in the PE programs had resulted in one or more of their PE teachers becoming excited about teaching again. P1 stated,

We have one teacher who was not part of writing the grant and was very traditional in his teaching... he used to roll the ball out and sit back and watch... but he has been pulled along by my other PE teacher and slowly he is becoming a better teacher. He now avoids winner and loser games and is buying into the importance of helping each student understand the importance of physical activity.

A focus on interdisciplinary teaching in physical education. One surprising theme that emerged from the interviews was how the PEP grant has prompted the PE teachers to integrate content from other subjects into their teaching. This was not an original goal set by the project steering committee, but it was declared to be a positive outcome by the interviewed principals and teachers. T3 provided an example of this interdisciplinary approach:

We do addition games on the climbing wall; the wall we got is a dry erase type wall where you can mark on it and draw arrows or particular trails and math problems where they go

from one number to another number and add them up and then write down the answer.

Another interdisciplinary example focused on reviewing math and geography skills in PE classes. T1 described how he

set up a class challenge where the students roller-skated around the gym and the more laps they did was more miles which we then plotted on a map of the United States to see how far the class had roller-skated in that class and in all the classes since the unit started.

The integration of content from other subject areas was also discussed by the principals. They were excited that PE was being recognized as a “team player” in helping the school meet yearly goals on reading and math. P2 pointed out,

Our PE teachers now leave notes in the classroom teachers’ mailboxes asking them what they will be teaching in the next nine weeks and then they try to combine that content with what they are doing in PE. It is really amazing to see and it is really appreciated by the classroom teachers as covering the content in different contexts can help the students learn it.

Increased use of technology. The fifth theme was related to the increased use of technology in PE. The interviews revealed that each of the schools had purchased multiple pieces of technology-based equipment that were popular with the students and effective in promoting physical activity. Each school received the FITNESSGRAM software. According to T4, “Each student now receives a printed prescriptive FITNESSGRAM report card twice a year that allows students and parents to see how they are progressing with their fitness.”

T1 listed the technology items they purchased, including “heart rate monitors, pedometers, Dance Dance Revolution games (pads and TVs/PlayStations), bike riding games (bikes and TVs/PlayStation), and a music system with a wireless microphone.” Specifically, recording individual student physical activity levels with the heart rate monitors and pedometers gave the students immediate feedback and motivated them to set goals and beat prior scores. The FITNESSGRAM software provided reports for each student’s health-related fitness level, thereby sharing information with parents

and school administrators. The PlayStations, fitness bikes, and Dance Dance Revolution games provided new ways for students to be physically active and were implemented into the curriculums through station work and incentives for effort and good behavior. All the participants in the study noted that these technology-based pieces of equipment had boosted student excitement and had resulted in increased amounts of physical activity during PE classes, especially regarding students who were lower skilled in manipulative activities such as throwing, kicking, and striking.

All of the principals talked excitedly about the technology that had been incorporated into their PE programs. P2 told the researchers,

I recently had a visit from two School Board members and the first place I took them was to the gym so that they could see what our students were doing. One Board member even removed her shoes and jumped onto the DDR pads to play with the students. She left out of breath and saying how much fun she had... I think she got the point of why we think PE is important and how we believe it should be taught.

P1 noted, "My PE teachers use more technology in their teaching than any of my other teachers."

PE teacher becoming leaders in the school and the district. In this theme, the principals reported that PE teachers had assumed more of a leadership position in the school. The physical educators led workshops that taught classroom teachers how to incorporate physical activity into their classes. Additionally, P2, P3, and P4 discussed how PE teachers had approached the school improvement teams and requested a goal be added that focused on fitness. P3 stated,

We have a school improvement team and we added improving fitness as one of our goals based on recommendations from the PE teachers. We want our children to achieve academically, but we also want them to live healthy lives. We have some overweight kids, so I think this is a good goal for our school.

T1 and T2 described family fitness nights that they had started at their schools. T2 told the interviewers, "Our last family fitness night was in February and we had lots of parents, students, and teachers here participating... it was a lot of fun because the kids liked showing their parents what they do in PE." P2 also mentioned

the family fitness night and shared feedback she had received from the parents of an ESL student at her school:

We had the parents of one of our Korean students at the last parents' night and they were really excited about the PE program and how their daughter was being challenged in a positive environment. Apparently, PE was not a priority in Korea and the parents thought that the activity and socializing in PE class was really helping her assimilate into her new school and community.

The themes that emerged to form these final categories identify a range of perceived benefits of the PEP grant. Implications of these benefits will be discussed in the next section.

Discussion

The themes that emerged in this study clearly indicate the positive impact a PEP grant can have on multiple aspects of PE programs. The principal and PE teacher interviews revealed positive changes in the following areas: the development and implementation of an expanded and innovative curriculum; the inclusion of children with special needs; increased motivation levels in students and teachers; a focus on interdisciplinary teaching in PE; increased use of technology; and the PE teacher becoming a leader in the school. Several conclusions can be yielded from the findings.

First, the reception of the PEP grant highly influenced PE curriculums. They were expanded and changed to include alternative and noncompetitive activities. Professional development workshops, new and different equipment, and instructional resources allowed for the use of various curriculum models including adventure education, interdisciplinary, and fitness education. The use of technology was increased as exemplified by curricular content from the FITNESSGRAM, Dance Dance Revolution, Cateye Fitness bikes, and heart rate monitors. Furthermore, PE teachers were able to document the meeting of state and national standards due to curriculum expansion and improvement. Prior to the PEP grant, many of the programs did not include adventure education or fitness education activities.

Second, the PEP grant positively impacted the physical educators' ability to potentially improve student learning and motivation, as well as meet individual students' needs. Student learning was

potentially enhanced by the expansion of curricular activities, the documentation of physical activity levels, the use of cognitive and affective formative assessments to demonstrate student knowledge and motivation, and individual feedback from the FITNESSGRAM software reports. The variety of activities offered increased motivation and excitement in all students, even students who were reluctant to participate prior to the PEP grant. Additionally, teachers and principals cited learning environments that were more inclusive for students with special needs.

Last, the PEP grant increased visibility and accountability of the PE programs and teachers within and beyond the school environment. The principal interviews clearly demonstrated more involvement on school improvement teams, the development and display of physical activity programs beyond the PE class, and the positive comments from other teachers and parents concerning program quality. The PE teachers were much more willing to document student learning and program outcomes than before the grant, as they had no motivation to demonstrate accountability or highlight program activities prior to the funding. Comments from the teacher interviews indicated that the professional development workshops aided the teachers in demonstrating program accountability and provided them with the knowledge to expand the curriculum and student learning. Also, prior to the PEP grant, only one of the four elementary schools had teachers presenting at state and regional conferences. After implementation of the grant, teachers from all four schools engaged in conference presentations to highlight their programs, and they coauthored scholarly papers to bring visibility to their programs and share knowledge.

The above conclusions pose implications for seeking, obtaining, and documenting the impact of funding to initiate, expand, and improve physical activity programs for children and adolescents. As the results indicate, the PEP grant or similar programs have the potential to positively impact the quality of PE programs. Therefore, teacher education faculty, local school districts, and PE teachers are highly encouraged to collaborate in seeking federal funding under the newly proposed reorganization and authorization of the Elementary and Secondary Education Act. This effort is imperative as local and state budget cuts have impeded progress in many areas of educational programming. It is essential that PE teachers document changes that occur due to additional funding and support.

The results of this investigation imply the need for continued professional development of PE teachers' knowledge and practices for program improvement.

In conclusion, these findings warrant further study on the impact of funding on PE programs and the healthy lifestyle behaviors of school-aged learners. In the age of educational accountability and reduced external funding sources, it has become obvious that physical educators have to demonstrate how funds directly impact student learning. Specifically, future research could investigate the impact of grant funding and subsequent program redesign on (a) the fight against the obesity epidemic, (b) attempts to increase the number of minutes of moderate and vigorous physical activity that students participate in daily, and (c) the meeting of state learning objectives and national content standards. Future research needs to directly measure the impact of a PEP grant (or any external funding) on student learning and/or the amount of moderate and vigorous physical activity that students engage in during PE classes.

References

- Bogdan, R. C., & Biklen, S. (2006). *Qualitative research for education* (5th ed.). Boston, MA: Allyn and Bacon.
- Chen, A., & Ennis, C. D. (2004). Goals, interests, and learning in physical education. *Journal of Educational Research, 97*(6), 329–338.
- Cornwell, L., Hawley, S., & Romain, T. (2007). Implementation of a coordinated school health program in a rural, low-income community. *Journal of School Health, 77*(9), 601–606.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.
- Gordon-Larsen, P., Nelson, M., Page, P., & Popkin, B. M. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics, 117*(2), 417–424.
- Kun, P. (2010). Obama administration proposes changes to PEP program for FY 2011. Retrieved March 1, 2011, from <http://www.aahperd.org/naspe/advocacy/mediaCenter/pressReleases/PEP.cfm>
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

- McCollum, S., Elliott, S. M., Burke, S., Civalier, A., Pruitt, W., & Palmer, S. (2005). PEP up your PE program: Writing and implementing a PEP grant. *Teaching Elementary Physical Education, 16*(4), 46–52.
- Mowling, C. M., Brock, S. J., Eiler, K. K., & Rudisill, M. E. (2004). Student motivation in physical education: Breaking down barriers. *Journal of Physical Education, Recreation and Dance, 75*(6), 40–45, 51.
- Murphy, K. P., & Alexander, P. A. (2000). A motivated exploration of motivation technology. *Contemporary Educational Psychology, 25*(1), 3–53.
- Office of Safe and Drug-Free Schools. (2009). Health, mental health, environmental health, and physical education programs. Retrieved June 3, 2011, from <http://www2.ed.gov/about/offices/list/osdfs/programs.html#health>
- Patton, M. (2002). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Pintrich, P. R. (2003). A motivation science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667–686.
- Schunk, D. (2000). *Learning theories* (3rd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Stipek, D. (2002). *Motivation to learn: Integrating theory and practice* (4th ed.). Boston, MA: Allyn and Bacon.
- U.S. Department of Education. (2010, February). Fiscal year budget summary—February 1, 2010. Retrieved March 1, 2011, from <http://www2.ed.gov/about/overview/budget/budget11/summary/edlite-section4.html>
- U.S. Department of Education. (2009). Office of Safe and Drug-Free Schools—Overview information, Carol M. White Physical Education Program, notice inviting applications for new awards for fiscal year (FY) 2009. *Federal Register, 74*(11), 3001–3005.
- U.S. Department of Education. (2013, February 26). Carol M. White Physical Education Program. Retrieved from <http://www2.ed.gov/programs/whitephysed/index.html>
- Ward, P., & O’Sullivan, M. (2006). The contexts of urban settings. *Journal of Teaching in Physical Education, 25*(4), 348–362.