

The Seven Elementary Specialists

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The purpose of this study was to investigate the work of effective elementary physical education specialists who differed in years of teaching experience. The results of those various investigations comprise the substance of this monograph. The purpose of this opening article is to introduce the subjects, provide background information on them, and justify describing them as effective.

The Origins of the Study

The descriptive/analytic research in teaching physical education has not produced a very bright picture (Siedentop, 1983). We have become too accustomed to low rates of academic learning time, lack of specific feedback, high rates of wait time, classes in which teachers trade demands in the instructional task system for compliance in the managerial task system, and teachers whose primary goals are to keep students "busy, happy, and good" (Placek, 1983). As our group of researchers met to discuss the focus for a collaborative study, we quickly agreed that our study would investigate practitioners we felt were effective.

The second decision was to limit the study to elementary physical education specialists. This was done for one simple reason: In our area we felt we had a larger sample of effective elementary specialists to choose from than we did for either the middle school or the high school. The third decision was to develop the sample based on years of experience. This was done because several of us had been interested for some time in how veteran elementary specialists persisted in effective programming and teaching year after year, despite the well known isolation of their job and the potential for burnout.

Once these decisions were made, it became clear that the study of seemingly effective elementary physical education specialists over the full course of an academic year was a good idea. Long-term studies of practicing physical educators are not common. Studies specifically focusing on effective practitioners are not common. Studies in which a team of researchers collaborate on different foci for research are not common. We felt that this study had the potential to teach us a lot, both about the lives and practices of effective teachers who differ in years of experience and about the processes of collaborative research.

Choosing the Subjects

How can subjects be chosen for a study of *effective* teachers before evidence can be accumulated to justify using that label to describe them? The answer to

that, for us, was fairly easy. Several of us on the research team knew each of these seven subjects differently, but we knew them well. The "we" in this case was a group of teacher educators who were conversant with the research literature on effective teaching. That is a group, by the way, that is typically neglected when gathering "reputational" data to identify effective teachers (Berliner, 1986).

The reasons we chose these seven teachers are listed below with a brief introduction to each teacher. The three veterans are described first, then the two beginning teachers are described, then the teachers with intermediate levels of experience (the "intermediates") are introduced. This order was in fact the order in which we identified the groups and chose subjects from within each group.

The Three Veterans

The three veterans were well known to us because they had studied with us, supervised student teachers for us, served as subjects in previous research, and had often been directly observed in their teaching, both informally and systematically. We wanted to select our subjects from reasonably similar contexts simply because we did not want context to be the salient factor in the study. Thus we confined ourselves to teachers in suburban schools in districts we knew to support physical education well. In the central Ohio region, any discussion of effective elementary specialists would have had our three veteran teachers right at or very near the top of any list.

Bobbie has taught for 19 years at the same elementary school in a nearby suburb. She completed a master's degree at Ohio State in 1969 and has served as a model for elementary methods visitations, as a subject in OSU cooperating teacher training research, and as a subject in descriptive/analytic research. She is coordinator for physical education for her district and several years ago was selected as Jennings Scholar for her district.

Chris had taught secondary physical education, then dropped out of teaching to work as an accountant. She returned to teaching as an elementary specialist. She had 11 years of teaching, 7 of which were at the elementary level and 4 at her present school in a local suburb. Chris did her undergraduate training at OSU and has more than 30 hours of graduate work. She has regularly supervised student teachers from the OSU program and been a subject in descriptive/analytic research. Chris has a substantial background in coaching and administering gymnastics. She too has often been observed by our faculty, both formally and informally.

Gary has taught elementary physical education for 19 years, 17 of those years at his current school. He has completed a master's and doctorate at OSU; his dissertation was a descriptive/analytic study of student and teacher behavior at a school camp. Gary regularly supervises student teachers from OSU, has served as a subject in cooperating teacher research projects, and has been a subject in descriptive/analytic studies. He currently has an adjunct appointment on the OSU physical education faculty with responsibilities at the OSU adventure camp. Gary too has often been formally and informally observed by our faculty.

The three veterans were therefore well known to us. Observations of their teaching over the past 5 to 10 years have always resulted in data that showed them to score above the typical mean scores from descriptive studies (e.g., lower managerial and transition times, higher rates of ALT-PE, higher rates of feed-

in some form of curriculum development with the university. Our experience with them indicated that they were as highly regarded in their buildings and within their communities as they were by us.

The Beginners

We had decided early in our planning that contrasting beginners with veterans might help us to better understand the veterans, as well as provide interesting data on 1st-year teachers. Serendipitously, two graduating senior students from the OSU program were hired in area schools as elementary specialists. Since these two beginning teachers were considered to be among the best in their graduating class, it was expected that they would be effective 1st-year teachers.

Kelley had a strong background in gymnastics and had been a capable student in the OSU teacher education program. Her prestudent teaching field experience reports were strong. She had excellent reports from both her student teaching supervisor and cooperating teacher. She was one of five seniors honored with a Promising Teacher Award, the highest honor given in the OSU teacher education program.

Mike was perhaps the best all-around student in his teacher education cohort group at OSU. He had been one of four students honored with 1st-year awards in the program, one of six students honored for performance during the pedagogy year of the program, and, like Kelley, had received a Promising Teacher Award in his final year at OSU. Mike had also completed an honor's thesis, which focused on a descriptive analysis of teacher and student behavior during a middle school early field experience. Mike had received consistently high reports from supervisors and cooperating teachers during his field experiences and student teaching.

Thus the beginners were, at least by standards we as teacher educators would use for predictive purposes, ready to be effective as 1st-year teachers. Data collected on them during their field experiences and student teaching indicated strong management skills, the capacity to produce high amounts of active learning time, and strongly positive interactive teaching skills.

The Intermediates

If beginners and veterans might be shown to differ in some respects, how did veterans get to their stage of development? That of course is a complex question to ask, and one that could not be answered with any certitude without a longitudinal study. Yet, as we planned, we decided to include in our sample several teachers who were past the beginner stage but who were not yet on the job long enough to move them into the veteran stage. Therefore we asked two area elementary specialists to be part of our study as intermediates.

Kathy had graduated from OSU 3 years earlier. Like Mike, she had won every possible honor within that program (Science Year, Pedagogy Year, and Promising Teacher Awards). She had been in her present elementary school for those 3 years, during which time she had already accumulated nearly 30 hours of graduate credit. She had just reached the 3-year point when, by State of Ohio standards, she could supervise student teachers. She was being trained in the OSU cooperating teacher training program.

Missy was a graduate of a state university in Ohio, one well known for its contributions to elementary physical education. She had taught for 2 years

in another state, then for 2 years had worked in an area recreation department. She was now in her 2nd year as an elementary specialist in a local suburb. Missy had completed 15 graduate hours and was also trained in the OSU cooperating teacher program. She would begin to supervise student teachers the next year.

Kathy's work was well known to us, and Missy was highly recommended by two of the veteran teachers in our study. Their 3 and 4 years of experience placed them beyond the beginner stage, yet they had not been on the job long enough to qualify as veterans.

Method for Justifying Effectiveness

As stated previously, we judged each of these seven elementary specialists to be effective based on our perceptions of their teaching in relation to our understanding of the teacher effectiveness research literature. It was on that basis that we solicited their participation as subjects for this study. However, once we gained their participation it remained for us to provide further justification for their designated status as effective teachers. This was accomplished in several ways.

First, the seven were all subjects for the start-of-the-school-year study included in this monograph. Since there are clear indicators of how effective teachers begin the school year (Emmer, Evertson, & Anderson, 1980), we could compare their performance with that known profile to estimate congruence. That study involved a minimum of six observations for each subject. Second, data were collected using the ALT-PE instrument (Siedentop, Tousignant, & Parker, 1982). Enough data have been collected using this instrument (see Dodds & Rife, 1983) to provide a fair normative data base against which to compare the profiles of the seven teachers. Third, the principals for each of the seven teachers were interviewed, as was a designated person from the parent organization associated with the school, typically the president or chairperson of the group. Fourth, four of the teachers had student teachers during the academic year in which this study took place. Interviews with those student teachers were conducted to ascertain their views of their cooperating teachers, both as teachers and mentors. Finally, we had the teachers keep logs. We talked with them periodically and interviewed them formally on several occasions. We completed an end-of-study debriefing with the group. In other words, there were many occasions during which we could listen to them talk about their teaching and about teaching in general. Their own ability to articulate views of effective teaching and to be reflective and candid about their own teaching became one more way to ascertain their effectiveness.

Demographic Information

Table 1 provides pertinent demographic information for the seven subjects. All of the five experienced teachers had coached school teams at some point in their careers, although only Kathy was currently coaching; none of the others indicated a desire to be coaching. All seven subjects had participated on school teams in high school, and Chris and Gary had participated on college teams. When in college, all subjects had been active in intramural and club sports. The elementary specialists were all currently active in recreational sport activities. In addition, Bobbie, Kelley, Mike, and Kathy had regular personal fitness programs. All seven subjects were active and fit professional physical educators.

Table 1
Demographic Information

Name	Age	Years taught	Highest degree	Hours beyond	Professional memberships
Bobble	40	19	MA	6	OEA, NEA, AAHPERD, PDK, BEA, ADK
Chris	38	12	BA	30	DEA, OEA, NEA, AAHPERD
Gary	41	19	PhD	0	WEA, OEA, NEA, AAHPERD, AEE
Kelley	24	0	BA	0	none
Mike	39	0	BA	0	NEA, OEA, WEA, AAHPERD
Kathy	25	3	BA	30	WEA, OEA, NEA
Missy	28	4	BA	15	BEA, OEA, NEA, AAHPERD, PDK, ASCD

All seven subjects were married. Chris, Gary, and Mike had families (two children each for Chris and Gary, one child for Mike) and Kathy was expecting her first child. Chris and Gary lived in the communities in which they taught. Each of the specialists taught in a suburban school. When asked about the conditions for teaching physical education at their schools, each judged them to be good or excellent. All judged the parental support for physical education at their schools to be good or excellent except Kelley, who judged her parental support to be adequate. Each of the specialists planned to continue teaching physical education in the future. Five of the seven teachers were certified to teach subjects other than physical education (typically health and/or biological sciences) but none had done so. The facility and equipment situation for the seven teachers was much more alike than different. Each had a good indoor gymnasium, ample outdoor space, and a well stocked equipment room.

Start-of-the-School-Year Data

The patterns of performance of all seven subjects were highly congruent with what the literature describes for effective teachers (see article by Fink & Siedentop in this monograph). While there were some minor differences among subjects attributable to experience, the general profiles of how they developed routines and expectations at the start of the school year were highly consistent with those of effective classroom teachers.

The ALT-PE Data

In addition to the systematic observations conducted at the start of the school year, each teacher was observed several times using the Academic Learning Time-Physical Education instrument (Siedentop et al., 1982). Observations were done on a 5-second observe, 5-second record interval system using a partial interval coding convention. The ALT-PE system was chosen because of the large ALT-PE data base that could be utilized for comparative purposes. The pertinent ALT-PE information for each subject is presented in Table 2. Data for each subject are means from several observations.

Table 2
ALT-PE (figures represent percentages)

Category	Chris	Bobbie	Gary	Mike	Kelley	Kathy	Missy
Transition	11.2	11.0	11.7	10.5	12.4	11.0	6.8
Management	1.0	1.0	2.1	9.0	0.1	9.0	22.5
Warm-up	4.0	2.0	0.9	20.7	3.2	3.9	4.0
Subject matter knowledge	25.9	26.7	25.1	12.7	24.4	29.0	8.2
Subject matter motor	57.8	58.5	53.8	41.4	57.6	54.0	62.3
Waiting	6.1	5.5	10.3	6.3	3.6	6.9	10.2
Interim	2.5	3.5	10.4	2.0	2.9	2.9	4.3
Off-task	0.4	0.5	0.4	1.9	2.9	2.0	4.9
On-task	13.9	5.0	17.6	35.4	14.5	13.1	20.8
Cognitive	24.9	26.5	23.9	12.3	23.4	27.6	8.0
Motor inappropriate	1.5	2.5	1.4	2.6	1.4	2.0	6.6
ALT-PE	50.5	56.5	34.9	39.1	51.9	46.1	44.6

Compared to the descriptive data base in physical education (Siedentop, 1983), developed from a variety of instruments including ALT-PE, the figures shown above are consistently above the norm. ALT-PE is strongly influenced by the activity being taught as well as by the teacher's pedagogical skills. Missy was teaching a climbing unit on an indoor climbing wall when several of her observations were conducted. The change of harnesses and helmets resulted in a higher than usual number of management intervals. Gary was teaching track and field outdoors when several of his observations were done, resulting in a higher than usual number of interim intervals as students walked back between trials on a hurdles course, correspondingly reducing the ALT-PE intervals since the activity was all within practice time. Mike had chosen to do a long, quite elaborate series of warm-up exercises, which under ALT-PE coding conventions get coded as warm-up and do not count as ALT-PE intervals.

Regardless of the individual variations due to activity, the overall ALT-PE picture is quite favorable. Management time is virtually nonexistent, as is off-task behavior. Waiting is kept to a minimum. These teachers averaged 6 to 8 transitions per lesson, yet took hardly 10% of class time to accomplish these changes. The low number of transition, management, and off-task intervals represent further verification that the routines developed by these teachers at the start of the school year accomplish their purpose (see article by Fink & Siedentop). Activities were designed sufficiently well that motor inappropriate intervals were infrequent. The ALT-PE percentages are 15 to 25% higher than what might be considered a norm in the descriptive research literature in physical education.

The Reputational Data

Principals

There is little doubt that the principals of these subjects considered them

are presented below. The interviews with principals indicate that these positive, summary viewpoints are supported by specific kinds of knowledge about their teaching, knowledge related to planning, classroom management, instruction, and interpersonal relations with students.

- Missy is without a doubt an effective P.E. teacher, maybe the most effective I have known. (previous experience with three P.E. teachers)
- She [Bobbie] is no doubt an outstanding P.E. teacher. She has total knowledge of P.E. content. Teachers I knew in the past were gym teachers. She is a physical education teacher.
- She [Chris] is the finest P.E. teacher I've worked with. (12 years as a principal, but finishing first year in that school)
- I gave her [Kelley] the highest rating of any P.E. teacher I've had.
- He [Mike] was as good or better than any beginning teacher that has come to work for me in the last 11 years.
- Effective isn't a big enough word. He [Gary] is a lot more than effective.
- She [Kathy] plans well, has lots of energy, follows through with ideas, has a great program, and has built important relationships with the children.

It is also clear that part of being effective, from the viewpoint of a school principal, was developing positive, useful working relationships with the classroom teachers. On this count too, the seven subjects were rated highly:

- Some things in particular that are important to the classroom teacher, Mike did on a consistent basis.
- The staff views Chris very positively and she has had a positive influence on them.
- She [Kelley] has tremendous rapport with the adult staff. She helped a fifth-grade teacher with fitness and started a walking club for teachers. I even took part.
- She [Missy] works closely with classroom teachers. When the major theme was pioneers, she taught square-dancing.
- She [Bobbie] is the most well respected teacher in the school. She has gained the staff appreciation for her excellence.
- The teachers wonder how he [Gary] can be so upbeat. They love what he programs. He's so together that other teachers sometimes are uncomfortable. He's not afraid to tell teachers if they've made a poor decision.
- She [Kathy] is up front, cooperative, and open to suggestions from teachers. I hear no negative comments about her, only good feelings.

Parents

At least one parent in a position of responsibility in the school's parent organization was interviewed also. Each teacher has special programs that involve parents, so the work of the physical education teacher was not unknown to these persons. Their responses were uniformly positive. Some pertinent excerpts follow:

come home excited and with a knowledge of what they are doing. She is approachable and will try to help.

— I've had four children in the school and I think he [Gary] walks on water. When kids go back to this school, the first teacher they go to see is Gary. He cares about every child, sees their needs, and tries to help them.

— She's [Missy] innovative, very helpful in field trips, is responsive to parents and talks to them frequently.

— She [Bobbie] has built an excellent program. She teaches her kids that exercise is important. Even the clumsiest kid, as well as the most successful, gets a chance to experience success. For me, she is the ideal P.E. teacher.

— She [Chris] does so much, and does it so well, that parents are constantly amazed.

Student Teachers

Four of the teachers (Gary, Bobbie, Chris, and Kathy) had student teachers during the time in which this study was conducted. All of these student teachers were interviewed individually at the end of their student teaching experience and were asked questions relative to their cooperating teacher as a teacher of physical education and as a mentor for student teachers. The student teachers' responses were positive, and many of them referred to specific teaching and/or supervisory skills as well as the more expected interpersonal skills. What follows are some salient excerpts from those interviews:

— She [Chris] doesn't waste time. She uses positives with all her students, even to desist off-task students. She's very organized and knows exactly what she's doing. She rarely said subjective things to me and always provided some data as to why a lesson had gone well or poorly.

— He [Gary] was always positive with me and the kids. I would never be afraid to talk to him. He was so open and understanding.

— She [Kathy] used all the basic teaching methods I learned. She was strongly positive with the students and gave a lot of feedback. She was a great person to work with.

— She [Bobbie] is constantly renewing, creating new lessons, and modifying the lessons according to students' needs. There are no discipline problems because rules are established and maintained on a daily basis.

Conclusion

The information from principals, parents, and student teachers triangulated very well. All had common perceptions and they typically focused on (a) the positive teaching style of the teacher, (b) the degree to which the teacher was respected and appreciated within the school, (c) the degree to which the teacher was organized and managed classes well, and (d) the degree to which the physical education program accommodated children of varying skill levels. The principals in particular provided richly detailed and, from our perspective, honest appraisals of their physical education teachers. Kelley's principal talked candidly about her being too serious with students at the start of the school year and how insecure

she first seemed about her ability to do a really effective job. Gary's principal described his role as vice-principal when she was out of the building and how this engendered concern among a few teachers about his level of power.

Perhaps most important, the views of principals, parents, and student teachers corresponded closely with our own perceptions of these teachers and the data collected in their classes throughout this study. The three veterans in particular had achieved significant status within their schools. They were well known and appreciated. Just as important, their work was well known and appreciated.

The purpose of this chapter has been twofold: to introduce the reader to the seven elementary physical education specialists in this study and to justify the use of the term "effective" when talking about them. Objective and reputational data were presented to justify the choices made by the research team to include these teachers in our sample. We felt confident when making our choices that these teachers were effective. What we have learned since then, from these various sources, has served only to increase our confidence that these are effective elementary physical education specialists.