A Survey Of School Principals And Teachers Regarding Teachers' Professional Development Participation

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A SURVEY OF SCHOOL PRINCIPALS AND TEACHERS REGARDING TEACHERS’ PROFESSIONAL DEVELOPMENT PARTICIPATION

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Research, Technology, and Leadership in the College of Education at the University of Central Florida Orlando, Florida

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ABSTRACT

The purpose of this study was twofold: First, to gather perspectives of randomly selected administrators and teachers in two central Florida school districts concerning the participation of teachers in professional development (PD), and secondly, to determine if there was a significant differences in the amount of participation of teachers from different academic departments in these activities. Results indicated that a teacher’s assignment to a particular academic department has a relationship to the amount of PD involvement. Results also suggested that building principals’ perceptions concerning teacher support of and participation in these activities were moderately accurate.

Data were collected using two survey instruments developed by the researcher. The Professional Development Questionnaire for Teachers contained 22 items developed to gather teachers’ perceptions concerning: (a) their participation in PD, (b) the relevance of the PD activities they had been involved in, (c) the process used to select these activities, (d) the monitoring efforts of their administrators concerning teacher involvement in these activities, and (e) information about the number of hours they were involved in PD between July 1, 2002 and June 30, 2004. The Professional Development Questionnaire for Building Principals collected data from administrators at the same schools as those of the teachers surveyed. Building principals were asked their perceptions concerning: (a) teacher participation in PD, (b) the effectiveness of PD, (c) the selection of activities, and (d) the fund sources used to provide PD for their teachers. A total of 433 teachers and 38 building administrators comprised the sample population.
Descriptive statistics, independent samples t-tests, and a One-way Analysis of Variance (ANOVA) were used to analyze the data collected. In addition, information was collected from respondents using comments they included in the surveys.

The implications for policy and procedure drawn from this study were: (a) school administrators’ need to develop a plan to more closely monitor the participation of their teachers in PD and (b) the availability of PD opportunities should be equitable for all teachers regardless of their academic department assignment. Suggestions for future research and educational practices were also provided.
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CHAPTER 1

INTRODUCTION

As the landscape of public education continues to change and the pressures of accountability continue to rise, the training and development of effective teachers is of critical concern to educational leaders. A major component of this development is providing teachers with the tools necessary to be effective through the use of professional development.

Once teachers have been selected for employment, providing meaningful professional development that directly links to student achievement is a necessity for unseasoned teachers. Likewise, providing veteran teachers with professional development that allows them to hone their pedagogy is also vital.

The need for professional development began to emerge in the 1970s. Activities were based primarily on the results of teachers’ attitudes towards the professional development programs that had been presented. In most cases, the professional development programs were geared toward individual teachers’ interests, rather than on a school-wide objective. Kosmoski (1997) discussed that although professional development is relatively new to American schools, all schools and school districts need these planned and organized activities. She wrote that professional development serves as a vehicle for purposeful organizational change, supplements and expands initial formal teacher training, insures staff maintenance and growth, and combats complacency and satisfaction with the status quo. Kosmoski went on to imply that school supervisors recognize that purposeful organizational change is a slow and difficult process. Yet, she
believed that professional development among the staff is more effective when leaders identify the employees who have the greater need for change and provide those employees with opportunities for growth.

Protheroe, Lewis, and Paik (2002) wrote, “Educators, students, and parents agree. It takes high quality teachers to ensure that students receive a solid education “ (p. 1). A study by Haselkorn and Harris (2001) supports this claim. In their work, they surveyed Americans from across the country and determined that teachers have the greatest influence on an individual’s learning. The percentage of respondents who echoed that statement rose from 55% in 1989 to 89% in 2000. In a 2001 study on improving education for low-income and minority students, Lewis and Paik noted that one way to produce quality teaching was to provide schools with the high-quality expertise as part of consistent intensive professional development.

A major component of the Florida school-based management movement of the late 1980s was the establishment of School Advisory Councils at each school (Kosmoski, 1997). These councils meet to determine the needs of the school and produce a School Improvement Plan that identifies the goals and objectives that will be concentrated on for the upcoming school year. Strategies are determined to help accomplish the goals and objectives that are developed. A major strategy in all School Improvement Plans is providing professional development for teachers using researched-based teaching methods that have been shown to increase student achievement in areas such as reading comprehension and analytical thinking.
As the effectiveness of teachers continues to be judged primarily based on the Florida Comprehensive Assessment Test (FCAT) results of their students, it remains vitally important that teachers participate in meaningful professional development that has a positive impact on student achievement. However, without the active participation of teachers in professional development, student future growth is limited. Additionally, bringing about site-based school reform as indicated in the School Improvement Plans is impossible.

Statement of the Problem

The following question guided this investigation: “Is there a sub-population of teachers who are not actively involved in professional development as in relation to their peers in other departments?”

Purpose of the Study

The purpose of this study was twofold: First, to gather perspectives of randomly selected school principals and teachers in Volusia County School District and Brevard County School District concerning the participation of teachers in professional development over the previous 2-year period, and secondly, to determine if there were similarities or differences concerning the amount of participation of teachers from different departments in these activities. The teachers surveyed for this study were assigned to categories based on whether they taught in Volusia County School District or
Brevard County School District; elementary, middle, or high schools; and a particular department (e.g., primary, intermediate, mathematics, language arts, or liberal arts).

The researcher identified types of professional development that would be used to help teachers improve their pedagogy. Interviews with teachers and administrators and a thorough review of literature guided the researcher in the design of the two survey instruments and the selection of research questions. It was hypothesized that elementary school teachers who teach in the exceptional student education department had participated significantly more in professional development activities than other subgroups. This assumption was due to the increasing demand for teachers in the exceptional student education programs to stay current on federal, state and district mandates and policies.

A pilot survey was conducted in November, 2004 involving eight schools in each of two central Florida school districts: Brevard and Volusia. Following the pilot study, the researcher applied Dillman’s Tailored Design Method (TDM) of five respondent contacts (Appendix A) to conduct the research study (Dillman, 2000). Two high schools, two middle schools, and four elementary schools were randomly selected in both districts were mailed a pre-notice letter followed closely by a packet that included a cover letter, the questionnaires, and a return envelope. Three more follow-up contacts were made with respondents that did not return questionnaires. Once the questionnaires were collected, the data compilation and analysis phase of the study began. A discussion and implications for policy and procedures were stated and research findings were outlined in the final phase of the research study.
The Professional Development Questionnaire for Building Principals (Appendix B) and the Professional Development Questionnaire for Teachers (Appendix C) were used to obtain information from administrators and teachers from the randomly selected schools in Volusia County School District and Brevard County School District. The Professional Development Questionnaire for Building Principals (Appendix B) was used to determine their building principals’ perceptions concerning: (a) teacher participation in professional development, (b) the availability of desired professional development that correlated with the School Improvement Plan developed at each school, (c) the affordability of these activities, and (d) whether the professional development that had been selected in the past had a positive impact on student achievement.

The Professional Development Questionnaire for Teachers (Appendix C) was used to gather data from teachers about the number of hours they were engaged in professional development during the period of July 1, 2002 and June 30, 2004. Also, the questionnaires were used to determine the perceptions of teachers concerning: (a) the effectiveness of these activities as they related to student achievement, (b) if the activities they had participated in were aligned with the goals and objectives established in the School Improvement Plans at their schools, (c) if they believed their building principals were accurately aware of the amount of professional development participation of teachers, and (d) whether the professional development they had selected were done so with the goal of increasing student achievement or meeting re-certification requirements established by the Florida Department of Education.
Educational leaders responsible for the professional development of teachers may benefit from the findings of the study by becoming more aware of which sub-population of teachers are not actively participating in these activities. The findings of the study may also be useful to administrators who are committed to increasing student achievement through the incorporation of researched based professional development activities that have a positive impact on teacher effectiveness.

**Research Questions**

The following questions guided the research:

1. To what extent do teachers participate in professional development as measured by the number of hours they are actively involved in such activities?
2. How accurate are the perceptions of school principals concerning the participation of their teachers in professional development?
3. Is there a department of teachers who participate less in professional development than those in other departments?

**Definition of Terms**

Because the literature appears to use the terms staff development and professional development somewhat interchangeably, for the purpose of this study they will be considered synonymous. A working knowledge of the following terms will assist in the understanding of this research study.
1. **Accountability:** Having the responsibility for successful completion of a goal or task.

2. **Florida Comprehensive Assessment Test:** A criterion referenced test developed by the Florida Department of Education that is used to determine student growth in grades three through ten in the areas of reading, writing, and mathematics. The test is correlated with the Sunshine State Standards that are benchmarks established for each grade level that identifies what students should be learning.

3. **Professional Development:** What individuals do to improve themselves as professionals. This can mean gaining additional certification, attending conferences and workshops, or pursuing an advance degree (Maute, 2004).

4. **Staff Development:** Learning activities that are related to school or district goals. These include workshops, classes, institutes, and seminars that are determined by the school or district (Maute, 2004). Those processes that improve the job-related knowledge, skills, or attitudes of school employees (Sparks & Loucks-Horsley, 1989).

5. **School Advisory Council:** A group of individuals at each school consisting of teachers, support staff, parents, and community members whose responsibility is to assist in the development of the School Improvement Plan.

6. **School Improvement Plan:** A document developed by a School Advisory Council that is produced after a needs assessment has been completed. This document contains the goals and objectives the staff of the school will concentrate on for the upcoming school year.
Significance of the Study

In an effort to increase student achievement, schools and school districts attempt to provide meaningful professional development for teachers. Just as teachers need to be aware of whether all of their students are actively participating in classroom learning opportunities (e.g., male students are as involved as female students), school administrators need to be aware if there is a sub-population of teachers at their schools who are not participating in a sufficient number of professional development in relation to the other populations of teachers. This study was conducted to identify if there is such a sub-population or sub-group.

The findings of this study intended to provide school administrators information that would allow them to more closely monitor the involvement of teachers in professional development. Using student test results, along with information on the amount of teacher involvement in these activities, it may be helpful for school administrators to determine that the students are unsuccessful academically not because of their own inabilities, but because their teachers are not participating in effective professional development activities that positively impact student learning. If that is the case, school administrators would be able to act accordingly and assist teachers by providing professional development activities that are not only effective, but ones that teachers will participate in.
Limitations

The following limitations exist for this study.

1. Only faculty members and administrators from randomly selected schools in Brevard and Volusia County School Districts were considered in the study.

2. The administrators and teachers at the selected schools may not have worked at their site during the time period July 1, 2002 to June 30, 2004.

3. The scope of the survey will be limited to the number of building principals and teachers in the sample willing to participate in completing the questionnaires.

Summary

The literature reviewed for this study revealed several activities that occur which could be considered professional development. Chapter 2 contains an overview of information concerning the history of professional development over the past 3 decades, the processes used to select professional development, and which activities are considered for professional development. It also reveals the processes that are used in the selection of professional development. The methodology used in the implementation of this study is presented in Chapter 3. Research findings and data analyses emerge to form Chapter 4. Finally, the author presents discussion and implications concerning the importance of school administrators being aware of which teachers within their faculties are or are not participating in professional development and suggestions for continued research on the topic.
CHAPTER 2
REVIEW OF THE LITERATURE

Introduction

This chapter was organized to permit a review of the related literature on professional development. Included is information related to the history and the importance of professional development for teachers. Research relative to the processes that are used to select professional development is also addressed. Information is also presented concerning the most popular forms of professional development that are selected by teachers. These activities include workshops, teacher lead study groups, independent readings, attendance at affiliated conferences, peer collaboration, or participation at universities and professional development centers. Finally, information concerning the importance of follow-up activities after the completion of professional development activities is discussed.

History of Professional Development

Beginning in the 1970s, the importance and delivery of professional development were primarily based on the results of teachers’ attitudes towards these programs. Several studies (Ainsworth, 1976; Joyce & Peck, 1977) were conducted that indicated nearly unanimous teacher dissatisfaction with the efforts that were being made in that area. Teachers, however, did have a strong unified belief that if school programs and
practices were to be improved, professional development activities would be needed (Sparks & Loucks-Horsley, 1989).

During the late 1970s and early 1980s, studies were conducted that concentrated on the practices of effective professional development rather than teacher attitudes towards the experiences. Kells (1981) compiled a list of these effective practices that included: (a) programs were conducted at the school sites and aligned with school wide efforts, (b) teachers were actively involved as helpers to each other and were included in the planning process with administrators, (c) there was an emphasis on self-instruction using differentiated training opportunities, (d) teachers were active participants who chose goals and activities for themselves, (e) there was an emphasis on demonstration, supervised trials, and feedback allowing the training to be ongoing, and (f) there was ongoing assistance and support for teachers available on request.

According to Sparks and Loucks-Horsley (1989), professional development was the focus of numerous conferences, workshops, articles, books, and research reports. State legislators and administrators began to see professional development as a key aspect of school improvement. Studies were conducted by the authors on the knowledge presented at professional development activities, which led to a more advanced understanding of effective professional development practices.

Concerning modern times, James (2004) stated:

Today’s teachers are acutely aware of the need for quality professional development to keep abreast of new content knowledge, to individualize instruction for diverse student population, to understand growth and development, to effectively manage their classrooms, and to help students achieve high standards. (p. 4)
The Importance of Professional Development

Professional development can be useful and important for several reasons. The outcomes usually involve gaining awareness, knowledge, skill development, changes in attitude, or the transfer of training. Fullan and Hargreaves (1996) suggested the most effective training programs include exploration of theory, demonstration of practice, supervised trial of new skills with feedback on performance, and coaching within the workplace.

Fullan and Hargreaves (1996) discussed the importance of professional development in their book, *What’s Worth Fighting for in Your School*. The authors indicated that some approaches to professional development have been part of the change problem in education more than the solution. For example, many professional development strategies had been, “just as fragmented, non-involving and as oblivious to the real needs and concerns of teachers, as the other innovation strategies they were meant to supplement or supplant” (p. 16). Where a climate existed that did not promote collegiality and collaboration among teachers, professional development initiatives had failed. To be successful, Fullan and Hargreaves indicated that a more careful integration of professional development with strategies of school improvement as a whole is of the utmost importance to help foster positive school reform.

Maxwell (1993) agreed with Fullan and Hargreaves on the topic of meaningful professional development. He promoted the continuous development of people as a viable means to construct effective organizations that work toward a common goal. An
important competency of an effective administrator is being able to select and hire talented teachers who will have a positive affect on student learning.

Fullan and Hargreaves (1996) proposed that as educational reforms and mandated legislation continue to change the landscape of America’s public school system, the selection, implementation, and follow-up activities of meaningful professional development opportunities for all educators become increasingly vital. They suggest that including teachers in the process is vital for the success of our schools. In the authors’ opinion, without teacher input, staff development and attempts at school reform will fail.

Glickman (1986) offered that the aim of professional development should be to improve teachers’ ability to think and view curriculum development as a key aspect of school improvement. Sparks and Loucks-Horsley (1989) agreed in stating, “whichever perspective one has, staff development and the improvement of schools and curriculum go hand in hand” (p. 35).

Ornstein and Hunkins (1993) wrote that professional development is a core component in the school improvement process. However, they implied that professional development to support school improvement should be centered on the school as the basic unit, not the individual needs of the teachers.

Hirsh (2004) emphasized that an individual’s professional development plan should not be written without considering the goals of the school or district. She stated that professional development “functions most effectively when it is embedded into the district or school plan and is seen as the primary strategy for achieving district or school goals” (p. 12). The author suggested that individual professional plans were most
effective when they ensured that professional development was (a) results-driven, (b) standards-based, and (c) focused on educators’ daily work.

Hirsh (2004) implied that effective district leaders recognize how much professional learning “contributes to the district’s learning goals for students, and so they align individual, team, school, and system learning plans” (p. 13). It is through the use of results-driven data that the effectiveness is determined. At the individual, team, school, and district levels, participants considered what outcomes they wanted for their students, the knowledge and skills that would be needed by teachers to achieve the outcome, and the professional development learning activities that would be needed to achieve their goals.

Hirsh wrote, “comprehensive professional development considers standards for students, teachers, leaders, and staff development” (p. 13). She referenced the standards (Appendix D) that have been developed by the National Staff Development Council for which she is the Deputy Executive Director. These standards are used to describe the qualities of professional development associated with high-performance cultures. The National Staff Development Council Standards were revised by a group of educators who represented the largest education associations in America. The standards (context, process, and content) describe what qualities of staff development improve teacher practice and student performance. They also provide direction for planning, implementing, and monitoring staff development.

In addition, Hirsh indicated that for individual professional development plans to be most effective they should be focused on the daily work of the teachers. This job-
embedded learning stipulates that teachers work in learning communities whose goals are aligned with those of the school and district. Teachers in these communities use disaggregated student data to set priorities for their own professional development learning, to monitor student progress, and to ensure continued improvement. Finally, the teachers in these learning communities use research to assist in decision making concerning which strategies to use that will lead to desired changes in teacher practice and ultimately in student achievement.

Hirsh (2004) also offered guidelines that should be used to develop and implement effective professional development action plans that bring about desired results. The guidelines are: (a) involve all stakeholders, (b) focus on leadership development, (c) make explicit the theory of change, (d) emphasize the school and team level, (e) review and reflect on the research, (f) monitor progress, and (g) be an advocate for quality professional development. She concluded by offering that professional development were only as effective as the goals they are asked to achieve, should be viewed as the key strategy for achieving school and district goals, and should not be used in isolation as a fragmented plan.

In their study of 809 teachers from public elementary, middle, and high schools across America, Blase and Blase (2001) attempted to gather information about the characteristics of effective administrators who had a positive influence on classroom instruction. Teachers surveyed in their study identified two major themes that effective principals exhibited as instructional leaders. The first theme dealt with talking with teachers to promote reflection. Teachers surveyed described effective principals as those
who made suggestions about good teaching, gave feedback that showed interest for
teachers and students, modeled teaching techniques and positive interactions with
students, and used inquiry to solicit advice and opinions about instruction. Principals
also exhibited the ability to offer genuine praise that focused on specific and concrete
teaching behaviors. The second theme identified in the study of effective administrators
indicated that these educators also promoted professional growth among their teachers
using six strategies.

The six strategies identified in the Blase and Blase (2001) study indicated
effective administrators used the strategies to promote teachers’ professional
development. The first strategy noted indicated that effective principals emphasized the
study of teaching and learning. As such, principals provided professional development
opportunities that addressed emergent needs at their schools, while encouraging teacher
input, attendance at the activities, and teacher support of innovation. The effective
principals identified in the study also participated with their teachers in the professional
development sessions.

The second strategy identified in the Blase and Blase study of effective
administrators that promoted teacher professional development suggested that these
individuals supported collaboration among educators by developing networks for
teachers which allowed them to communicate with their peers. The principals also
advocated that teachers share their ideas with others and use peer observations to observe
teaching methods and programs.
Blase and Blase also wrote that effective principals identified in the teacher survey developed coaching relationships where teachers were encouraged to become peer coaches with their colleagues. In the book, *Student Achievement Through Staff Development: Fundamentals of School Renewal*, Joyce and Showers (1995) agreed with this concept. They emphasized that teacher training is most effective when it includes peer coaching as a major component.

The fourth strategy effective principals used to promote teacher professional development indicated that they encouraged and supported program redesign. As such, these principals challenged teachers to redesign instructional programs and to support innovative approaches to teaching and learning. They also motivated teachers and asked them to be flexible when grouping students for instruction and provided them with the resources when necessary to support program redesign (Blase & Blase, 2001).

The fifth strategy identified in the Blase and Blase study suggested that the principals identified were effective because they understood and promoted the principles of adult learning and growth through the use of professional development activities. They did so by “creating cultures of collaboration, inquiry, lifelong learning, experimentation, and reflection consistent with the principles of adult learning and an understanding of teachers’ life cycles, roles, and motivation” (p. 24).

The sixth and final strategy mentioned in the Blase and Blase study indicated that effective principals implemented action research to inform instructional decision-making. These individuals used professional development at their schools as a large-scale research
project. They also used student data to determine academic growth and to determine the effectiveness of the professional development activities that had been offered to teachers.

Blase and Blase concluded that effective principals used the six strategies to increase teacher innovation and creativity. They also used them to encourage risk taking, instructional focus, and reflection. Finally, the strategies used had a positive effect on teacher motivation, sense of efficacy, and self-esteem.

Loucks-Horsley, Harding, Arbuckle, Murray, Dubea, and Williams (1987) identified several attributes of schools where professional development had been most successful. At the successful schools they studied, staff members had a common, coherent set of goals and objectives. They also held high expectations for themselves and their students. The administrators at the schools displayed strong leadership qualities by promoting collegiality, communication among staff members, and reduced the formal use of controls to achieve coordination. The administrators and teachers also placed a high priority on professional development and continuous improvement. The administrators and teachers used a variety of formal and informal assessment tools to monitor progress towards goals and made adjustments in order to overcome obstacles. Finally, knowledge expertise, and resources, such as time and funds, were used appropriately to initiate and support professional development goals.

After conducting a study of 44 elementary, middle, and high schools in Kentucky, Daniel and Stallion (1996) established recommendations concerning annual professional development plans. They suggested administrators and teachers should formulate a mission statement to focus on goals for the school, while keeping their individual
professional growth plans aligned with the school plan. They also indicated that faculty members should expand their understanding of what constitutes professional development. Having a clear understanding that not all workshops or lectures have an impact on professional development is important in establishing a clear vision for growth. Likewise, the authors recommended that the school’s annual plan include a method for providing follow-up or ongoing experiences so practitioners could become experts. The six components that are critical to school based professional development identified by Daniel and Stallion include (a) preparing an articulated mission, (b) planning for professional development at the school and individual practitioner level, (c) implementing the school professional development plan, (d) providing broad support for professional development, (e) building and maintaining capacity to perform, and (f) evaluating the professional development program.

Sparks and Hirsh (2000) indicated that “improving staff development requires empowering educators to develop new models for integrating learning into all aspects of the school” (p. 1). The researchers offered that effective staff development is results-driven and job-embedded; focused on helping teachers become deeply immersed in subject matter and teaching methods; curriculum-centered and standards-based; sustained, rigorous, and cumulative; and directly linked to what teachers do in their classrooms. However, without the active participation of teachers in these professional development activities, student growth will be limited and bringing about site-based school reform is impossible.
King and Newmann (2002) offered that teachers have the most direct sustained contact with students and considerable control over what is taught. The authors also suggested that teachers dictate the climate for learning in the classroom. Therefore, King and Newmann submitted that improving teachers’ dispositions through professional development is a critical step in improving student achievement.

Richards (2002) submitted that schools desperately need change, yet many teachers are resistant to change. She summarized teachers’ resistance to innovation and change by highlighting the following teacher concerns: skepticism, increased burden, lack of ownership, chaos, lack of support, and lack of perceived benefit. Richards felt that if teachers were empowered with the opportunity to influence professional development programs, they would embrace change. She concluded that reform within schools is possible, if teachers are asked to participate in the process and are given the needed research findings, training, and time to reflect and collaborate.

McLaughlin and Marsh (1978) indicated that it is vital for principals and district administrators to be active supporters if change in schools is to occur. In Rand Change Agent Study, the authors determined that the role of the principal as the instructional leader was to strengthen the school improvement process through team building and problem solving. Likewise, the principal needed to be clear that teachers should take responsibility for their own professional growth.

Joyce (2004) offered that if organizations are to successfully initiate change, using professional development is a necessary key element. He believed that school reform movements in the past had failed because the teachers were ultimately in control of the
culture of the school and they resisted forced change. To Joyce, schools should become professional communities of inquiry where teachers study their practice. However, for that to be effective, the structure of the school must be changed to create the condition where teachers want to work collaboratively with their peers. Joyce offered that you cannot disseminate information to teachers, without also disseminating information to central office administrators and building principals. He wrote,

Those in the latter category are the agents for changing the structure of the workplace. Central office folks need to be deeply involved in the process and need to create structures that small teams of teachers and most schools cannot make without their help. (p. 81)

King and Newmann (2000) emphasized the importance of including teachers in the process. They stated that teacher learning is more likely to occur when teachers have influence over the substance and process of professional development. This involvement allowed teachers to connect with the learning activity and to develop a sense of ownership.

Lieberman and Miller (1986) agreed with the importance of including teachers in the decisions concerning the selection of professional development activities. They emphasized that the traditional method where district staff or administrators selected the professional development topics should be used in conjunction with teachers giving their insight into what professional activities should be selected. They also emphasized that teachers should give input as to how these activities were to be delivered. The top-down approach has been used to set expectations concerning performance and the bottom-up approach was used to include teachers in goal setting and the designing of meaningful professional development activities.
At the time of this study (2005), public schools in the state of Florida are required to develop School Improvement Plans that identify the goals and objectives that will be emphasized at each school for the upcoming school year. These goals and objectives are developed as a result of a needs assessment that take place at each schools. When performing a needs assessment, the data used most prominently in the state of Florida are the students’ test scores generated from the previous year’s Florida Comprehensive Achievement Test (FCAT). The outcomes of the goals and objectives that are developed in the School Improvement Plan must be measurable and should have a positive affect on student achievement. After the goals and objectives have been established, strategies are identified that will be used to insure that the goals and objectives are met. One important strategy that is used by the majority of the schools to bring about school reform is the use of professional development for teachers (personal contact, Dr. Chris Colwell, Deputy Superintendent for Curriculum and School Improvement, 10/28/04).

The Selection of Effective Professional Development

Fullan and Hargreaves (1996) emphasized that many unsuccessful staff development initiatives are those that were “done to teachers rather than with them, still less by them” (p. 17). Administrators were cautioned not to select staff development initiatives because of political pressures to quickly implement reform, but rather to select them based on strategies likely to improve the all around quality and performance of the school.
Cobb (2000) indicated that scholarly inquiry and research had often been neglected and perceived as a weakness of the professional development school movement. She felt that there had been a lack of research that focused on the impact these professional development schools have had on children, in-service teachers, pre-service teachers, and teacher education institutions.

Deojay and Novak (2004) studied the effective professional development practices at Highland Park Elementary School in Manchester, Connecticut. The authors suggested that unlike other schools, where teachers were evaluated, school improvement plans were created, and professional development opportunities were offered to teachers in a typically fragmented, stand-alone manner, the staff at Highland Park Elementary used student performance data to help “transform fragmented plans into a comprehensive system for school improvement” (p. 32). At the school, student data was aggregated and disaggregated by group, class, grade, and demographic characteristics to help teams choose school improvement goals and to help teachers choose their own professional growth objectives. They were also used to help teachers decide what professional development was most relevant in relation to the school’s learning community.

After identifying 18 effective school districts out of the 1500 they studied, Marshall, Pritchard and Gunderson (2001) concluded that one attribute consistent in the effective districts was that professional development was considered job-embedded. In those districts professional development and teacher training were an expected part of contracted, professional activity, not an add-on requirement. In effective schools, all staff members participated in professional development because it was the expected norm of
the school. As such, the process brought highly diverse faculties together as a functioning team.

Sparks and Hirsh (1997) stated it was essential that schools have a job-embedded growth process where all educators, from superintendents to teachers, view the professional development of others as one of their most important responsibilities. The authors emphasized that job-embedded learning models, such as action research, small-group problem solving, peer observation, journal writing, cooperative lesson planning, critiquing of student work, and involvement in school improvement projects should not be overlooked.

Marshall, Pritchard and Gunderson (2001) discussed professional development practices that showed little value added in relation to the dollars and time spent on the activities. The first practice they identified was that of giving teachers individual choice in planning professional development. The authors concluded that individual choice resulted in no constancy of purpose or specified end in mind. Likewise, individual choice rarely resulted in a unified scheme with school-level follow-up support. Therefore, with no follow-up by a support group, changes in teachers’ behavior were rarely achieved.

Marshall, Pritchard and Gunderson also suggest that professional development activities offered by providers outside the school districts, such as regional service centers or universities showed little value in relation to teacher improvement. The primary reason for this determination was that these outside agencies had not always aligned their offerings with the districts’ missions. Therefore, at times there was not a connection made with the improvement efforts identified by the districts. The authors did

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not find evidence of this occurring in the 18 districts they studied. They did find, however, that when high-quality in-service workshops or other types of training were implemented with the support of the school district, effective school and classroom change occurred. When the same workshops were offered without district support, no documented change occurred. Therefore, Marshall, Pritchard and Gunderson concluded, “individual choice professional development without constancy of purpose and systematic follow-up support for implementation fails” (p. 66).

The second ineffective practice identified by Marshall, Pritchard and Gunderson was that of using teacher-needs assessments to determine which professional development activities should be selected. However, the authors agreed that teacher input was vital in the process. The teachers interviewed acknowledged that the in-service workshops attended based on their surveyed needs had produced little value. Teacher needs assessments were ineffective because the needs were based on individual teacher choice, rather than being established based on the purpose of the school or district.

Sparks and Loucks-Horsley (1989) compiled research conducted by learning styles theorists, adult learning theorists, and stage theorists. They determined that circumstances suitable for one teacher’s professional development may be different than the need of another. Therefore, they believed that individually-guided professional development allowed teachers to find answers to self-selected professional problems that were relevant to them, thereby possibly making learning more personal and meaningful.

Marshall, Pritchard and Gunderson (2001) also concluded that providing external incentives to teachers showed limited value towards the success of professional
development activities. These incentives included allocating points, credit hours, or some other numerical quota for the successful completion of an activity. The authors believed that these schemes negated the belief that professional development should be a job-embedded expectation. In some district, incentives included providing teachers with inexpensive graduate credits that allowed them to move up the salary scale. This resulted in teachers aligning professional development with extra pay rather than as a job expectation.

The fourth professional development practice noted by Marshall, Pritchard and Gunderson that showed limited value was that of providing professional development to teachers based on the academic department to which they were assigned to such as those found in secondary schools. One shortfall of this approach was that typically meaningful professional development was limited because the department heads in charge of these groups were academics, not staff developers. Also, in these types of structures, veteran teachers were awarded what some would consider the best classes and the most time for preparation, whereas, junior faculty members were awarded the special classes with students of special needs and the least time for preparation. Likewise, departments competed against each other for budget allocations and students. The authors suggested that this competition created unhealthy climates that relied on the department structure for leadership.

In the 18 school districts studied, Marshall, Pritchard and Gunderson (2001) determined that high-quality professional development provided a foundation for school improvement when it was aligned with district purpose and had a constancy of purpose.
In the most effective districts they studied, professional development was provided for all staff members and included training, mentoring, study groups, and follow-up activities. In these districts, professional development was considered job-embedded for all educators, allowing administrators to participate in training along side teachers.

The last effective practice discussed in the Marshall, Pritchard and Gunderson (2001) study concerned follow-up activities after a professional development has begun. Effective schools studied had principals who ensured follow-up support to professional development activities with mentoring, discussion groups, and additional training. The authors also found that if the principal did not facilitate this follow-up support, professional development training had no long-term impact. Gorton and Schneider (1991) agreed while stating, “The absence of follow-up after workshops is without a doubt the greatest single problem in contemporary professional development” (p. 38).

Maute (2004) suggested that once administrators and teachers have selected the topics of desired professional development activities, the task of the school leader is to then stay on task using the following principles. First, the principal should recognize that every meeting between two or more staff members is an opportunity for growth and learning. These meetings may include team, grade-level, or faculty meetings. Also, principals should be aware of the cost factors involved in professional development selection. Principals were encouraged not to approve funds for learning activities that do not have a direct connection to the school goals. Likewise, principals were challenged to be innovative in creating the time needed to provide learning opportunities for teachers. These opportunities included time to learn, observe, and reflect together. Finally,
principals were encouraged to develop a group of teachers at their schools who could provide learning opportunities for their peers rather than to solely rely on outside expertise.

Wu (1987) discussed the value of using teachers as trainers of their peers. Wu reviewed other research and found that “when peers are trainers, teachers feel more comfortable exchanging ideas, play a more active role in workshops, and report that they receive more practical suggestions” (p. 5).

James (2004) wrote, “most of our nation’s teachers are unable to access the professional development they need to improve their knowledge and skills” (p. 4). She indicated that teachers know what they need to learn and why they need to know it, but they lack the piece of how they are to be involved in the learning process. The author suggested that administrators must find the time to allow teachers to participate in quality professional development activities. In her research, James offered that Asian and European nations regularly provide time for their teachers to be involved in professional development activities to upgrade skills, observe exemplary teaching, plan lessons, and work collegially. In a comparison between teachers in America and Japan, James indicated that Japanese teachers spent almost 40 percent of their workday on professional development and collegial work, whereas in America the figure is only 14 percent.

James offered the following suggestions for principals to use in their attempts to find more time for teachers to be involved in professional development and to work collaboratively with their colleagues. First, principals were encouraged to consider extending the school day in exchange for early release or late start days once a week for
professional development. Secondly, principals were asked to create a yearly calendar and build in an appropriate number of professional development days. Third, principals should hire permanent substitutes who would be used solely for the purpose of releasing teachers for professional development and collaboration. Also, principals should build planning periods that allow teachers to not only engage in learning activities, but opportunities for collaborative discussions with peers. Next, principals should free teachers by enlisting administrators, paraprofessionals, and interns to conduct their classes at regular intervals. Finally, principals should consider adding professional development days to the school year and use these extra days to provide half-day or full-day professional development opportunities for teachers. James emphasized that,

If principals engage teachers in discussions of not only how to find time for professional development but the kind of professional development they need, they will find that teachers are ready to cooperate in finding the time if they can be assured that the professional development is of high quality. (p. 6)

Brewer (2001) wrote, “While everyone cries, ‘We don’t have time,’ the successful principal determines how to make time, take time, and use time” (p. 31). He suggested that targeted professional development was an essential ingredient to use while supporting the school’s and community’s desired goals.
Types of Professional Development

Workshops

Marshall, Pritchard and Gunderson (2001) noted several professional development activities that were used successfully to increase teacher effectiveness. One of the professional development activities that worked in the districts they studied was that of professional development workshops. The authors suggested that in-service workshops are intended to focus on the school’s vision. In these workshops, all faculty members must attend, including administrators.

Gorton and Schneider (1991) suggested that in-service workshops during the school year should be used to explore a problem, topic, or new approach to instruction in greater depth than would be possible during a faculty or committee meeting. They also insisted that for in-service workshops to be successful, faculty input regarding the topic and delivery was very important. Otherwise, the faculty would not be very receptive to unilateral administrative decision making and planning in regard to an in-service workshop. Previously, Sergiovanni and Starrat (1988), suggested that professional development focuses on teacher growth, while in-service education is concerned with overcoming deficiencies.

Sparks and Loucks-Horsley (1989) described workshops as activities where a presenter is the expert who establishes the content and flow of activities. The content for the training is based on a set of objectives or learner outcomes. The desired outcomes may be to either increase the awareness or knowledge of the participants or skill their
development. Additional uses for workshop type professional development activities may be to change the attitudes of participants or the transfer training of new teaching strategies into the classroom (Joyce & Showers, 1988).

Teacher Led Study Groups

Marshall, Pritchard and Gunderson (2001) conducted research to study the effects of teacher-led professional development. In their research, they emphasized that the best schools they studied worked in tandem with strong central offices. In effect, the superintendent of those districts knew what high-quality education was and how to establish it, focusing first on students and then on the process to educate them. These districts used professional development to realize their visions. They understood that achieving excellence was a long-term process that involved the entire staff. To accomplish their goals, all staff members in the districts were required to participate in professional development.

Marshall, Pritchard and Gunderson determined that the professional development that had the most impact on school reform and student achievement focused on the aspect of teacher study groups. In these groups, the principal played an integral role by supporting the development of these groups. In the most effective schools studied, teachers formed discussion groups to focus on educational issues that directly related to student needs. These sessions were established as a venue where formal dialogue took place that ultimately had an impact on the direction the school would take toward
improvement. Recommendations generated from these teacher groups were forwarded to the school advisory council for action.

Independent Readings

Sparks and Loucks-Horsley (1989) indicated that a key characteristic of individually-guided professional development activities is that teachers learn many things on their own. One way to do so is by reading professional journals and publications. Here, teachers determine their own goals for learning and select literature that will allow them to gain a better understanding of strategies, teaching methods, or other areas of classroom pedagogy. Information needed for independent readings can be found in research articles, periodicals, texts, or information found from other sources.

Sparks and Loucks-Horsley (1989) suggested that the underlying assumption with this type of professional development is that individuals are better at judging their own learning needs and are capable of self direction and self-initiated. For this type of learning to be effective, adult learners must be capable of planning their own reading activities rather than spend time engaged in activities that are less relevant than those they would design.

Attendance at Affiliated Conferences

Morgan (2003) offered three suggestions individuals should use in order to maximize the benefits of attending a professional development conference. First, attendees should attend a conference in their area of expertise. This was offered to keep
the attendee up to date on relevant information and as an opportunity to extend personal contacts with others in their field. Second, individuals should attend a conference that addresses somewhat unfamiliar information that may be used to cross reference with previously learned information. Here, the attendee is able to stretch their area of expertise while also reinforcing what they already know. Finally, Morgan suggested that individuals should choose conferences that tell a story from beginning to end. This suggestion was given so that attendees could select conferences where the organizers had woven the information presented into a comprehensible package that had meaning, rather than being disjointed.

Richardson (1999) offered that after returning from professional development conferences, many participants often find themselves overwhelmed by their busy, normal routines and are unable to incorporate the information they have learned into their daily teaching. To combat this problem, Richardson suggested that by increasing the number of participants from each school, the greater the likelihood that new ideas will be implemented.

Richardson also suggested that for teachers and principals to maximize the benefits of the conferences they attend, they should know ahead of time what they expect to learn and how the information will be used upon their return. She referenced a plan developed by the St.Vrain Valley School District in Longmont, Colorado. This plan was developed for participants to use in order to make conference participation more effective. Prior to attending a conference, participants from the St. Vrain Valley School District formed focus groups to generate questions and develop learning goals for each
individual and for the group as a whole. Then, participants selected the conference sessions they believed would help them learn something related to their goals. Next, conference registration completed as a team with each participant committing to attending certain sessions. During the conference, participants met daily to debrief and discuss the information they had learned. A different facilitator was selected for each day and debriefings usually lasted 90 minutes. The participants then created a notebook from handouts and notes they had compiled during the sessions. Each participant received a copy of the notebook to use as a reference. Finally, presentations were conducted at their home school in order to share the information learned with the rest of the faculty.

The Staff Development Department of Volusia County Schools, Florida, considers the attendance of teachers at conferences and seminars as a professional development activity. At these conferences, teachers are able to attend mini-workshops that may last one hour or longer in duration. Presenters at these workshops provide attendees with information on a specific topic. The teachers are asked to take the information they have learned back to their work site and incorporate the effective strategies into their classroom teaching methods (personal contact, Victoria Drager, Director, 10/28/04).

Peer Collaboration

King and Newmann (2002) indicated that teacher learning is most likely to take place when teachers collaborate with professional peers, especially those within their own
school. As such, professional development can rely almost exclusively on internal resources and expertise that exists in the school.

Therese Dozier, Senior Advisor on Teaching to the U.S. Secretary of Education, gave her views concerning professional development in an 2000 interview published in the *Journal of Staff Development*. She believed that teachers should be given the opportunity during the course of the workday to work collaboratively with their peers on the content they teach and the ways they teach it. Dozier further indicated that there currently exists limited data that suggest a strong correlation between professional development for teachers and an increase in student learning. She attributes this to the type of professional development that was normally available in the United States, disjointed one-shot workshops that are usually unrelated to what actually occurs in a teacher’s daily routine (Sparks, 2000).

Casalengo (2000) discussed the importance of peer collaboration in her research that focused on an increase in student achievement by revitalizing teaching and instruction through action-based research. He indicated that effective teachers are those who value opportunities to reflect and grow. Peer collaboration and peer coaching were emphasized as fundamental components in that process. These activities allowed teachers to facilitate introspection, encouraged new procedures or methodologies, and built confidence in a supporting, professional environment. Concerning the effectiveness of peer coaching on teacher learning in relation to attendance at a workshop only approach, Sparks (1986) found that peer coaching was more effective in improving classroom performance.

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In her research dealing with teacher induction programs, McKenna (1998) discussed the use of peer observation/coaching as a valuable component. She concluded that this process allowed peer teachers to communicate effective teaching strategies through the use of discussions, observations, demonstrations, and instructional feedback.

The importance of using professional circles as a means of professional development was emphasized by Mycue (2001). She indicated that it was vital for teachers to be given the opportunity to engage in discussions with their peers in professional circles. In her opinion, for effective teacher development to occur, the teachers themselves must meet for dialogue and conversation about their beliefs, practices, goals, concerns, and successes. Mycue concluded that the benefits of the professional circles were that teachers experienced less isolation and developed greater collaborative efforts with their peers.

Mycue described four stages that take place in the development of professional circles where teachers work with their peers on professional development initiatives. The first stage was called the planning stage. Here, a homogeneous group of teachers were invited to meet and work toward a common goal of mutual interest. Teachers in these groups were asked to determine how material would be disseminated to other group members. For professional centers to be most effective, the number of teachers in each group should be limited to less than 12. A schedule for follow-up meetings was developed during the planning stage, which included one- to two-hour meetings that would take place weekly or biweekly, depending on the goals of the group.
The second stage identified by Mycue (2001) was called the beginning stage. Here, teachers were introduced and asked to share something about themselves and their purpose for joining the group. Teacher growth and professional development was the overall goal of the professional circles and Mycue emphasized that the group members should focus on collaboration when determining both individual and group goals. The teachers in the groups were asked to take responsibility for establishing the agenda and periodically revising the goals. In the beginning stage, ground rules that would be used by the group were also discussed, along with the need for confidentiality and mutual respect.

Mycue described the third stage of professional circles as the working stage. In this stage, teachers were encouraged to plan ahead for each group meeting. Short opening and closing exercises were used to set the stage for a positive group time. Teachers were given thought-provoking questions that allowed the opportunity for reflection and collaboration with their peers. The use of ongoing self-evaluation was also used. As such, teachers were asked to use verbal or written notes pertaining to individual and group goals, efforts, and interest. The use of self-evaluation allowed the professional circle to stay a strong and necessary part of teachers’ professional development plans.

In what is referred by Mycue as the closing stage, teachers were given time to wrap up the professional circle experience. Here, teachers were given the opportunity to share with their peers what they considered were the positive benefits of working with the group. An important component of the closing stage was asking teachers to discuss how they would connect their learning experience to their lives beyond the professional circle.
The importance of using peer collaboration and discussions in professional learning communities was emphasized by Louis and Kruse (1995). To them, a professional learning community was not a place where teachers worked in the same building, but in a learning community where teachers from every part of the school campus worked collaboratively at all levels. The collaboration included what the authors described as reflective dialogue: meaningful conversations about issues and problems related to students, learning, and teaching.

The characteristics of the professional learning communities described by Louis and Kruse (1995) included: (a) a principal who shared power and authority with teachers by encouraging them to be active participants in the decision making process; (b) a shared vision among staff members concerning a commitment to student learning and teacher performance; (c) opportunities for teacher-to-teacher visitations accompanied by feedback and assistance when needed; (d) opportunities for reflection among staff members, collective inquiry, and the sharing of personal practice; and (e) the sharing of success stories and the celebration of teacher achievements. The inclusion of peer discussions was noted as one of the most important ingredients in the professional learning communities. The teachers who identified their schools as professional learning communities in the studies conducted by the authors reported fewer feelings of isolation and were inclined to view their work as being more satisfying.

In another study, Madsen and Hipp (1999) reported that teachers in professional learning communities felt more energized when they were given opportunities to engage in dialogue with their peers. Teachers also felt they were able to take risks and be more
innovative concerning teaching methods that were employed. The authors indicated that these were reasons why school improvement efforts were probably more successful in these types of schools.

Students who were taught in schools with professional learning communities benefited by showing gains in achievement in the areas of math, science, history, and reading (Hord, 1997). Likewise, students in schools where professional learning communities are encouraged among teachers showed less gaps in learning between students from different backgrounds as compared to students at traditional schools.

Universities and Professional Development Centers

Another form of professional development available to teachers is the involvement in coursework at universities or teaching centers. Hering and Howey (1982) summarized research conducted on 15 teacher centers. They found the most important characteristic of this type of professional development was the emphasis of working with individual teachers over time. To them, this focus on individual teachers was absent from many traditional professional development programs being offered at the time.

In her research into professional development, Cobb (2000) discussed the virtues of professional development centers. In these centers, public schools and universities formed a partnership based on the need for school reform. Professional development was an important ingredient in this partnership, with the purpose of preparing teachers to meet the challenges of the 21st century. Cobb cited work by the Holmes Group in 1997, which defined six goals of the professional development centers. Those goals were (a) high
quality professional preparation; (b) simultaneous renewal; (c) equity, diversity and cultural competence; (d) scholarly inquiry and programs of research; (e) university and school-based faculty development; and (f) policy initiation.

**Summary**

The review of the literature presented in Chapter 2 encompassed information related to professional development. The focus of the research was to describe the history and importance of professional development, along with the selection process used by highly effective school districts when selecting these activities. Research was also reviewed concerning the most common types of professional development used in schools today.

Chapter 2 was divided into seven sections that included an introduction and a summary. In section two, a brief historical outline of the use of professional development over the past three decades was presented. Beginning in the 1970s, the literature discussed how professional development was primarily based on the results of teachers’ attitudes towards such programs. Information concerning the 1980s was presented that indicated studies were conducted that concentrated on the practices of effective professional development activities rather than teacher attitudes towards them. In the last decade, information was compiled concerning how teachers had become more acutely aware of the need for quality professional development to keep abreast of effective teaching strategies, understanding the growth and development of students, and how to individualize instruction for an increasingly diverse student population.
Section three contained research on the importance of professional development. Information was presented on how these activities could be used for gaining awareness, knowledge, skill development, changes in attitude, or the transfer of training. The most effective training programs discussed were those that included an exploration of theory, demonstration of practice, supervised trial of new skills with feedback on performance, and coaching within the workplace.

In section four, the processes used in the selection of professional development activities were reviewed. Information was presented that emphasized one constant in effective school districts studied. This constant was that professional development was considered as being job-embedded. Conflicting studies were reviewed concerning who should be responsible for the selection of professional development activities. Information was reviewed that implied it is most effective when the activities selected for teachers are aligned with a school-wide plan for professional development. However, some research indicated that teachers have more buy-in concerning professional development when they were given the opportunity to select their own activities based on what they perceived as their area of needed growth.

Section five included information on the six most commonly used forms of professional development activities found in school districts. These included in-service workshops, teacher led study groups, independent readings, attendance at affiliated conferences, peer collaboration, and enrollment at universities and professional development centers. The positive attributes of each activity were presented.
In section six, the importance of follow-up after a professional development activity was discussed. The research on effective schools studied indicated that follow-up support to professional development activities with mentoring, discussion groups, and additional training was extremely vital to the process of teacher growth.

School principals play a major role in the development of school-wide professional development plans that promote the professional growth of teachers. To implement that plan, principals must be aware of the importance of selecting effective professional development opportunities and then monitoring teacher participation in those activities. Sparks and Hirsh (2000) suggested that improving professional development requires empowering educators to develop new modes for integrating learning into all aspects of the school. The researchers offered that effective professional development should be results drive, job embedded, curriculum centered, sustained and cumulative, and directly linked to what teachers do in the classroom. If we are to continue to increase student achievement in an accountability driven system, teachers must play an active roll in the establishment of school-wide goals and the selection of effective professional development activities.
CHAPTER 3

METHODOLOGY

Introduction

The purpose of this chapter is to describe the methodology and procedures used in determining if there is a sub-population of teachers in two central Florida school districts who may not be participating equally in professional development activities in relationship to their peers. Likewise, another purpose of this chapter is to describe the methodology and procedures used in determining the accuracy of the perceptions of the building principals at the schools sampled concerning the participation of their teachers in professional development activities.

This chapter is divided into six sections. The first section contains a statement of the problem. The second section provides a description of the population of the study. In the third section, the data collection process is explained. The instrumentation is described in the fourth section, and the fifth section contains the research questions. The sixth and final section details the data analysis. A summary of the six sections concludes Chapter 3.

Problem Statement

The following question guided this investigation: “Is there a sub-population of teachers who are not actively involved in professional development in relation to their peers in other departments?”
The purpose of this study was twofold. The first was to gather perspectives of randomly selected school principals and teachers in Volusia County School District and Brevard County School District concerning the participation of teachers in professional development over the previous 2-year period. The second was to determine if there were similarities or differences concerning the amount of participation of teachers from different departments in these activities. The teachers surveyed for this study were assigned to categories based on whether they taught in Volusia County School District or Brevard County School District; elementary, middle, or high schools; and a particular department (e.g., primary, intermediate, mathematics, language arts, liberal arts, etc.).

Population

The population for this study was defined to be the teachers and administrators in two central Florida school districts: Brevard and Volusia. For this study, teachers and building administrators at eight randomly selected schools from each of the two districts were used as the sample. The teachers and building administrators were surveyed at 4 elementary schools, 2 middle schools, and 2 high schools in each district for a total of 471 educators in the sample.

Brevard County School District operated 81 schools at the time of this study (2005). Of those schools, 52 were elementary schools, while 29 were either middle or high schools. Those schools serviced a student population of 75,327. The Brevard County School District employed 4716 teachers and 219 building administrators. For this study, the teacher population at the 8 schools surveyed represented 10% of the total
teacher population employed in Brevard County School District (N=491). Also, the building administrators at the 8 schools surveyed represented 11% of the total number of building administrators assigned to schools in Brevard County (N=24).

In 2005, Volusia County School District operated 65 schools. Of those schools, 45 were elementary, while 20 were either middle or high schools. Those schools serviced a population of 62,577 students. The Volusia County School District employed 2928 teachers and 198 building administrators. For this study, the teacher population at the 8 schools surveyed represented 18% of the total teacher population employed in Volusia County School District (N=537). Also, the building administrators at the 8 schools surveyed represented 14% of the total number of building administrators assigned to the schools in Volusia County (N=27).

Data Collection

Survey instruments (Appendix B and C), cover letters (Appendix A), participant participation consent decrees (Appendix E and F), and an envelope with instructions on when the surveys were due and who to give them to were distributed to 491 teachers and 24 building administrators at the 8 randomly selected schools in Brevard County School District. Likewise, 537 teachers and 27 building administrators were sent similar packets at the 8 randomly selected schools chosen in the Volusia County School District. The packets were initially mailed during the first week of November, 2004. A second mailing of surveys was conducted in December, 2004.
Return responses were considered usable if the teacher or building administrator worked at their current school site between the time period July 1, 2002 and June 30, 2004. Those who were not working at their current school during that time period were asked not to complete the surveys.

The first mailing yielded a return of 278 teacher surveys (27%) and 13 building administrator surveys (25%) that could be used for this study. A follow up email (Appendix J) was sent on November 25, 2004 to the remaining 750 teachers and 38 building administrators whose surveys had not been returned. This email reminded respondents of the surveys, requested they be returned immediately, and provided an opportunity for teachers and building administrators to request new surveys. The email reminder resulted in the return of 46 additional teacher surveys (4%) and 7 additional building administrator surveys (14%) that could be used for data collection.

A second mailing was conducted in December, 2004. In this mailing, 704 teacher and 31 building administrators surveys were sent to those who had not responded to the first mailing or follow-up email. Due to the second mailing, 109 additional teacher surveys were collected (11%) along with 18 building administrator surveys (35%).

Table 1 displays the combined distribution and collection results from both Brevard and Volusia County School Districts. The two survey distributions yielded a total return of 593 teacher surveys (57%) and 44 building administrator surveys (86%). Of those, data from 433 teacher surveys (42%) and 38 building administrator surveys (73%) were used for this study. The remaining 160 teachers and 6 building administrators...
administrators indicated that they had not been working at their respective schools during the required time period of July 1, 2002 and June 30, 2004.

Table 1

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<thead>
<tr>
<th>District</th>
<th># of Teachers</th>
<th># of Teacher Surveys Returned</th>
<th># of Administrators</th>
<th># of Administrator Surveys Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevard</td>
<td>491</td>
<td>204</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Volusia</td>
<td>537</td>
<td>229</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>1028</td>
<td>433</td>
<td>51</td>
<td>38</td>
</tr>
</tbody>
</table>

**Instrumentation**

Questionnaires developed by the researcher were the primary instruments used for data collection. The Professional Development Questionnaire for Building Principals (Appendix B) instrument consisted of 18 items. This instrument was designed to gather building principals’ perceptions concerning 6 content base categories. Building principals were asked their perceptions concerning: (a) teacher participation in professional development activities, (b) the effectiveness of professional development activities, (c) the selection of these activities, and (d) the availability of facilitators needed to provide professional development activities. Building principals were also asked to give information concerning the fund sources they have used to provide
professional development activities for their teachers. Finally, building principals were asked to select which sub-group of teachers out of the 13 departments that were listed (i.e., elementary primary, mathematics, social studies, physical education, etc.) who they felt participate more in professional development activities than teachers from the other departments. The Professional Development Questionnaire for Building Principals survey was tested for validity and reliability during the Analysis of Survey, Record, and other Qualitative Data course at the University of Central Florida in the Summer 2004 semester. Test results indicated the survey was judged to be modestly reliable with a coefficient of .7723.

The Professional Development Questionnaire for Teachers (Appendix C) contained 22 items. This questionnaire developed by the researcher was designed to collect data from teachers concerning 6 content based categories. Teachers were asked to give their perceptions concerning: (a) their participation in professional development activities, (b) the relevance of the professional development activities they had been involved in, (c) the process used to select these activities, (d) the monitoring efforts of their administrators concerning teacher involvement in these activities, and (e) information about the number of hours they were involved in professional development between July 1, 2002 and June 30, 2004. Teachers were asked to indicate the amount of hours they were involved in workshops, study groups, independent readings, attending affiliated conferences, discussions with peers or other professionals on related topics, or university course work. Demographic information concerning the gender, the number of completed years as a classroom teacher, and the highest college/university degree
completed by the respondent was also asked. Finally, the teachers were asked to identify which teaching assignment they held during the period July 1, 2002 and June 30, 2004 out of the list that was provided. The list was identical to the department list included on the Professional Development Questionnaire for Building Principals. The Professional Development Questionnaire for Teachers survey was tested for validity and reliability during the Analysis of Survey, Record, and other Qualitative Data course at the University of Central Florida in the Summer 2004 semester. Test results indicated the survey was judged to be modestly reliable with a coefficient of .7816.

**Research Questions**

The following questions guided the research:

1. To what extent do teachers participate in professional development as measured by the amount of hours they are actively involved in such activities?
2. How accurate are the perceptions of school principals concerning the participation of their teachers in professional development?
3. Is there a department of teachers who participate less in professional development than those in other departments?

**Data Analysis**

The 18-question survey instrument for building principals (Appendix B) developed by the researcher was divided into 4 parts. Part I consisted of the first 10 questions. Here, building principals were asked to use a 5-point Likert Scale (1 =
strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) to rate questions pertaining to (a) teacher participation in professional development, (b) the effectiveness of professional development, (c) the selection of these activities, and (d) the availability of facilitators needed to provide professional development activities. Part II consisted of questions 11 through 15 and asked building principals to identify which fund sources they have used to provide professional development opportunities for their teachers. Part III consisted of two demographic questions (numbers 16 and 17) that asked for the gender of the respondent and the number of years that individual had served in an administrative role. Part IV contained the final question that asked building principals to select the one department out of the 13 that were listed to identify which sub-population of teachers they felt participated in more professional development activities than the other departments listed. Table 2 contains the 6 content base categories of the building principals’ survey and the questions that are aligned with each category.

The 22-question survey instrument for teachers (Appendix C) developed by the researcher was divided into four parts. Part I consisted of the first 11 questions. Here, teachers were asked to use a 5-point Likert Scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) to rate questions pertaining to (a) their participation in professional development, (b) the relevance of the professional development they had been involved in, (c) the process used to select these activities, and (d) the monitoring efforts of their administrators concerning teacher involvement in these activities. Questions number 12 through 18 combined to make Part II. Here, teachers
were asked to estimate the number of hours they had been involved in six specific types of professional development between July 1, 2002 and June 30, 2004. The six specific types of professional development consisted of workshops, study groups, independent readings, attending affiliated conferences, discussions with peers or other professionals on related topics, or university coursework. Part III included questions 19, 20 and 21. In this section, teachers were asked demographical information concerning their gender, their number of completed years as a classroom teacher, and the highest college/university degree earned by the respondent. The fourth part of the survey consisted of question 22, which asked teachers to identify which department they were assigned to as a teacher during the period of July 1, 2002 and June 30, 2004. Table 3 outlines the 6 content-based categories and the questions that are aligned with each category.

Table 2

<table>
<thead>
<tr>
<th>Content Base Category</th>
<th>Number of Items</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions concerning teacher participation in PD activities</td>
<td>5</td>
<td>4, 5, 8, 9, 18</td>
</tr>
<tr>
<td>Effectiveness of PD activities</td>
<td>2</td>
<td>6, 7</td>
</tr>
<tr>
<td>Selection of PD activities</td>
<td>3</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Availability of facilitators for PD activities</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Fund sources used to provide PD</td>
<td>5</td>
<td>11, 12, 13, 14, 15</td>
</tr>
<tr>
<td>Demographical information</td>
<td>4</td>
<td>19, 20, 21, 22</td>
</tr>
</tbody>
</table>
Table 3

Professional Development (PD) Questionnaire for Teachers: Blueprint Table

<table>
<thead>
<tr>
<th>Content Base Category</th>
<th>Number of Items</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in PD activities</td>
<td>3</td>
<td>4, 5, 8</td>
</tr>
<tr>
<td>Relevance of PD activities</td>
<td>4</td>
<td>1, 6, 7, 11</td>
</tr>
<tr>
<td>PD selection process</td>
<td>3</td>
<td>2, 3, 10</td>
</tr>
<tr>
<td>Administrators monitoring of PD activities</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Information about the amount of hours spent by teachers in PD activities</td>
<td>7</td>
<td>12, 13, 14, 15, 16, 17, 18</td>
</tr>
<tr>
<td>Demographical information</td>
<td>4</td>
<td>19, 20, 21, 22</td>
</tr>
</tbody>
</table>

Data Analysis for Research Question 1

Research Question 1 focused on the extent to which teachers participate in professional development as measured by the amount of hours they were involved in such activities. To analyze the responses to this question, the researcher used questions 12, 13, 14, 15, 16, 17, and 18 from the Professional Development Questionnaire for Teachers.

An item-by-item analysis of responses was determined through the use of descriptive statistics. The mean averages for each department of teachers represented (primary, intermediate, guidance counselor, reading, etc.) were calculated by comparing the means of the hours spent in professional development to the department in which they were assigned. The total number of hours spent in professional development was the
dependent variable, while the department assignment was the independent variable. The results were recorded and analyzed using the Statistics Package for the Social Sciences (SPSS), Version 10.0. The results were presented in tabular form and discussed.

Data Analysis for Research Question 2

Research Question 2 focused on how accurate the perceptions of building principals were concerning the participation of their teachers in professional development. To analyze the responses to this question, the researcher used questions 4, 5, 9, and 18 from the Professional Development Questionnaire for Building Principals. An item-by-item analysis of responses to questions 4 and 5 was determined through the use of descriptive statistics. Results from questions 4 and 5 were compared to the responses of teachers on similar questions from the Professional Development Questionnaire for Teachers. The frequencies and percentages of the respondents’ answers to each question were calculated. Building principal responses to questions 9 and 18 were tabulated and reported using descriptive analysis. The results were recorded and analyzed using SPSS and results were presented in tabular form and discussed. These results were then compared to those of Research Question 1.

Data Analysis for Research Question 3

To answer Research Question 3 concerning whether or not there is a department of teachers who participate less in professional development than those in other
departments, the researcher used questions 12, 13, 14, 15, 16, 17, 18, and 22 from the Professional Development Questionnaire for Teachers.

For this question, the dependent variable was the number of hours estimated by the teachers concerning their involvement in professional development between July 1, 2002 and June 30, 2004. The independent variable was the department they were assigned to.

The independent samples t-test was used to evaluate the hypothesis that the department in which teachers are assigned (i.e. foreign language) had an impact on the number of hours of professional development they were involved in.

One-way Analysis of Variance (ANOVA) was used to evaluate the relationship between the department assignment and the total number of hours involved in professional development. This was chosen because the independent variable has several levels and is assumed that the dependent variable was impacted by the categorical variables. Residual plots were reviewed to determine independence. Q-Q plots were reviewed for normality using Kolmogorov-Smirnov and Shapiro Wilks tests. Follow-up tests were conducted to evaluate pair size differences among the means. Levene’s test of equality of variance was used as well as Tukey/Kramer due to the unequal sample sizes. Statistical levels at p>.05 were used for statistical comparisons.

Summary

This chapter has described the methodology and procedures used to determine the extent to which teachers participate in professional development activities and the
perceptions of building principals in relation to such. It contains a description of the population and the statement of the problem. Information related to the development of the survey instruments and the procedures used in data analysis were also presented.

Tables and accompanying narratives summarizing the data analysis and organized around the three research questions will be presented in Chapter 4. The conclusion, discussion and implications for practice and future research will be presented in Chapter 5.
CHAPTER 4
ANALYSIS OF THE DATA

Introduction

This study was developed to gather perspectives of randomly selected school principals and teachers in Volusia and Brevard County School Districts concerning the participation of teachers in professional development over the 2-year period, July 1, 2002 to June 30, 2004, and to determine if there were similarities or differences concerning the amount of participation in these activities of teachers from different departments.

Population and Demographic Characteristics

The population for this study was the teachers and administrators in two central Florida school districts: Brevard and Volusia. For this study, teachers and building administrators at eight randomly selected schools from each of the two districts were used as the sample. The teachers and building administrators were surveyed at 4 elementary schools, 2 middle schools, and 2 high schools in each district for a total of 471 educators in the sample. Data were generated from 433 teachers (42% of the teacher sample population) and 38 building administrators (75% of the administrator sample population). Only those teachers and building principals who worked at their current school during the period July 1, 2002 through June 30, 2004 participated for this study.

The mean number of completed years in teaching for the 433 teacher respondents was 14.75 years. The mean number of completed years in administration for the 38
building principal respondents was 9.79 years. Other demographic data obtained from the teachers are presented in Tables 6-10. Data obtained from the building principals are presented in Tables 11-13.

Table 4 displays the number and percentages of teachers in each of the three levels of teaching (elementary, middle, and high school). The 433 teachers that made up the teacher survey population was comprised of 159 elementary (36.7%), 94 middle (21.7%), and 180 high school (41.6%) teachers.

Table 4

<table>
<thead>
<tr>
<th>Teaching Level</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>159</td>
<td>36.7</td>
</tr>
<tr>
<td>Middle School</td>
<td>94</td>
<td>21.7</td>
</tr>
<tr>
<td>High School</td>
<td>180</td>
<td>41.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>433</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of the 433 respondents who comprised the teacher survey population, 204 (47.1%) were from the Brevard County School District and 229 (52.9%) from the Volusia County School District (Table 5). In relation to gender, 97 were males (22.4%) and 336 females (77.6%). Table 6 displays the number and percentage of teachers concerning gender representation.
Table 5

<table>
<thead>
<tr>
<th>School District</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevard County Schools</td>
<td>204</td>
<td>47.1</td>
</tr>
<tr>
<td>Volusia County Schools</td>
<td>229</td>
<td>52.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>433</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 6

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>97</td>
<td>22.4</td>
</tr>
<tr>
<td>Female</td>
<td>336</td>
<td>77.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>433</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 7 illustrates the number and percentage of teacher respondents in relation to the highest university degree they had completed. Two hundred, thirty-four (54.0%) of the teachers held bachelor degrees, 183 (42.3%) had master’s degrees, 11 (2.5%) had specialist degrees, and 5 (1.2%) had doctoral degrees.

Using the Professional Development Questionnaire for Teachers (Appendix C), respondents in the teacher sample population were asked to indicate which department they were assigned to between July 1, 2002 and June 30, 2004. Eight respondents did not select one of the 13 departments listed on the survey and instead chose “Other.” Of the 8, all indicated they were media specialists. As a result, the researcher added media...
specialist as the 14th category. Teachers from the Exceptional Student Education department were represented the most (n=93, 21.5%) in the teacher survey population, followed by those from the primary grades department who taught Kindergarten through 2nd (n=63, 14.5%). The media specialists had the least representation (n=8, 1.8%) with teachers from the Performing Arts (Music and Art) having the second least number (n=13, 3%) of teachers represented. Table 8 displays information concerning the department assignments of the 433 respondents who comprised the teacher survey population.

Table 7

<table>
<thead>
<tr>
<th>Degree</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s</td>
<td>234</td>
<td>54.0</td>
</tr>
<tr>
<td>Master’s</td>
<td>183</td>
<td>42.3</td>
</tr>
<tr>
<td>Specialist</td>
<td>11</td>
<td>2.5</td>
</tr>
<tr>
<td>Doctorate</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>433</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 8

Teacher Respondents’ Department

<table>
<thead>
<tr>
<th>Department</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Grades (K through 2\textsuperscript{nd} grades)</td>
<td>63</td>
<td>14.5</td>
</tr>
<tr>
<td>Intermediate Grades (2\textsuperscript{nd} through 5\textsuperscript{th})</td>
<td>39</td>
<td>9.0</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>21</td>
<td>4.8</td>
</tr>
<tr>
<td>Reading</td>
<td>17</td>
<td>3.9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>33</td>
<td>7.6</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>15</td>
<td>3.5</td>
</tr>
<tr>
<td>Science</td>
<td>28</td>
<td>6.5</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., business, etc.)</td>
<td>26</td>
<td>6.0</td>
</tr>
<tr>
<td>Social Studies/Psychology</td>
<td>27</td>
<td>6.2</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>30</td>
<td>6.9</td>
</tr>
<tr>
<td>Performing Arts (Music, Art, etc.)</td>
<td>13</td>
<td>3.0</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>20</td>
<td>4.6</td>
</tr>
<tr>
<td>Exceptional Student Education (ESE)</td>
<td>93</td>
<td>21.5</td>
</tr>
<tr>
<td>Media Specialist</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>433</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Of the 38 respondents who comprised the principal survey population, 12 were elementary principals (31.6%), 11 were middle school principals (28.9%), and 15 were high school (39.5%) principals and these are presented in Table 9. Likewise, 18 principals (47.4%) were from the Brevard County School District and 20 (52.6%) from
the Volusia County School District and the information is presented in Table 10. The gender of the 38 principal respondents indicated 20 (52.6%) were males and 18 (47.4%) were females (Table 11).

Table 9

<table>
<thead>
<tr>
<th>Level of Administration</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>Middle School</td>
<td>11</td>
<td>28.9</td>
</tr>
<tr>
<td>High School</td>
<td>15</td>
<td>39.5</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 10

<table>
<thead>
<tr>
<th>School District</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevard County Schools</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>Volusia County Schools</td>
<td>20</td>
<td>52.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 11

Building Principal Respondents’ Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>20</td>
<td>52.6</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Research Question 1

To what extent do teachers participate in professional development as measured by the number of hours they are actively involved in such activities?

In order to address Research Question 1, it was necessary to examine the responses from each of the participating teachers using questions 12, 13, 14, 15, 16, 17, and 18 from the Professional Development Questionnaire for Teachers (Appendix C). For those questions, teachers were asked to estimate how many hours they were involved in professional development between July 1, 2002 and June 30, 2004 using the six professional development activities listed on the questionnaire. These activities included workshops, study groups, independent readings, attending affiliated conferences, discussions with peers or other professionals on related topics, and university coursework. Question 18 was provided in order to give teachers the opportunity to list other types of professional development they may have been involved in other than the ones previously mentioned.
Data indicated that teachers from the reading department had the greatest number of hours (mean = 169.53) of participation in professional development workshops. Teachers in the foreign language (mean = 35.20) and physical education/health departments (mean = 36.00) showed the least amount of involvement. Statistical analysis was computed using the amount of hours involved in professional development workshops as the dependent variable and the department in which the teacher was assigned as the independent variable. Of the 433 teachers who completed the survey, their mean participation in professional development workshops was 69.80 hours (Table 12).

The mean and number of teachers in each department in relation to the amount of hours spent in professional development study groups are illustrated in Table 13. The amount of hours involved in professional development study groups was used as the dependent variable and the department in which the teacher was assigned as the independent variable for statistical analysis purposes. Similar to data acquired for professional development workshops, reading teachers showed the most involvement (mean = 25.65) in professional development study groups among the teachers who completed the survey (n=433). Science (mean = 2.00), media specialist (mean = 2.13), and practical arts (mean = 22.7) teachers, respectfully, had the least amount of involvement. Teacher participation in professional development study groups indicated the least overall involvement (mean = 8.16) than any of the other types of professional development studied.
Table 12

Teacher Participation in Professional Development Workshops by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>65.90</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>78.21</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>62.57</td>
<td>21</td>
</tr>
<tr>
<td>Reading</td>
<td>169.53</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>60.91</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>35.20</td>
<td>15</td>
</tr>
<tr>
<td>Science</td>
<td>74.46</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)</td>
<td>64.12</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies</td>
<td>53.52</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>68.10</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)</td>
<td>42.46</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>36.00</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education</td>
<td>79.46</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist</td>
<td>48.38</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>69.80</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments

1Grades K – 12
2Grades 7 - 12
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>10.41</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>17.33</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor(^1)</td>
<td>7.67</td>
<td>21</td>
</tr>
<tr>
<td>Reading(^1)</td>
<td>25.65</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics(^1)</td>
<td>5.91</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language(^2)</td>
<td>2.27</td>
<td>15</td>
</tr>
<tr>
<td>Science(^2)</td>
<td>2.00</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)(^2)</td>
<td>2.27</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies(^2)</td>
<td>4.22</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts(^2)</td>
<td>5.30</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)(^1)</td>
<td>8.77</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health(^1)</td>
<td>6.80</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education(^1)</td>
<td>7.74</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist(^1)</td>
<td>2.13</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8.16</strong></td>
<td><strong>433</strong></td>
</tr>
</tbody>
</table>

Note: \(^*\)Number of respondents in respective departments
\(^1\)Grades K – 12
\(^2\)Grades 7 - 12
Teacher participation in professional development independent readings is illustrated in Table 14. Statistical analysis was computed using the amount of hours involved in independent readings as the dependent variable and the department in which the teacher was assigned as the independent variable. For the 433 teachers in the sample population, the mean participation in professional development independent readings was 36.46 hours. As with the other forms of professional development, reading teachers showed the most involvement with a mean of 180.47 hours. Guidance counselors indicated the next highest level of involvement (mean = 37.19). Although a major responsibility of most media specialists is to encourage their students to be active readers, these teachers had the least amount of involvement in independent readings (mean = 9.75) than their peers in other departments.

Table 15 displays the mean and number of teachers in each department in relation to the amount of hours spent attending affiliated conferences as professional development. Statistical analysis was computed using the amount of hours involved in attendance at affiliated conferences as the dependent variable and the department in which the teacher was assigned as the independent variable. Overall, the 433 teachers who responded to this question had a mean of 19.88 hours of participation. Performing arts teachers (music and art) had the most involvement with a mean of 57.62 hours, whereas media specialists (mean = 10.38) and Exceptional Student Education teachers (mean = 10.47) had the least involvement.
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>25.98</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>17.85</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor&lt;sup&gt;1&lt;/sup&gt;</td>
<td>37.19</td>
<td>21</td>
</tr>
<tr>
<td>Reading&lt;sup&gt;1&lt;/sup&gt;</td>
<td>180.47</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics&lt;sup&gt;1&lt;/sup&gt;</td>
<td>40.21</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>15</td>
</tr>
<tr>
<td>Science&lt;sup&gt;2&lt;/sup&gt;</td>
<td>30.07</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>24.46</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies&lt;sup&gt;2&lt;/sup&gt;</td>
<td>32.52</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts&lt;sup&gt;2&lt;/sup&gt;</td>
<td>53.13</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>32.23</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health&lt;sup&gt;1&lt;/sup&gt;</td>
<td>22.10</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education&lt;sup&gt;1&lt;/sup&gt;</td>
<td>32.68</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist&lt;sup&gt;1&lt;/sup&gt;</td>
<td>9.75</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36.46</strong></td>
<td><strong>433</strong></td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments
<sup>1</sup>Grades K – 12
<sup>2</sup>Grades 7 - 12
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>14.11</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>22.21</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>15.76</td>
<td>21</td>
</tr>
<tr>
<td>Reading</td>
<td>38.18</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>18.27</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>14.47</td>
<td>15</td>
</tr>
<tr>
<td>Science</td>
<td>29.68</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)</td>
<td>36.35</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies</td>
<td>23.44</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>16.37</td>
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</tr>
<tr>
<td>Performing Arts (Music, Art)</td>
<td>57.62</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>17.40</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education</td>
<td>10.47</td>
<td>93</td>
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<tr>
<td>Media Specialist</td>
<td>10.38</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>19.88</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments

1Grades K – 12
2Grades 7 - 12
Teacher participation in discussion with peers or other professionals on related topics that would be considered professional development is presented in Table 16. Statistical analysis was computed using the amount of hours involved in these discussions as the dependent variable and the department in which the teacher was assigned as the independent variable. The 433 teachers who responded to this question had a mean of 58.62 hours. Reading teachers showed the most (mean = 124.29) active participation in this method of professional development than the other teachers, with media specialists having the least (mean = 15.75).

Table 17 illustrates the mean and number of teachers in each department in relation to the amount of hours spent in university courses that would be considered professional development. Statistical analysis was computed using the amount of hours involved in these activities as the dependent variable and the department in which the teacher was assigned as the independent variable. All 433 teachers who completed the survey provided information concerning their involvement in university courses. Reading teachers (n=17) showed the most participation with a mean of 153.53 hours, followed by guidance counselors (n=21, mean = 75.95). Overall, the 433 teachers who responded to this question had a mean of 34.73 hours.
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>55.60</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>62.49</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>55.19</td>
<td>21</td>
</tr>
<tr>
<td>Reading</td>
<td>124.29</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>61.76</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>19.67</td>
<td>15</td>
</tr>
<tr>
<td>Science</td>
<td>41.04</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)</td>
<td>71.31</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies</td>
<td>32.26</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>49.60</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)</td>
<td>43.54</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>26.55</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education</td>
<td>77.98</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist</td>
<td>15.75</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>58.62</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments
1Grades K – 12
2Grades 7 - 12
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>34.60</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>18.05</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>21</td>
</tr>
<tr>
<td>Reading&lt;sup&gt;1&lt;/sup&gt;</td>
<td>153.53</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics&lt;sup&gt;1&lt;/sup&gt;</td>
<td>30.06</td>
<td>33</td>
</tr>
<tr>
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<td>15</td>
</tr>
<tr>
<td>Science&lt;sup&gt;2&lt;/sup&gt;</td>
<td>13.93</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>43.85</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies&lt;sup&gt;2&lt;/sup&gt;</td>
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<td>27</td>
</tr>
<tr>
<td>English/Language Arts&lt;sup&gt;2&lt;/sup&gt;</td>
<td>20.00</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>36.92</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health&lt;sup&gt;1&lt;/sup&gt;</td>
<td>37.00</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>93</td>
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<tr>
<td>Media Specialist&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.50</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34.73</strong></td>
<td><strong>433</strong></td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments

<sup>1</sup>Grades K – 12

<sup>2</sup>Grades 7 - 12
Twenty-four of the teachers who responded to the survey indicated they had participated in other types of professional development than those previously mentioned. These activities included the following: on-line studies, National Board for Professional Teaching Certification, and independent study modules. Statistical analysis was computed using the amount of hours involved in these activities as the dependent variable and the department in which the teacher was assigned as the independent variable. Overall, the teachers surveyed had a mean of 7.42 hours of participation in these activities. Reading teachers had the most participation with a mean of 106.00 hours. Their involvement was mostly due to on-line reading endorsement courses that are offered by the state of Florida Department of Education. Teacher participation in these other types of professional development is presented in Table 18.

Table 19 displays the mean and number of teachers surveyed in each department in relation to the amount of total hours spent in all the forms of professional development previously mentioned. Statistical analysis was computed using the amount of hours involved in these activities as the dependent variable and the department in which the teacher was assigned as the independent variable. The 433 teachers surveyed had a mean of 227.93 hours of involvement with reading teachers having the most (mean = 633.06).
<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Grades K – 2)</td>
<td>3.90</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>1.54</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor(^1)</td>
<td>0.00</td>
<td>21</td>
</tr>
<tr>
<td>Reading(^1)</td>
<td>106.00</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics(^1)</td>
<td>11.52</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language(^2)</td>
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<td>15</td>
</tr>
<tr>
<td>Science(^2)</td>
<td>4.64</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)(^2)</td>
<td>6.77</td>
<td>26</td>
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<tr>
<td>Social Studies(^2)</td>
<td>0.74</td>
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</tr>
<tr>
<td>English/Language Arts(^2)</td>
<td>2.67</td>
<td>30</td>
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<tr>
<td>Performing Arts (Music, Art)(^1)</td>
<td>1.23</td>
<td>13</td>
</tr>
<tr>
<td>Physical Education/Health(^1)</td>
<td>0.00</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education(^1)</td>
<td>2.54</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist(^1)</td>
<td>0.00</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>7.42</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: \(^*\)Number of respondents in respective departments
\(^1\)Grades K – 12
\(^2\)Grades 7 - 12
Table 19

Teacher Overall Participation in Professional Development by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours Per Respondent</th>
<th>n*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>213.67</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>219.97</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>253.86</td>
<td>21</td>
</tr>
<tr>
<td>Reading</td>
<td>633.06</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics</td>
<td>219.30</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>131.87</td>
<td>15</td>
</tr>
<tr>
<td>Science</td>
<td>190.39</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec., Business)</td>
<td>248.73</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies</td>
<td>151.33</td>
<td>27</td>
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<tr>
<td>English/Language Arts</td>
<td>212.17</td>
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<td>Performing Arts (Music, Art)</td>
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<td>Physical Education/Health</td>
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<tr>
<td>Exceptional Student Education</td>
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</tr>
<tr>
<td>Media Specialist</td>
<td>88.88</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>227.93</strong></td>
<td><strong>433</strong></td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments
1Grades K – 12
2Grades 7 - 12
Research Question 2

How accurate are the perceptions of school principals concerning the participation of their teachers in professional development?

In order to address Research Question 2, it was necessary to divide the analysis of data provided from teachers and building principals into 4 parts. Data were collected from the responses of participating teachers and building principals on each of the two surveys administered. Teachers’ responses to questions 4, 5, and 19 on the Professional Development Questionnaire for Teachers (Appendix C) were used for analysis purposes and compared to data produced from building principals using questions 4, 5, 9, and 18 from the Professional Development Questionnaire for Building Principals (Appendix B).

For questions 4 and 5, respondents were given a 5-point Likert Rating Scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). The frequencies of the respondents’ answers to each question were calculated. The frequency and percentage of building principals’ responses to question 18 were tabulated and reported to determine the common responses.

Part 1: Teacher Support of Professional Development

Teachers responded to question #4 on the Professional Development Questionnaire for Teachers. They were asked to rate how supportive they were of the professional development that had been provided for them. The responses were compared to those of building principals using question #4 on the Professional Development Questionnaire for Building Principals. Question #4 measured principals’
perception of their teachers’ support for the professional development that had been provided. A 5-point Likert Scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree) was used by the teachers and building principals concerning these questions.

Table 20 displays the frequencies and percentages of teachers and building principals concerning question #4. Of the 433 teachers who completed the survey, 5 indicated they Strongly Disagreed (1.2%), 25 Disagreed (5.8%), 51 Neither Agreed nor Disagreed (11.8%), 222 Agreed (51.3%), 129 Strongly Agreed (29.8%), and 1 answered “Not Applicable” (0.2%) to the statement: I am supportive of the professional development activities that have been provided to me.

Comments from the teachers concerning this subject were mixed. One primary teacher from Volusia County Schools wrote,

I think professional development is very important for all teachers. Teachers need to be aware of the new techniques and new goals that the county and state have set for teachers. It also gives new ideas and motivates teachers to become better teachers (or so it does for me). I have enjoyed the professional development activities that have been provided.

However, several teachers disagreed and made comments indicating they were not supportive of the professional development that had been provided. For example, a fellow Volusia County Schools teacher who teaches intermediate grades (Grades 3 – 5) wrote,

My personal opinion concerning mandated in-service requirements are…We should never have any; unless it is absolutely, positively, necessary… and then it better be based on 3rd level empirical research and presented in a professional fashion. Then we should absolutely be financially compensated…our hour rate of
pay. Also, compensation for distance throughout the year. (For additional comments made by teachers please refer to Appendix K)

Of the 38 administrators who completed the survey, none of them indicated they either Strongly Disagreed or Disagreed, 3 Neither Agreed nor Disagreed (7.9%), 28 Agreed (73.7%), and 7 Strongly Agreed (18.4%) with the statement: The teachers at our school have been supportive of the professional development that have been provided.

Table 20

Teachers’ and Building Principals’ Opinions Concerning Teacher Support of the Professional Development That Had Been Provided

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Teachers n</th>
<th>Teachers %</th>
<th>Building Principals n</th>
<th>Building Principals %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>5</td>
<td>1.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>D</td>
<td>25</td>
<td>5.8</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Neither A/D</td>
<td>51</td>
<td>11.8</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>A</td>
<td>222</td>
<td>51.3</td>
<td>28</td>
<td>73.7</td>
</tr>
<tr>
<td>SA</td>
<td>129</td>
<td>29.8</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>N/A</td>
<td>1</td>
<td>0.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>433</td>
<td>100.0</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: SD = Strongly Disagree, D = Disagree, Neither A/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree, and N/A = Not Applicable

Part 2: Teachers’ Active Participation in Professional Development

Teachers responded to question #5 on the Professional Development Questionnaire for Teachers and were asked if they actively participated in the
professional development activities that had been provided at their schools. The responses were compared to those of building principals using question #5 on the Professional Development Questionnaire for Building Principals. A 5-point Likert Scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree) was used by the teacher and building principal respondents concerning these questions. Table 21 presents the frequency and percentage of teachers and building principals concerning question #5.

Of the 433 teachers who completed the survey, 3 indicated they Strongly Disagreed (0.7%), 3 Disagreed (0.7%), 15 Neither Agreed nor Disagreed (3.5%), 222 Agreed (51.3%), 188 Strongly Agreed (43.4%), and 2 answered “Not Applicable” (0.5%) with the statement: I have actively participated in the professional development activities that have been provided. One Brevard County Schools teacher who works in a high school mathematics department commented on this topic using the Professional Development Questionnaire for Teachers. She indicated her involvement by stating,

I loved participating in the professional development that has been offered at our school. It gave me a chance to not only learn new and important material, but also a chance to interact with my peers, something I find little time to do these days.

However, several teachers disagreed and commented (Appendix K) that they did not want to participate in the professional development that had been provided. An Exceptional Student Education teacher from the same school wrote,

Professional development in our county is too much of the ‘same old thing.’ Re-visiting our college courses really isn’t necessary. We need to learn what is in the new and latest research. I have attended the professional development workshops that have been provided at our school, but too often I was wasting my time and not participating as I should have.
Of the 38 administrators who completed the survey, none of them indicated they either Strongly Disagreed or Disagreed, 1 Neither Agreed nor Disagreed (2.6%), 28 Agreed (73.7%), and 9 Strongly Agreed (23.7%) to the statement: The teachers at our school have actively participated in the professional development that have been provided.

Table 21

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Teachers</th>
<th>Building Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>SD</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>Neither A/D</td>
<td>15</td>
<td>3.5</td>
</tr>
<tr>
<td>A</td>
<td>222</td>
<td>51.3</td>
</tr>
<tr>
<td>SA</td>
<td>188</td>
<td>43.4</td>
</tr>
<tr>
<td>N/A</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>433</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: SD = Strongly Disagree, D = Disagree, Neither A/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree, and N/A = Not Applicable

Part 3: Gender Participation in Professional Development

An analysis of the total number of hours teachers had participated in professional development as indicated on the Professional Development Questionnaire for Teachers
was compared to the perceptions of building principals using question #9 on the Professional Development Questionnaire for Building Principals. Statistical analysis was computed for the teacher data using the amount of hours involved in professional development as the dependent variable and the gender of the teacher responding as the independent variable. A 5-point Likert Scale was used by the building principals for question #9 on the survey (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree).

Table 22 displays the mean and number of teachers for each gender in relation to the amount of hours spent in professional development. All 433 teachers who completed the survey provided information concerning their gender. Male teachers (n=97) had a mean average of 184.84 hours spent in professional development. Female teachers (n=336) had a mean average of 240.37 hours in professional development. Overall, the 433 teachers who responded to this question had a mean average of 227.93 hours.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean Hours</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>184.84</td>
<td>97</td>
</tr>
<tr>
<td>Female</td>
<td>240.37</td>
<td>336</td>
</tr>
<tr>
<td>Total</td>
<td>227.93</td>
<td>433</td>
</tr>
</tbody>
</table>
Table 23 displays the frequencies and percentages of building principals concerning question #9 on the Professional Development Questionnaire for Building Principals. Of the 38 building principals who completed the survey, 1 Strongly Disagreed (2.6%), 5 Disagreed (13.2%), 8 Neither Agreed nor Disagreed (21.1%), 19 Agreed (50.0%), and 5 Strongly Agreed (13.2%) with the statement: No one gender (male or female) of teachers participate in more professional development than the other.

Table 23

Building Principals’ Perceptions Concerning Teacher Gender Participation in Professional Development

<table>
<thead>
<tr>
<th>Opinion</th>
<th>n</th>
<th>Building Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>Neither A/D</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>A</td>
<td>19</td>
<td>50.0</td>
</tr>
<tr>
<td>SA</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>N/A</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: SD = Strongly Disagree, D = Disagree, Neither A/D = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree, and N/A = Not Applicable
Part 4: Building Principals’ Perceptions Concerning Professional Development

Administrators responded to question #18 on the Professional Development Questionnaire for Building Principals and indicated which department of teachers (i.e. Mathematics, Performing Fine Arts, and others) they felt participated more in professional development than the other departments listed. All 38 administrators who completed the survey gave information concerning their selection.

For this study, building principal respondents were divided into three areas of administration: elementary, middle, or high school. Table 24 displays the frequency and percentage of teacher departments selected by the building principals based on which level the administrator worked in. The primary department was selected by 5 of the building principals, all of whom were elementary school administrators. Similarly, teachers in the mathematics, science, and English/language arts departments were selected only by middle or high school administrators. This was perhaps due to the fact that not all schools have the same classification of teachers. For example, primary teachers, those who teach kindergarten through 2nd grade, are not found in the middle or high schools. Likewise, it is not common for teachers who teach only mathematics, science, or English/language arts to be found in elementary schools. Therefore, the exposure to these types of teachers by administrators from all of the three levels is not common.
Table 24

Building Principals’ Perceptions of Which Department of Teachers Participate More in Professional Development Based on the Administrators’ Assignment

<table>
<thead>
<tr>
<th>Department</th>
<th>Elementary</th>
<th>Middle School</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reading&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Science&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>English/Language Arts&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Exceptional Student Education&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments
1Grades K – 12
2Grades 7 - 12

Table 25 presents the frequency and percentage of the departments selected by the 38 building principals. Five building principals (13.3%) selected the primary department, 1 (2.6%) selected intermediate, 9 (23.7%) selected reading, 1 (2.6%) selected mathematics, 1 (2.6%) selected science, 7 (18.4%) selected English, and 14 (36.8%) selected Exceptional Student Education teachers.
Table 25

Building Principals’ Perceptions of Which Department of Teachers Participate More in Professional Development

<table>
<thead>
<tr>
<th>Department</th>
<th>Building Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Primary (Grades K – 2)</td>
<td>5</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>1</td>
</tr>
<tr>
<td>Guidance Counselor</td>
<td>0</td>
</tr>
<tr>
<td>Reading</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>0</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
</tr>
<tr>
<td>Practical Arts (Home Ec, Business)</td>
<td>0</td>
</tr>
<tr>
<td>Social Studies</td>
<td>0</td>
</tr>
<tr>
<td>English/Language Arts</td>
<td>7</td>
</tr>
<tr>
<td>Performing Fine Arts (Music, Art)</td>
<td>0</td>
</tr>
<tr>
<td>Physical Education</td>
<td>0</td>
</tr>
<tr>
<td>Exceptional Student Education</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments
  
1Grades K – 12
  
2Grades 7 - 12
Research Question 3

Is there a department of teachers who participate less in professional development than those in the other departments?

In order to address Research Question 3, it was necessary to examine the data given by teachers to questions 12, 13, 14, 15, 16, 17, 18, and 22 from the Professional Development Questionnaire for Teachers. For questions 12, 13, 14, 15, 16, 17, and 18, teachers were asked to indicate how many hours they had been engaged in the professional development activities that had been listed. Question 22 provided demographic information about which department the teacher worked in between July 1, 2002 and June 30, 2004.

In the statistical procedure used for Research Question 3, the number of hours the teachers spent engaged in professional development between July 1, 2002 and June 30, 2004 was considered the dependent variable. The independent variable was the academic department in which the teacher was assigned.

A one-way analysis of variance (ANOVA) was used to evaluate the relationship between the academic department and the number of hours engaged in professional development. This procedure was selected because the independent variable (department) had more than two levels and it was assumed that the dependent variable (participation in professional development) was impacted by the categorical variable. The independent variable originally had 13 levels: primary, intermediate, guidance counselor, reading, mathematics, foreign language, science, practical arts, social studies, English/language arts, performing fine arts, physical education/health, and exceptional
student education. A 14th category, media specialist, was added once the results of the teacher survey were analyzed. Of the 8 teachers who indicated they did not work in the original 13 departments, all 8 indicated that they were media specialists. As a result, the researcher added media specialists as the 14th department. The dependent variable was the total amount of hours teachers spent engaged in professional development between July 1, 2002 and June 30, 2004.

The descriptive statistics table (Table 26) indicated that, on the average, reading teachers (n=17, mean=633.06, SD=854.217) had the most participation and media specialist (n=8, mean=88.88, SD=68.799) participated the least in professional development.

The ANOVA was significant, F (13, 419) = 3.35, p = .00. The strength of the relationship between the department assignment and professional development involvement, as determined by the eta squared, was moderately strong with the department accounting for 9% of the variance of professional development involvement (95% based on the adjusted eta squared).

Follow-up tests were conducted to evaluate pairwise differences among means. Based on the Levene’s test of equality of variances, the variances were assumed to be homogeneous and post-hoc tests were conducted using the Tukey/Kramer method due to the unequal sample sizes. There was a significant difference in means between the reading department and all other departments (p<.05). Reading teachers (mean=633.06, SD=854.217) showed the highest amount of professional development involvement as compared to primary (mean=213.67, SD=212.642, p=.000), intermediate (mean=219.97,
SD=222.166, p=.000), guidance counselor (mean=253.86, SD=220.135, p=.004), mathematics (mean=219.30, SD=248.267, p=.000), foreign language (mean=131.87, SD=192.732, p=.000), science (mean=190.39, SD=173.754, p=.000), practical arts (mean=248.73, SD=326.129, p=.001), social studies (mean=151.33, SD=127.467, p=.000), English/Language Arts (mean=212.17, SD=166.369, p=.000), performing arts (mean=222.77, SD=174.604, p=.007), physical education/health (mean=145.85, SD=140.573, p=.000), exceptional student education (mean=242.70, SD=299.864, p=.000), and media specialist (mean=88.88, SD=68.799, p=.001). The results of the one-way ANOVA supported the hypothesis that the academic department assignment had a differential effect on the involvement in professional development with media specialists having the least amount of involvement.
Table 26

Descriptive Statistics Comparing the Department Assignment to Total Professional Development Hours

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean Hours</th>
<th>Std. Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (Grades K – 2)</td>
<td>213.67</td>
<td>212.642</td>
<td>63</td>
</tr>
<tr>
<td>Intermediate (Grades 3 – 5)</td>
<td>219.97</td>
<td>222.166</td>
<td>39</td>
</tr>
<tr>
<td>Guidance Counselor¹</td>
<td>253.86</td>
<td>220.135</td>
<td>21</td>
</tr>
<tr>
<td>Reading¹</td>
<td>633.06</td>
<td>854.217</td>
<td>17</td>
</tr>
<tr>
<td>Mathematics¹</td>
<td>219.30</td>
<td>248.267</td>
<td>33</td>
</tr>
<tr>
<td>Foreign Language²</td>
<td>131.87</td>
<td>192.732</td>
<td>15</td>
</tr>
<tr>
<td>Science²</td>
<td>190.39</td>
<td>173.754</td>
<td>28</td>
</tr>
<tr>
<td>Practical Arts (Home Ec, Business)²</td>
<td>248.73</td>
<td>326.129</td>
<td>26</td>
</tr>
<tr>
<td>Social Studies²</td>
<td>151.33</td>
<td>127.467</td>
<td>27</td>
</tr>
<tr>
<td>English/Language Arts²</td>
<td>212.17</td>
<td>166.369</td>
<td>30</td>
</tr>
<tr>
<td>Performing Arts (Music, Art)¹</td>
<td>222.77</td>
<td>174.604</td>
<td>13</td>
</tr>
<tr>
<td>Physical Ed/Health¹</td>
<td>145.85</td>
<td>140.573</td>
<td>20</td>
</tr>
<tr>
<td>Exceptional Student Education¹</td>
<td>242.70</td>
<td>299.864</td>
<td>93</td>
</tr>
<tr>
<td>Media Specialist¹</td>
<td>88.88</td>
<td>68.799</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>227.93</td>
<td>292.850</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: *Number of respondents in respective departments

¹Grades K – 12
²Grades 7 - 12
Summary

The data analysis conducted in this study is reported in Chapter 4. Demographic information was also presented concerning the 433 teachers and 38 building principals from the Brevard and Volusia County School Districts who participated in this study. Descriptive statistics were employed to evaluate Research Questions 1 and 2 using data gathered from questions 4, 5, 12, 13, 14, 15, 16, 17, and 19 on the Professional Development Questionnaire for Teachers. Descriptive statistics were also employed to evaluate Research Question 2 using building principals’ responses to questions 4, 5, and 19 from the Professional Development Questionnaire for Building Principals. A one-way analysis of variance (ANOVA) was employed to evaluate the data gathered from the respondents pertaining to Research Question 3, using teachers’ responses to questions 12, 13, 14, 15, 16, 17, 18, and 22 from the Professional Development Questionnaire for Teachers.

The results of the data analyses reflected that of the 433 teachers who participated in this study, reading teachers had the most participation in professional development workshops (mean = 169.53 hours) while foreign language teachers participated the least (mean = 35.20 hours). Teacher involvement in study groups indicated that reading teachers participated the most (mean = 25.65 hours) while science teachers (mean = 2.00 hours) had the least participation. For involvement in independent readings on professional development related material, data indicated that reading teachers had the most participation (mean = 180.47 hours) and media specialist (mean = 9.75 hours) the least. Concerning the attendance at affiliated conferences, performing arts (music and
art) teachers had the most involvement (mean = 57.62 hours) while media specialists (mean = 10.38 hours) had the least. Teacher participation in discussions with peers or other professionals on related professional development topics indicated that reading teachers had the most involvement (mean = 124.29 hours) and media specialists the least (mean = 15.75 hours). For completion of university coursework, reading teachers had a mean of 153.53 hours, while media specialists had the least involvement with a mean of 2.50 hours. Some respondents indicated that they had participated in other types of professional development (on-line studies, national board certification, and independent study modules) other than the six previously mentioned. Of those respondents, reading teachers had the most involvement (mean = 106.00 hours) while guidance counselors and physical education/health teachers indicated the least (mean = 0.00 hours). Finally, an analysis of the overall teacher participation in all forms of professional development indicated that reading teachers had the most participation (mean = 633.06 hours), whereas media specialists had the least involvement (mean = 88.88 hours).

Results of the data analyzed indicated that building principals were moderately accurate concerning their perceptions of teacher support for professional development. Of the 433 teachers who responded to the survey, 81.1% (n=351) indicated they Agreed or Strongly Agreed to the statement: I am supportive of the professional development activities that have been provided to me. Of the 38 building principals, 92.1% (n=35) Agreed or Strongly Agreed with the statement: The teachers at our school have been supportive of the professional development activities that we have provided.
Data analyzed also indicated building principals were accurate concerning their perceptions of teacher participation in professional development. Of the 433 teachers who responded to the survey, 94.7% (n=410) Agreed or Strongly Agreed with the statement: I have actively participated in the professional activities that have been provided. Of the 38 building principals, 97.4% (n=37) Agreed or Strongly Agreed to the statement: The teachers at our school have actively participated in the professional development activities that have been provided.

Building principals were not as accurate concerning whether one gender of teachers participated more in professional development than the other. The mean for the 97 male teachers who responded to the survey indicated they had a mean of 184.84 hours of involvement in professional development, whereas the female teachers (n=336) had a mean of 240.37 hours. Of the 38 building principals who were surveyed, 24 (63.2%) Agreed or Strongly Agreed with the statement: No one gender (male or female) of teachers participate in more professional development than the other. Only 15.8% (n=6) Strongly Disagreed or Disagreed with that statement.

Data from the 38 building principals indicated the majority of them (76.3%) were not accurate concerning their perceptions of which department of teachers participate more in professional development in relation to the other departments. Fourteen respondents (36.8%) indicated they believed that exceptional student education teachers had the most involvement in professional development. The reading department was chosen by 23.7% (n=9) of the respondents, 18.4 % (n=7) selected the English/language arts department, and 13.2% (n=5) selected the primary (Grades K – 2) department. Of
the remaining 3 building principal respondents, 1 (2.6%) selected the intermediate
department (Grades 3 – 5), 1 (2.6%) selected the mathematics department, and 1 (2.6%)
selected the science departments.

Results of the one-way ANOVA indicated a significant difference (p<.05) in the
relationship between the department assignment of the teacher and involvement in
professional development. There was a significant difference in the means between the
reading department (mean = 633.06 hours), which had the most participation, and all
other departments (total mean = 227.93). Data indicated that media specialists (mean =
88.88 hours) had the least involvement in professional development.
CHAPTER 5
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

Chapter 5 presents a summary of the first four chapters and a review of the data analysis submitted in Chapter 4. Included are an introduction, a summary of chapters, a summary of methodology, a summary and discussion of statistical findings, and a section on discussion and implications for policy and procedures. In addition, recommendations for further study are presented.

Summary of Chapters

In Chapter 1, the researcher presented a framework of the variables examined in the study. The investigation was guided by the following question: “Is there a sub-population of teachers who are not actively involved in professional development as in relation to their peers in other departments?” The chapter presented the statement of the problem, purpose of the study, research questions, definitions of terms used in the study, significance of the study, limitations of the study, and the conclusion.

The review of the literature presented in Chapter 2 encompassed information related to professional development. The focus of the research was to describe the history and importance of professional development, along with the selection process used by highly effective school districts when selecting these activities. Research was
also reviewed concerning the most common types of professional development used in schools today.

Chapter 2 was divided into seven sections that included an introduction and a summary. In section two, a brief historical outline of the use of professional development over the past 3 decades was presented. Beginning in the 1970s, the literature discussed how professional development was primarily based on the results of teachers’ attitudes towards such programs. Information drawn from the 1980s suggested that studies were conducted regarding the practices of effective professional development rather than teacher attitudes towards them. In the last decade (1990s), information was compiled concerning how teachers had become more acutely aware of the need for quality professional development to keep abreast of effective teaching strategies, to understand the growth and development of students, and how to individualize instruction for an increasingly diverse student population.

Section three contained research on the importance of professional development. Information was presented on how these activities could be used for gaining awareness, knowledge, skill development, changes in attitude, or the transfer of training. The most effective training programs discussed were those that included an exploration of theory, demonstration of practice, supervised trial of new skills with feedback on performance, and coaching within the workplace.

In section four, the processes used in the selection of professional development were reviewed. The cited research suggests that effective school districts consider professional development as job-embedded. In addition, conflicting studies were
reviewed concerning who should be responsible for the selection of professional development. Information was reviewed that implied professional development selected for teachers is most effective when it is aligned with a school-wide plan for professional development. However, some research indicated that teachers have more buy-in concerning professional development when they were given the opportunity to select their own activities based on what they perceived as their area of needed growth.

Section five included information on the six most commonly used forms of professional development found in school districts. These included in-service workshops, teacher-led study groups, independent readings, attendance at affiliated conferences, discussions with peers, and enrollment in universities or professional development centers. The positive attributes of each activity were presented.

In section six, the importance of follow-up after professional development was discussed. The research on effective schools studied indicated that follow-up support to professional development with mentoring, discussion groups, and additional training was extremely vital to the process of teacher growth.

**Methodology**

The methodology used in this study was presented in Chapter 3. The chapter also included an introduction, a statement of the problem, an explanation of how the population and sample were selected, a description of the survey instruments used, a description of the data collection procedures, the research questions, a discussion of the data analysis for each research question, and a summary.
The population for this study was teachers and administrators in two central Florida school districts: Brevard and Volusia. For this study, teachers and building administrators at eight randomly selected schools from each of the two districts were used as a sample. The teachers and building administrators were surveyed at 4 elementary schools, 2 middle schools, and 2 high schools in each district for a total of 471 educators in the sample. Data were generated from 433 teachers (42% of the teacher sample population) and 38 building administrators (75% of the administrator sample population). Only those teachers and building principals who worked at their current school during the period July 1, 2002 through June 30, 2004 were used for this study.

Questionnaires developed by the researcher were the primary instruments used for data collection. The Professional Development Questionnaire for Building Principals (Appendix B) instrument consisted of 18 items. This instrument was designed to gather building principals’ perceptions concerning six content-based categories. Building principals were asked their perceptions concerning: (a) teacher participation in professional development activities, (b) the effectiveness of professional development, (c) the selection of these activities, and (d) the availability of facilitators needed to provide professional development. Principals were also asked to give information concerning the fund sources they have used to provide professional development for their teachers. Finally, they were asked to select which sub-group of teachers of the 13 departments listed (i.e., elementary primary, mathematics, social studies, physical education, etc.) participated more in professional development than teachers from the other departments. The Professional Development Questionnaire for Building Principals
survey was tested for validity and reliability during the Analysis of Survey, Record, and other Qualitative Data course at the University of Central Florida in the Summer 2004 semester. The survey was judged to be modestly reliable with a coefficient of .7723.

The Professional Development Questionnaire for Teachers (Appendix C) contained 22 items. It was designed to collect data from teachers concerning 6 content-based categories. These categories included: (a) teacher participation in professional development, (b) the relevance of the professional development they had been involved in, (c) the process used to select these activities, (d) the monitoring efforts of their administrators concerning teacher involvement in these activities, and (e) information about the number of hours they were involved in professional development between July 1, 2002 and June 30, 2004. Demographic information concerning the gender, number of completed years as a classroom teacher, highest college/university degree completed by the respondent, and which department the teacher worked in was also asked. The demographic information was used along with data obtained from the six content based areas to determine if there was a department of teachers who participated more in professional development than their peers in other departments. The Professional Development Questionnaire for Teachers survey was tested for validity and reliability during the Analysis of Survey, Record, and other Qualitative Data course at the University of Central Florida in the Summer 2004 semester. The survey was judged to be modestly reliable with a coefficient of .7816.

In Chapter 4, an analysis of the data collected for this study was presented. Data analyses were based on responses to questionnaires completed by the teachers (n=433)
and building principals (n=38) in the randomly selected elementary, middle, and high schools in Brevard County and Volusia County School Districts. The chapter was divided into six sections that included an introduction, population and demographic characteristics, the three research questions, and a summary.

Summary and Discussion of Statistical Findings

The summary and discussion of the findings for the collected data in response to the three research questions for this study were as follows:

Research Question 1

To what extent do teachers participate in professional development as measured by the number of hours they are actively involved in such activities?

Results for Research Question 1 indicated that reading teachers had the most participation in professional development workshops with foreign language teachers having the least participation. Likewise, reading teachers had the most involvement in the professional development that research (Marshall, Pritchard & Gunderson, 2001) suggested is most effective, teacher led study groups. Science teachers had the least participation of all the departments in teacher led study groups. Similarly, reading teachers had the most involvement in professional development activities involving independent readings. In this area of professional development, media specialists had the least training.

Performing arts (music and art) teachers had the most involvement in attendance at affiliated conferences. This is not surprising since most music and art teachers belong
to state and national associations that gather to concentrate specifically on their area of expertise. As one high school art teacher from Volusia County Schools stated,

Professional development is crucial to continued learning of new strategies, as well as remaining informed on current procedures in our field. Sometimes the district does not put together workshops that are related to the arts field. It is frustrating at times, because we feel left out. (For more teacher comments, please refer to Appendix K.)

For teacher participation in collaborative discussions with peers on related professional development topics, reading teachers again had the most involvement, while media specialists had the least. This is perhaps due to the isolated conditions in which most media specialists work that does not allow them to interact significantly with teachers from other departments.

Reading teachers also had the most participation in enrollment at universities for professional development purposes. Of the 17 teachers who represented the reading teacher survey population, the majority (76.5%) held graduate level degrees. The reading department had the highest percentage of teachers with graduate level degrees than any of the other departments surveyed. Media specialists showed the least involvement concerning university coursework.

For involvement in other types of professional development such as on-line courses, National Board Certification, or independent study modules, reading teachers again had the most participation. Teachers from three departments (guidance counselors, science, and physical education/health) indicated no participation at all in these types of professional development.
Research Question 2

How accurate are the perceptions of school principals concerning the participation of their teachers in professional development?

In order to address Research Question 2, it was necessary to divide the analysis of the data into 4 parts. In part 1, the majority of teachers (87.1%) indicated they were supportive of the professional development that had been provided to them. Building principals’ perceptions concerning this issue were accurate with 92.1% of the administrators indicating that they felt their teachers were supportive. However, 74.4% of the teachers indicated they would rather select their own professional development than be directed by school administrators on which ones to take. As one female Social Studies teacher from Brevard County Schools explained, “Many of the in-service/workshops offered in our district are based on educational fads. Most of it is impractical and mindless. As teachers, we often must research our own information to enhance classroom instruction.” (For more teacher comments, please refer to Appendix K)

In Part 2, building principals’ perceptions concerning the active participation of teachers in professional development was analyzed. Of the 433 teachers in the survey population, 94.7% indicated they had participated in the professional development that had been offered to them, whereas 97.4% of the building principals felt their teachers were active participants. One high school administrator offered his thoughts concerning the difficulty of getting some teachers to participate in professional development (see Appendix L for additional building principals’ comments). He wrote,
The amount of paperwork required of teachers has a direct impact on a teacher’s willingness to participate in staff development activities. Example: Teachers of ESE only attend the very basic staff development, forget getting them to attend core curriculum staff development. Example: Reading teachers attend little because they are doing the endorsement (Florida Center for Reading Research).

In Part 3, the accuracy of building principals’ perceptions on whether one gender of teachers participates more in professional development than the other was analyzed. The majority of administrators (63.2%) were not accurate in their assumptions. In fact, analysis of the data provided by teachers indicated that female teachers had a mean of 240.37 hours of participation compared to the male teachers who had a mean of 184.84 hours.

In Part 4, building principals were asked to indicate which department of teachers (i.e. guidance counselor, mathematics or foreign language), in their opinion, had more participation by teachers in professional development than those from the other departments listed. The majority of the building principals (63.2%) were not accurate concerning their perceptions of which department participates the most in professional development. As mentioned earlier, this may be due to the fact that not all of the departments of teachers are found at the three levels of schools: elementary, middle, and high school. For example, intermediate teachers (Grades 3 –5) do not work at the middle or high schools, therefore making them less accessible for study by the administrators at those schools. (Note: Principals responded regardless of their level of assignment to select the department, even if teachers from all departments were not assigned to their schools.)
Research Question 3

Is there a department of teachers who participate less in professional development than those in other departments?

The data analysis for Research Question 3 indicated that media specialists participated significantly less (p<.05) in professional development than teachers from other departments. Foreign language teachers had the next lowest involvement, followed by teachers from the physical education/health department. Teachers from the reading department had the most participation in professional development with teachers from the practical arts (music and art) departments having the next highest participation rate. Teachers in all departments do not have the same opportunities for participation in all types of professional development (i.e. a lack of sufficient workshops for art teachers), it is, however, important that they do become active in whatever training is available.

Discussion and Implications for Policy and Procedures

The purpose of this study was twofold: First, to gather perspectives of randomly selected school principals and teachers in two central Florida school districts concerning teacher participation in professional development, and secondly, to determine if there were similarities or differences concerning the amount of participation of teachers from different departments in these activities.

Results of this study determined that the majority of teachers (81.1%) were supportive of the professional development that had been provided, while 94.7% indicated they actively participated in these activities. Building principals (92.1%) were accurate concerning their perceptions of teacher support for the activities that had been
provided, while 97.4% of the principals were accurate concerning teacher participation. However, the data indicated that building principals need to be more accurate when identifying which teachers at their schools were participating less in professional development than others, whether it be based on gender or the department assignment. Administrators may benefit from a list provided annually which identifies the amount and type of professional development opportunities pursued by each staff member. This would allow principals to monitor teacher participation and assist when needed to either provide meaningful professional development, or guide teachers to appropriate resources for training. Likewise, administrators should be active participants in the professional development being provided. This would send a message to teachers that the topic being studied is important to administration. It would also allow the administrators to interact with the teachers during the learning process, thereby giving administrators direct insight into which teachers are or are not participating.

Most of the teachers surveyed (74.4%) indicated they would rather select their own professional development than have it determined by the administration. However, 76.5% of the teachers indicated that the professional development that had been selected for them had helped them become more effective teachers. It may be helpful for building principals to review research by King and Newmann (2000) who emphasized the importance of including teachers in the selection process. By doing so, administrators would allow teachers to connect with the learning activity and to develop a sense of ownership.
Some implications may be drawn from the data that indicated teacher involvement in professional development was affected by their department assignment. A study conducted by Marshall, Pritchard, and Gunderson (2001) showed limited value to providing professional development to teachers based on the academic department to which they were assigned, such as those found in secondary schools. Building principals must be cognizant of the need to include all teachers in professional development that is aligned with the goals of the school, rather than training teachers in isolation based on department assignment. Doing so will allow teachers to work closely with their peers in other departments, integrate the curriculum throughout all the content areas, and increase student achievement.

Another implication may be that a lack of student academic growth is not necessarily the fault of the students, but rather that of teachers who are not participating in professional development and learning effective teaching techniques that have been shown to assist students. For example, if all of the teachers are not involved in professional development that concentrates on techniques used to help students become better readers, then those teachers will not be as effective as they could be and their students will be negatively affected.

A review of on-line training opportunities available at the time of this study in 2005, through one of the districts surveyed indicates a preponderance of training focusing on reading. Professional development departments in school districts may want to consider offerings provided to teachers and make efforts to ensure that all areas,
including specialization areas such as media specialists, foreign language, and physical education, have opportunities to pursue training of this type.

With federal and state emphasis on reading, it is not an unlikely outcome of this study for reading teachers to be the most enmeshed in professional development. In addition, over the past two years, districts and universities have provided extensive online training in the area of reading. The Florida Center for Reading Research (FCRR) has significantly impacted professional development for reading teachers by providing training throughout the state for elementary teachers in this content area. Perhaps an unintended consequence of the focus on reading has been a diversion of focus from other areas with regard to professional development. While arguably reading is a vital and integral component of all academic areas, professional development should address all areas within a school community that are known to impact educational outcomes of students.

Membership in professional state and national associations can also have a positive impact on the professional growth of teachers (i.e. music and art). However, building principals need to determine if they are more likely to release teachers from a particular department to attend conferences than those belonging to other departments. If this is the case, then administrators need to make sure the training opportunities are equitable for all staff members.

There are several barriers that have a negative impact on the selection of professional development activities. These barriers include the lack of adequate funds and insufficient time needed to provide training. Concerning adequate funding, of the 38
building principals who participated in this study, all of them indicated on the Professional Development Questionnaire for Building Principals that they had to rely on funds from sources other than those in their school budget in order to provide sufficient professional development for teachers. Those sources included Title I funds, grants, School Advisory Council funds, donations from Parents/Teachers Associations, and money generated from the sale of sodas and snacks on campus. As one male middle school principal from Volusia County Schools remarked, “It is becoming increasingly more difficult to not only come up with the funds we need to provide professional development for our teachers, but it is also becoming more difficult to schedule time sufficient enough for these activities.” Another male administrator from the same district commented on the time factor stating, “I believe the biggest challenge in providing staff development to teachers is in scheduling” (for more building principals’ comments please refer to Appendix L). Building principals need to be very creative concerning the allocation of sufficient funds and time needed to provide meaningful, quality professional development to teachers.

Recommendations for Further Study

This study provided an overview of the importance of offering professional development for teachers in order to increase their teaching effectiveness and ultimately student achievement. Included in the review of literature was information concerning the process used when selecting professional development topics and methods for delivery. Building principals have the opportunity to make positive changes in teacher
effectiveness if they are cognizant of the importance of aligning teacher training with the overall improvement goals of the school. Although this study presented information and collected data concerning the six most common forms of professional development currently used in schools, the opportunity exists for future studies to include emerging forms of professional development such as on-line courses, self-study modules, or the National Board for Professional Teacher Certification Program.

If the use of professional development to increase teacher effectiveness is important to building principals, then additional research is needed concerning the allocation of necessary funds needed to provide these activities. All of the building principals surveyed in this study indicated they had to seek funds from sources other than their school budgets in order to provide adequate training for their teachers. The funding formulas used by states and school districts to allocate funds to schools needs to be studied and addressed.

One of the building principal’s roles is to ensure the faculty at their school is up-to-date on the latest research based teaching strategies that have been proven to be effective concerning student achievement. However, unless building principals closely monitor their teachers’ participation in these activities, teachers may not be involved in them as often as may be necessary. Of the 433 teachers who participated in this study, only 54.3% indicated that the building principals at their schools monitor the amount of participation of teachers in professional development. Not surprisingly, over half of them (52%) worked in departments (media specialist, physical education/health, social studies, primary grades, foreign language, and mathematics) that showed the least
participation of teachers in professional development. Future studies are needed to
determine why teachers from these departments are not involved in professional
development as much as their peers. Likewise, studies are needed to gather information
that will assist administrators in monitoring the participation of teachers in these activities
and the relationship to an increase or lack of increase in student achievement.

Not included in this study was an analysis to determine if the total number of
years of experience a teachers has or if the number of years a teacher has left on their
current teaching certificate has an impact on their involvement in professional
development. For example, a future study may determine that teachers who have less
than two years of eligibility left may participate more than those who recently renewed
their teaching certificates. Forty-one percent of the teachers in this study indicated the
main reason they participate in professional development is to fulfill requirements for re-
certification purposes. If this is the case, then states may consider changing re-
certification requirements to include a minimal number of hours of training needed each
year as opposed to the current practice of requiring teachers to obtain a certain number of
hours of training over an extended period of time (e.g. five years).

The opportunity also exists for replication of this study or further research on
teacher involvement in professional development not fully considered here. The
professional develop of teachers remains one of the highest priorities of building
principals and future studies should be conducted to expand on the information available
on this important subject.
Finally, with state and federal focus on accountability, school districts and
principals have an opportunity and responsibility to improve academic performance by
ensuring that all teachers, regardless of area of specialization, have access to relevant and
meaningful professional development opportunities. Just as school communities strive to
develop the concept of “life long learners” in students, school leaders must strive to
ensure that teachers continuously obtain skills and knowledge that will positively impact
student outcomes.
APPENDIX A

COVER LETTERS FOR BUILDING PRINCIPALS AND TEACHERS
November 5, 2004

Dear Fellow Administrator:

I am a school administrator in need of your help in the completion of my doctoral research. I am conducting a study concerning the participation of teachers in professional development activities. The purpose of the attached questionnaire is to determine your perceptions concerning this topic. I have requested and received permission from your district office to administer this questionnaire.

Your answers on this questionnaire are completely confidential and will be released only as summaries in which no individual’s answers can be identified. If you cannot accurately provide an answer, or do not feel confident about a question, please leave that question blank. There are no known risks and participation is voluntary. Additionally, there are no direct benefits or compensation to participants. If for some reason you prefer not to respond, please let me know by returning the blank questionnaire.

If you have any questions or comments about this study, I would be happy to talk with you. Please contact me at (386) 295-0262, or you may contact my University of Central Florida faculty advisor, Dr. William Bozeman at (407) 823-1471. My e-mail address is ringeucf@aol.com. Questions or concerns about research participants’ rights may be directed to the UCFIRB Office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

I realize this survey will take five minutes of your valuable time, but the results should be worth the effort. Once you have completed the questionnaire, please place it in the attached envelope. Also, please read, initial, and sign the attached Principal’s Participation Consent Agreement and place it in the envelope before sealing it and returning it to your principal. To be useful, your response must be collected the week of November 15, 2004.

Thank you in advance for your time and consideration. It’s only with the generous help of people like you that my research can be successful.

Sincerely,

Richard R. Inge
University of Central Florida Graduate Student
809 Hamlin Drive, South Daytona, FL 32119
(386) 295-0262
ringeucf@aol.com
November 5, 2004

Dear Teacher,

I need your help in the completion of my doctoral research. I am conducting a study concerning the participation of teachers in professional development activities. The purpose of the attached questionnaire is to determine the participation of teachers in these activities.

Enclosed you will find the *Professional Development Questionnaire for Teachers*. Please assist me by completing this questionnaire and returning it to your building principal before November 15, 2004. The attached teachers’ questionnaire has met the requirements of the University of Central Florida IRB. I have asked for and received permission from your school district office to administer this survey.

Your answers are completely confidential and will be released only as summaries in which no individual’s answers can be identified. If you cannot accurately provide an answer or do not feel confident about a question, please leave that question blank. However, you can help me very much by taking a few minutes to share your perceptions concerning your past involvement in professional development activities. There are no known risks and participation is voluntary. Additionally, there are no direct benefits or compensation to participants. If for some reason you prefer not to respond, please let me know by returning the blank questionnaire.

If you have any questions or comments about this study, I would be happy to talk with you. Please contact me at (386) 295-0262, or my contact my faculty advisor, Dr. William Bozeman at (407) 823-1471. My e-mail address is ringeucf@aol.com. Questions or concerns about research participants’ rights may be directed to the UCFIRB Office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

Further, please initial the two statements that appear on the attached permission form indicating that you are aware of the informed consent procedures. Once you have completed the questionnaire, please place it and the signed permission form in the attached envelope, seal it, and give it to your building administrator.

Thank you in advance for your time and consideration.

Sincerely,

Richard R. Inge
University of Central Florida Graduate Student
809 Hamlin Drive, South Daytona, FL 32119
(386) 295-0262
ringeucf@aol.com
APPENDIX B

PROFESSIONAL DEVELOPMENT QUESTIONNAIRE FOR BUILDING PRINCIPALS
Please answer: I was the principal or designee at our school who was responsible for the professional development of teachers between July 1, 2002 and June 30, 2004:

- if yes, please complete survey
- if no, please return blank survey.

### Professional Development Questionnaire for Building Principals

Submitted by Rick Inge

**Instructions:** Please circle one answer for each statement below as it relates to your school.

#### START HERE

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The professional development of teachers is of the highest importance to the administrators at our school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>2. The professional development activities we provide for teachers are aligned with the student achievement goals identified in our School Improvement Plan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>3. At our school, we have developed a school-wide professional development plan versus allowing teachers to select their own professional development activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>4. The teachers at our school have been supportive of the professional development activities that we have provided.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>5. The teachers at our school have actively participated in the professional development activities that have been provided.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>6. Our faculty incorporates techniques and strategies that have been learned through these activities into their classroom pedagogy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>7. Teacher participation in professional development activities has had a positive affect on student achievement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>8. On average, teachers with less than 3 years of teaching experience participate in more professional development activities than those with more than 3 years of teaching experience.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>9. No one gender (male or female) of teachers participate in more professional development activities than the other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>10. Facilitators needed to provide the professional development training that we select are readily available.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Please Continue on Next Page
Instructions: Please take a moment and answer the following questions by placing an X on the line beside each of the funding sources you have used to provide professional development activities for your teachers:

11. ______ Title I
12. ______ Grants
13. ______ School Advisory Funds
14. ______ PTA Funds
15. Other funds, please specify ____________________________

Instructions: Please take a moment to answer the following questions concerning yourself:

16. Your Gender: _____ Male _____ Female

17. Years in administration ______

18. Instructions: In your opinion, which one department listed below has more participation by teachers in professional development activities than the other departments listed? Place an X on the line beside the name of the one department that you select.

- Primary (Grades K - 2)
- Intermediate (Grades 3 -5)
- Guidance Counselor
- Reading
- Mathematics
- Foreign Language
- Science
- Practical Arts (Home Ec., Business)
- Social Studies (Psychology)
- English/Language Arts (Speech)
- Performing Fine Arts (Music, Art)
- Physical Education (Health)
- Exceptional Student Education (ESE)

Other: (Please Specify) ______________________________________

Please Continue on the Next Page
** Thank you for your time in completing this questionnaire. **

Please share any additional comments you may have in the box provided below.

When you are finished, please place the completed questionnaire and your signed permission form in the attached envelope and return it to your building principal. Your responses on this questionnaire will remain confidential and known only to the researcher.

Surveys should be completed and returned prior to November 15, 2004.

Contact Rick Inge at ringeucf@aol.com or (386) 295-0262 with questions.
APPENDIX C

PROFESSIONAL DEVELOPMENT QUESTIONNAIRE FOR TEACHERS
Please answer: I was teaching at my present school between July 1, 2002 and June 30, 2004.

_____ if yes, please complete survey
   _____ if no, please return blank survey to your administrator

### Professional Development Questionnaire for Teachers

**Instructions:** Please circle one answer for each statement below as it relates to your school.

#### START HERE

1. The continued professional development of teachers is vital to the success of our school.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

2. The professional development activities that have been provided for me by our school and district are aligned with the student achievement goals identified in our School Improvement Plan.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

3. At our school, we have developed a school-wide professional development plan versus allowing teachers to select their own professional development activities.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

4. I am supportive of the professional development activities that have been provided to me.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

5. I have actively participated in the professional development activities that have been provided.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

6. I incorporate techniques and strategies that I have learned through these activities into my classroom pedagogy.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

7. My participation in professional development activities has had a positive affect on my students’ academic achievement.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

8. The main reason I participate in professional development activities is because of the requirements for re-certification of my teaching certificate.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

9. The administration at our school monitors the amount of participation by teachers in professional development activities.  
   | 1 | 2 | 3 | 4 | 5 | N/A |

10. I would rather select my own professional development topics rather than be directed by administration on which ones to take.  
    | 1 | 2 | 3 | 4 | 5 | N/A |

11. The topics of the professional development activities that have been provided to me have helped me become a more effective teacher.  
    | 1 | 2 | 3 | 4 | 5 | N/A |

---

Please Continue on the Next Page
**Instructions:** For questions 12 through 18, please estimate how many hours you were involved in each of the following professional development activities between July 1, 2002 and June 30, 2004.

12. _______ workshops  
   (hours)

13. _______ study groups  
   (hours)

14. _______ independent readings  
   (hours)

15. _______ attending affiliated conferences  
   (hours)

16. _______ discussions with peers or other professionals on related topics  
   (hours)

17. _______ university courses (one university credit equals 20 hours)  
   (hours)

18. In addition to the professional development activities referenced in questions 12 through 17, I have also been involved in the following (please list, including estimated hours)

   ____________________________

**Instructions:** Please take a moment to answer each of the following questions.

19. Gender: _______ Male  _______ Female

20. Number of completed years as a classroom teacher: _______

21. The highest college/university degree I have completed is: (Choose one)

   ______ Bachelors  ______ Masters

   ______ Specialist  ______ Doctorate

Please Continue on the Next Page
22. Instructions: Considering your teaching assignment during the period July 1, 2002 to June 30, 2004, please put an X on the line in front of the one department that indicates your area of teaching.

   Primary (Grades K - 2)
   Intermediate (Grades 3 -5)
   Guidance Counselor
   Reading
   Mathematics
   Foreign Language
   Science
   Practical Arts (Home Ec., Business)
   Social Studies (Psychology)
   English/Language Arts (Speech)
   Performing Fine Arts (Music, Art)
   Physical Education/Health
   Exceptional Student Education (ESE)

   Other: (Please specify) ________________________

   ________________________

   ** Thank you for your time in completing this questionnaire. **

   Please share any additional comments you have in the box provided below.

When you are finished, please place the completed questionnaire and your signed permission form in the attached envelope and return it to your administrator contact. Your responses on this questionnaire will remain confidential and known only to the researcher.

Surveys should be returned to your administrator prior to November 15, 2004.

Contact Rick Inge at ringeucf@aol.com or (386) 295-0262 with questions.
The National Staff Development Council is a well-respected organization in the area of professional growth for educators. The standards below should be applied to all professional development activities. The standards address the context, or school environment as it effects professional learning, the process by which the training is conducted and the content of the training. Following these standards will ensure that the training you conduct will be successful and that teachers will be able to translate the information learned in inservice activities into instructional practice.

**CONTEXT STANDARDS**

Effective high school, middle level and elementary school staff development:

- Requires and fosters a norm of continuous improvement.
- Requires strong leadership in order to obtain continuing support and to motivate all staff, school board members, parents and the community to be advocates for continuous improvement.
- Is aligned with the school’s and the district’s strategic plan and is funded by a line item in the budget.

Provides adequate time during the work day for staff members to learn and work together to accomplish the school’s mission and goals.

**PROCESS STANDARDS**

Effective high school, middle level and elementary school staff development:

- Provides knowledge, skills, and attitudes regarding organization development and systems thinking.
- Is based on knowledge about human learning and development.
- Provides for the three phases of the change process: initiation, implementation, and institutionalization.
- Bases priorities on a careful analysis of disaggregated student data regarding goals for student learning.
- Uses content that has proven value in increasing student learning and development.

Provides a framework for integrating innovations and relating those innovations to the mission of the organization.
Requires an evaluation process that is ongoing, includes multiple sources of information, and focus on all levels of the organization.
Uses a variety of staff development approaches to accomplish the goals of improving instruction and student success.
Provides the follow up necessary to ensure improvement.
Requires staff members to learn and apply collaborative skills to conduct meetings, make shared decisions, solve problems, and work collegially.

Requires knowledge and uses the stages of group development to build effective, productive, collegial teams.

CONTENT

Effective high school, middle level and elementary school development:

- Increases administrators’ and teachers’ understanding of how to provide school environments and instruction that are responsive to the developmental needs of students.
- Facilitates the development and implementation of school and classroom-based management that maximize student learning.
- Addresses diversity by providing awareness and training related to the knowledge, skills, and behaviors needed to ensure that an equitable and quality education is provided to all students.
- Enables educators to provide challenging, developmentally-appropriate curricula that engage students in integrative ways of thinking and learning.
- Prepares teachers to use research-based teaching strategies appropriate to their instructional objectives and their students.
- Prepares educators to demonstrate high expectations for student learning.
- Facilitates staff collaboration with, and support of, families for improving student performance.

Prepares teachers to use various types of performance assessment in their classrooms.

EFFECTIVE HIGH SCHOOL AND MIDDLE LEVEL STAFF DEVELOPMENT:

- Prepares educators to combine academic student learning goals with service to the community.
- Increases administrators’ and teachers’ ability to provide guidance and advisement to adolescents.

EFFECTIVE MIDDLE LEVEL STAFF DEVELOPMENT:

* Increases staff knowledge and practice of interdisciplinary team organization and instruction.
APPENDIX E

PERMISSION FOR HUMAN SUBJECTS

BUILDING PRINCIPALS’ PARTICIPATION CONSENT AGREEMENT
Building Principal’s Participation Consent Agreement

___________ (Please Initial) I have read the procedures described in this correspondence.

___________ (Please Initial) I voluntarily agree to participate in the procedure.

__________________________________________      ___________________
Participant’s Name                                               Date

* Please return this signed document along with your survey once it has been completed.

P.S. If by some chance you were not involved in the professional development of teachers at your school between July 1, 2002 and June 30, 2004, please note that on the space provided at the beginning of the questionnaire, leaving the rest blank. Then, please return the blank questionnaire to your principal along with the completed information requested above. Thank you.
APPENDIX F

PERMISSION FOR HUMAN SUBJECTS

TEACHERS’ PARTICIPATION CONSENT AGREEMENT
Teacher’s Participation Consent Agreement

___________ (Please Initial) I have read the procedures described in this correspondence.

___________ (Please Initial) I voluntarily agree to participate in the procedure.

__________________________________________      ___________________
Participant’s Name                                               Date

* Please return this signed document along with your questionnaire.

P.S. If by some chance you were not teaching at your present school between July 1, 2002 and June 30, 2004, please indicate that by answering the question at the top of the questionnaire and leaving the rest of the form blank. Then, please return the blank questionnaire to your building administrator along with the completed information requested above. Thank you.
APPENDIX G

PERMISSION FROM BREVARD COUNTY SCHOOLS
To:         Rick Ing

From:       Karen Schafer
            Office of Accountability, Testing, & Evaluation
            Brevard Public Schools

Subject:    Acceptance of Application to Conduct Research

Date:       10/5/2004

Dear Researcher:

Thank you for your application to conduct research in the Brevard Public Schools. This letter is official verification that your application has been accepted and approved through the Office of Accountability, Testing, & Evaluation.

This is a reminder that you must contact the principal(s) of the school(s) listed on your application, present them with copies of your Application Form, and secure their signatures for approval. Approval of your study at the district level does not obligate principals to participate in the proposed research.

In the future if you have any questions or concerns, please contact Karen Schafer at 321/633-1000 extension 328. Good luck and please submit your research findings and summary to:

Office of Accountability, Testing, & Evaluation
Research Results
Brevard Public Schools
2700 Judge Fran Jamieson Way
Viera, Florida 32940
August 20, 2004

Mr. Richard Inge  
809 Hamilton Drive  
South Daytona, Florida 32129

Dear Mr. Inge:

I have received your 8/16/04 request to conduct research with Volusia County Schools. I understand you will be conducting research on "The Perspectives of School Principals and Teachers in Two Central Florida School Districts Related to Teacher Professional Development Participation. I am approving your request to conduct this study with randomly selected elementary, middle and high school teachers and principals in the Volusia County School District. Participation in your study will be at the discretion of the principals and the participants.

By copy of this letter, you may inform the principals and participants of my decision. It will be your responsibility to contact them and work out any arrangements for data collection and confidentiality.

I would appreciate receiving a copy of your project report at the completion of your study.

Sincerely,

Chris J. Colwell, Assistant Superintendent  
Curriculum and School Improvement Services  

CJC/mf
APPENDIX I

PERMISSION FROM UCF/IRB
October 12, 2004

Richard Inge, Principal
Sugar Mill Elementary School
1101 Charles Street
Port Orange, FL 32129

Dear Mr. Inge:

With reference to your protocol entitled, "The Perspectives of School Principals and Teachers in Two Central Florida School Districts Related to Teacher Professional Development Participation," I am enclosing for your records the approved, expedited document of the UCF IRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Barbara Ward, CIM
IRB Coordinator

cc. IRB office
Dr. William Bozeman, Educational Research, Technology and Leadership, Room 222N, 32816-1250
Dear Fellow Educator,

About two weeks ago, you should have received a survey I sent to you. The survey was in reference to the participation of teachers in professional development activities. This is just a gentle reminder that if you have not returned your survey, I would still appreciate hearing from you.

As an educator, I am well aware that this is a very busy time of year at our schools. However, hearing what you have to say concerning teacher participation in professional development activities is very important to me. If you have not already done so, would you please take a moment to fill out and return the survey to your building administrator in the envelope that was provided?

Please remember that your answers on the survey will remain confidential and known only to myself as data used in my research. If you did not receive your survey, or if you have misplaced it, please reply to this email and I would be happy to send you another one.

Thank you in advance for your assistance,

Rick Inge
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Volusia County Schools
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APPENDIX K

TEACHER COMMENTS FROM THE QUESTIONNAIRE
Following are comments made by teachers on the Professional Development Questionnaire for Teachers.

1. My personal opinion concerning mandated in-service requirements are … We should never have any; unless it is absolutely, positively, necessary… and then it better be based on 3rd level empirical research and presented in a professional fashion. Then we should absolutely be financially compensated… our hour rate of pay. Also, compensation for distance traveled.

2. The IRA conference last year in Reno was a big part of staff development at our school. Ten teachers got to attend and I found the “break out” sessions very helpful. I feel I benefited greatly by going to workshops 4 continuous days as opposed to 1 or 2 days scattered throughout the year.

3. The time of day and convenience of location also plays a part in selecting a staff development workshop. Workshops offered during the day were more beneficial because of convenience.

4. Because of hurricane make up days, we have lost entire days for in-service this year.

5. Paperwork, specifically IEPs and school-based facilitator (transfer IEPs ineligibles) makes it difficult to attend as many professional development activities as I would like. I would like to see more workshops offered at our location.

6. I love my children and they need to learn the skills and techniques for a healthy lifestyle.

7. I think professional development is very important for all teachers. Teachers need to be aware of new techniques and new goals that the county and state have set for teachers. It also gives new ideas and motivates teachers to become better teachers (or so it does for me). I have enjoyed the professional development activities that have been provided.

8. Please provide more technology related in-service opportunities for teachers: Web Quest, digital photography, news letters, class websites, production of class books using digital photography and word processing.

9. Our administration has encouraged specific professional development activities, but we are also allowed to choose what we wish to take. The ESOL classes are a waste of time.
10. Our school focused on professional development in reading last school year. However, we were not restricted in our choices for professional development. When applicable I incorporate what I have learned in my instruction.

11. Professional development is crucial to continued learning new strategies, as well as remaining informed on current procedures in our field. Sometimes the district does not put workshops that are related to the arts fields. It is frustrating at times, because we feel left out.

12. I’m concerned that you don’t believe media instruction is teaching – thus, you have left it off #22. In this area, we teach technology skills and critical thinking to mention a few. Please go to www.sunlink.ucf.edu/makingthegrade/ and read Dr. Baumbach’s executive summary. Thanks. P.S. We also invite you to visit our media program.

13. Professional development from sources outside the district are almost always more relevant and effective for my job.

14. At our school, each individual teacher does her own PDP. Questions 4-7 did not apply to my situation. Question 16 is an ongoing conversation with my peers, so probably more than 5 hours but it is not usually in a formal setting. I wish the county would ask teachers for more input as to workshop offerings.

15. Volusia County offers many opportunities for development. They strongly encourage our participation and updating of skills.

16. In my opinion, the best way to improve my teaching is through college courses, but some of the things offered by our county has sometimes been useful.

17. The timing at this point is extremely difficult for teachers as we are in the midst of exams and the end of the term.

18. I am especially interested in Ruby Paynes research on generational poverty, as well as teaching writing and reading skills across the curriculum since I teach an elective class and not academics. Good luck on your research!

19. Very little district professional development for ESE teachers at the high school level.

20. Many of the in-service/workshops offering in our district are based on educational fads. Most of it is impractical and mindless. As teachers, we often must research our own information to enhance classroom instruction.

21. I find that many professional development time is not geared to the “real world.” The most valuable ones are the summer computer and “hands on” activities.
22. As a new teachers (in my 40s) demands are high and time is limited. For the next year or so, I am only taking classes and in-service that offer $ to buy related materials. I need the time to assimilate and apply all the good information I have received over the last 2 years. I am enjoying teaching, but it is not what I expected. Paperwork, parents, accountability, FCAT – But I do love the kids!

23. County based professional development has been more beneficial than school based.

24. The best (most effective and interesting) professional development activities I have had were those that asked us to produce (like writing, lesson plans, etc.). The best was a Pacesetters training course that covered 5 working days. The presenter was knowledgeable. It was like a college course.

25. Since the professional development, in my opinion, is directly related to the student learning more efficiently, teachers should have more economical incentives to continue further studies…

26. The professional development is helpful, but I do not always have time to implement the information learned in a timely manner.

27. Professional development in our county is too much of the “same old thing.” Re-visiting our college courses really isn’t necessary. We need to learn what is in the new and latest research. I have attended the professional development workshops that have been provided at our school, but too often I was wasting my time and not participating as I should have.

28. Regarding #3, at our school, we do both. There are many workshops offered during the year that teachers can participate in after school hours at Viera. Also, our school has workshops for the teachers that our principal feels will help us in our daily teaching.

29. For such a long time, the district offered a wonderful collection of in-services to choose from. Now wish such a huge emphasis on math/reading & writing, our in-services are limited. The district has lost true sight of “professional development.” I do not like to be told where I have to spend my in-service time. Our particular school does not permit us to attend any in-service not directly connected with reading and/or math. No science or social studies. No technology, etc. Preparation for FCAT is way out of hand!

30. I loved participating in the professional development that has been offered at our school. It gave me a chance to not only learn new and important material, but also a chance to interact with my peers, something I find little time to do these days.
APPENDIX L

BUILDING PRINCIPAL COMMENTS FROM THE QUESTIONNAIRE
Following are comments made by building principals on the Professional Development Questionnaire for Building Principals.

1. I believe the biggest challenge in providing staff development to teachers is in scheduling.

2. More time in a school year is needed for staff development. One of the biggest concerns I hear from teachers is that they are feeling compressed for time. Staff development is critical… time for effective planning and implementation is needed.

3. The amount of paperwork required of teachers has a direct impact on a teacher’s willingness to participate in staff development activities. Example: Teachers of ESE only attend the very basic staff development, forget getting them to attend core curriculum staff development. Example: Reading teachers attend little because they are doing the endorsement.

4. It is becoming increasingly more difficult to not only come up with the funds we need to provide professional development for teachers, but it is also becoming more difficult to schedule time sufficient enough for these activities.
LIST OF REFERENCES


James, L.L. (Fall 2004). Finding the time. Leadership Compass, 2(01), 4-6.

Joyce, B. (September 2004). How are professional learning communities created? History has a few messages. Phi Delta Kappan, 86(1), 76-82.


Maute, J. (Fall 2004). Too much to learn, too little time. Leadership Compass, National Association of Elementary School Principals, 1(2), 1-3.


Richards, J. (March 2002). Why teachers resist change (and what principals can do about it). Principal, 81(4), 75-77.


