Effective Professional Development Models for Tablet Integration in Early Childhood Education

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**Abstract**

Technology in education is a trending topic in today’s society. As new technology emerges, it is important for educators to keep current and up to date with the changes that are taking place all around us. Teachers have a job to prepare all students for the new technological age we live in. In order to be effective and successful in this preparation, educators must continue their own technological education and be open and willing to integrate technology into the curriculum. This entails participation in various forms of professional developments, not only to learn about the new and emerging technologies, but ways in which to effectively integrate them into the curriculum.

This research paper is a deeper look into three models for professional development and the effectiveness of each. The effectiveness will be measured by how the individual models meet the needs of adult learners. The main focus will be finding effective professional development models for tablet (specifically iPad) integration in the early childhood program at Saint John Berchmans School in Logan Square, Illinois. Through the use of online surveys, one interview, and a focus group led by myself, I concluded the research study with a few themes that I was able to gather from my data collected. The main themes are as follows:

* The most effective professional development models depend on the needs and preferences of the school. There is not one set PD model that is most effective.
* Teachers need ongoing training, support, feedback, and guidance through professional developments in order to successfully integrate technology into the classroom.
* Teacher training strongly affects how technology is integrated into the classroom.
* The beliefs and attitudes of the teachers toward technology affects how and to what degree technology is integrated into the classroom.
* The integration of tablets in early childhood has had many positive impacts on both the students, the teacher, and the learning that takes place.

**Chapter I: Introduction**

**Overview of Saint John Berchmans Catholic School**

 Saint John Berchmans is an Archdiocesan Chicago Catholic School. It is comprised of a two building campus that serves students from the urban communities of Logan Square and the surrounding areas of Chicago. This school consists of approximately 244 students ranging in grades Pre-K through 8th grade. Approximately 30% of the schools population are students within the four preschool classrooms. Besides the four preschools, there are two kindergarten and two first grade classrooms, and one classroom from second to eighth grade. Saint John Berchmans is rich in ethnic diversity and has a wide range of students from various socioeconomic backgrounds with 35% of students receiving financial assistance. A large majority of the students are of Hispanic background.

**Saint John Berchmans Technology Development prior to 2008**

Technology at Saint John Berchmans has been increasing for the past three years or so, but prior to 2008, very little technology was available. After researching the school and asking multiple individuals about the technology prior to 2008, I have learned that a limited amount of knowledge is known. Only a handful of teachers that worked more than five years ago are currently teaching. This limits the amount of information I was able to gather.

 After talking with the business manager at Saint John Berchmans, he sent me to the kindergarten aid who used to be the computer teacher years ago. She was able to give me a limited amount of information about the technological changes that have taken place. Prior to 2008, the old Macintosh desktop computers in both the computer lab and in each individual classroom were replaced with new XP desktops. Also, the web server was changed from an inside service to an outside service. She was also able to inform me that the school used to have a technology specialist, but due to budget cuts, had to be let go prior to 2008 (she was unsure of the years). This led to a parent volunteering as a technology specialist once a week at Saint John Berchmans, but he left as well. Now, we do not have any sort of technology specialist and there is no room in the current budget for one.

**Saint John Berchmans Technology Development 2008-Present**

Saint John Berchmans is growing and changing with new technologies being introduced yearly. Although this Catholic School is very limited in the technology it has, it shows signs of growth and promise in the years to come. Each classroom (not including Pre-K) has a Promethean Board, which have been added over the past three years. All of the classrooms have at least one desktop computer (for student and teacher use). The office and the Pre-K through 3rd grade building (Logan) are located on one street and the 4th through 8th grade building (Altgeld) is located around the block. This school has two printers in the office, one in the Altgeld building, and one in the Logan building. There is one computer lab with 25 student stations, a Promethean board, and a scanner in the Altgeld building.

As far as technology updates, the computer lab was completely refurbished in 2010 to include all new Lenovo desktop computers, headphones, mice, and a Promethean board. In 2011, the email system was converted from Legacy Exchange server to Google Apps. Also in 2011, the phone system was upgraded and unified and the backend wired network was upgraded. In 2012, the T1 internet service was replaced with Comcast 50mb connect.

In January 2013, Saint John Berchmans received ten iPads from the Big Shoulders Fund of Chicago. “The Big Shoulders Fund provides support to Catholic schools in the neediest areas of inner-city Chicago.” (Big Shoulders Fund). Each of the four preschools received one iPad for use in the classroom. The iPads are a part of a pilot program at the school with the hopes of advancing to a 1:1 iPad initiative in preschool. Saint John Berchmans currently does not have WiFi, but it is listed as a future goal.

**Formation and Goals from Current Technology Plan**

Under the direction of the business manager, a Technology Committee was formed, consisting of three school parents and one friend of the school, to provide Saint John Berchmans with an individualized Technology Integration Plan. This committee is part of the “School Board of Specified Jurisdiction”, which is officially called the “Finance and Facilities Committee”. Over the past several years, the Archdiocese of Chicago has become aware of the need for technology integration in all Catholic Schools. After studying the needs of schools, the Archdiocese developed a comprehensive plan for use, management, deployment, budgeting, etc. of educational technologies. Currently, the school is using the Archdiocesan Technology Integration Plan that has been updated to include years 2011-2014. Previous technology plans were completed in 1997 and certified by the National Catholic Education Association (NCEA). They were then updated in 2002 and certified by the Illinois State Board of Education (ISBE) and then updated again in 2005-2006 and certified by the Illinois Catholic Conference. (Archdiocese of Chicago Technology Integration Plan, 2011).

The plan is divided into four sections: Stakeholder/Community Involvement, Curriculum and Instruction, Professional Development and Technology Deployment and Sustainability. Each of these four sections includes various goals and strategies to achieve those goals. In summary the main focus of the goals of these sections are as follows:

|  |  |
| --- | --- |
| Stakeholder/Community Involvement | All professional staff can articulate the vision and goals of the technology plans to the schools with which they work and can also demonstrate competency in basic technology skills.  |
| Curriculum and Instruction | Curricular programs will appropriately integrate technology with academic content and teaching strategies. |
| Professional Development | Professional development for enhancing staff technology competencies will be ongoing, utilizing online resources, tutorials, and distance learning models. Teachers will be involved in continuous and consistent staff development to design and implement a curriculum that uses appropriate technology. |
| Technology Deployment and Sustainability | Catholic schools will provide their students with equitable access to technology. |

**Research Questions**

This research project explores three models for professional development and the effectiveness of each. The three models to be researched are standardized, school-centered/site based, and self-directed. The effectiveness will be measured by how the individual models meet the needs of adult learners. The main focus will be finding effective professional development models for tablet (specifically iPad) integration in the early childhood program at Saint John Berchmans in Logan Square, Illinois. The focus question is stated below:

*“What are effective professional development models for tablet integration in early childhood education?”*

The study further explores the following sub-question related to the overarching research question:

* How does teacher training affect technology integration in the classroom?

**Purpose**

The purpose of this research paper is to explore the effectiveness of three professional development models (standardized, school-centered/site-based, and self-directed). Through an interview, surveys, a focus group, and a thorough literature review, I hope to gain more knowledge into what professional development programs and models would work best at Saint John Berchmans School in order to implement an effective tablet initiative in the early childhood program.

Chapter II: Literature Review

**Professional Development Models**

 Professional development is a vital tool that not only promotes teacher development and growth in a certain area, but ultimately benefits the students. Professional developments can be held for a variety of reasons including promoting a change vision at a school or within a district, as a training tool for new technology integration, to promote mastery in a subject area, or to keep teachers up to date on new research and technology. Professional developments can be held in varying forms as well; from workshops and seminars, to online courses and training sessions. The overriding idea behind this type of education is that increased knowledge helps teachers improve student achievement.

Research shows that there are many different models of professional development that have been used and studied over the years. For this research project, I chose to focus on three broad models of professional development. According to Gaible and Burns (2005), three broad categories for professional development are as follows:

* *Standardized Teacher Professional Development: The most centralized approach, best used to disseminate information and skills among large teacher populations*
* *Site-based Teacher Professional Development: Intensive learning by groups of teachers in a school or region, promoting profound and long-term changes in instructional methods*
* *Self-directed Teacher Professional Development: Independent learning, sometimes initiated at the learner’s discretion, using available resources that may include computers and the Internet.*

Standardized professional development (PD) is usually given in the form of a workshop, seminar, or training session and as a result, teachers gain broader knowledge, skills, and concepts. Through this type of PD, knowledge and instructional methods can be disseminated to teachers all across the country, but it is usually a one-time, one location workshop. This does not allow for on-going support for teachers. This type of professional development also includes the “Cascade Model” which is where teachers attend workshops or training sessions outside of their school and then train their own staff members by hosting their own PD workshop(s). (Gaible and Burns, 2005).

Site-based PD is a series of workshops or training sessions that take place within the school and focus on the specific needs or visions of that school. Teachers work together and collaborate ideas to address local school issues or new technologies that may emerge. Feedback occurs periodically since the meetings are over a period of time. This allows for ongoing opportunities for learning among teachers.

Self-directed (or individualized) PD is where teachers initiate and design their own PD. Those teachers would then share their ideas and resources with other teachers. Teachers need to be motivated and encouraged to participate in ongoing, self-motivated learning because all of the responsibility is placed on the teacher and requires very little of the school. This type of PD allows the teachers to choose specific workshops, seminars, online courses, or training sessions that would best help them help their students. (Gaible and Burns, 2005).

According to the Hanover Research Report (2012), standardized professional developments are considered to be least effective. The findings state, “Workshops, typically occurring off-site and lasting for eight hours or less without any follow up activities, are the least expensive and most widely used form of TPD but are generally considered to be the least effective approach.” (p. 3). Researchers and practitioners that took part in the Hanover study also found that site-based professional development are more effective because they are sustained over a longer period of time and allow teachers to collaborate with one another. It is important to realize that many of these types of studies operate from base assumptions and are not independently evaluated. (p. 3).

Another study (*What Makes Professional Development Effective? Results from a National Sample of Teachers*) was conducted by Garet, Porter, Desimone, Birman, and Yoon (2001) to investigate the characteristics that make professional development effective. According to the studies done by Garet, Porter, Desimone, Birman, and Yoon (2001) “…our results indicate that sustained and intensive professional development is more likely to have an impact, as reported by teachers, than is shorter professional development. Our results also indicate that professional development that focuses on academic subject matter (content), gives teachers opportunities for “hands-on” (active learning), and is integrated into the daily life of the school (coherence), is more likely to produce enhanced knowledge and skills.” (p. 935). When compared with the three PD models by Gaible and Burns (2005), this study seems to favor the site-based model.

It is possible to use all three models of professional development at a school or within a district, but there is usually one specific model that works best for individuals depending on the needs and structure of the school. According to “*One Size Doesn’t Fit All: Customizing Educational Technology Professional Development*” by Judi Harris (2008), “All professional development is designed to inspire change, whether small or systemic. Though certain PD models do support particular goals better than others overall, individual learners receive the same models differently.” (p. 24). It is important for PD leaders, administration staff, and teachers to be aware of those differences and accommodate to ensure success.

**Adult Learning Theory**

In order to have effective professional development, adult learning theories need to be taken into consideration prior to implementation. Just as it is crucial to meet the needs of our students, it is equally as important to meet the needs of fellow teachers at professional development opportunities. Research shows that teachers go through developmental stages during their teaching careers. Thus, professional development programs need to take these stages into consideration when planning workshops, seminars, training sessions, and the activities that go along with them. An article titled, “Adult Learning Theories: Impacting Professional Development Programs,” written by Yvonne Trotter (2006) provides an overview of “…Age and Stage Theory, Cognitive Development Theory, and Functional Theory, and how these theories can impact professional development programs.” (p. 8). Within this article, research is cited by another individual, Sharon Oji (1980), who studied adult learning as it applied to teacher inservice education. Oja emphasized four key ingredients for successful adult learning.

* *“Use of concrete experiences,*
* *Continuously available supervision and advising,*
* *Encouragement of adults to take on new and complex roles, and*
* *The use of support and feedback when implementing new techniques.”* (Trotter, 12)

One main point of this article explains how teachers should be the ones forming their own professional developments based on their needs, wants, and interests.

*“Teachers should be given latitude to form their own professional development. What interests them? What would they like to delve into more deeply? What do they feel they need to learn? Allowing the teachers to determine what direction their professional development will take will greatly increase the success of the teachers in their journey to be lifelong learners.”* (Trotter, 2006, p. 11).

When working with adult learners, it is important to offer opportunities or teach to their needs, wants, and interests. This may mean giving them the option of creating, planning, and preparing their own PD opportunity. PD leaders could also survey the teachers prior to implementation to see how they learn best, and where they are in their current knowledge of the topic(s) to be discussed. According to an article by Beavers (2009) titled, “Teachers as Learners: Implications of Adult Education for Professional Development,” “Most teachers would acknowledge the need for continued training on new technologies, updated educational standards, and relevant classroom strategies. Certainly, TPD based on “high-quality, meaningful and effective teacher enhancement” can affect teachers’ skills and attitudes in the classroom, further increasing the quality of education the students receive” (p. 25). It is important that PD leaders exhibit strong teaching strategies and take time to sufficiently plan and prepare PD for the specific group of teachers that are involved. Surveys and interviews prior to the PD opportunity will be helpful in the planning and preparing process. This gives the presenter ample time and information to plan a PD opportunity that is worthwhile, engaging, valuable, and most importantly, based on adult learning theories.

While researching, I came across many articles, books, and websites that focus on andragogy, which, according to an instructional design website, “...means that instruction for adults needs to focus more on the process and less on the content being taught.” (Culatta, 2013). The two following resources focus on the work of Malcolm Knowles, who is famous for the adoption of the theory of andragogy.

Culatta focuses on Malcolm Knowles’s four principles of andragogy. Culatta states that these principles of andragogy need to be taken into consideration prior to working with adult learners. These four principles are:

*1. Adults need to be involved in the planning and evaluation of their instruction.*

*2. Experience (including mistakes) provides the basis for learning activities.*

*3. Adults are most interested in learning subjects that have immediate relevance to their job or personal life.*

*4. Adult learning is problem-centered rather than content-oriented*. (Culatta, 2013)

Amy Beavers (2009) examines Knowles’s five assumptions of the adult learner. These are predefined ideas that adults develop throughout their various learning experiences. These five assumptions are summarized as follows:

*“(1) has an independent self-concept and who can direct his or her own learning,*

*(2) has accumulated a reservoir of life experiences that is a rich resource for learning,*

*(3) has learning needs closely related to changing social roles,*

*(4) is problem-centered and interested in immediate application of knowledge, and*

*(5) is motivated to learn by internal rather than external factors.”* (Beavers, 2009).

In previous paragraphs, I have described Oja’s four key ingredients for successful adult learning, Knowles’s four principles of andragogy, and Knowles’s five assumptions of the adult learner. From these three sources, one is able to see that adult learners have needs and characteristics that need to be taken into consideration prior to planning and implementing professional development programs. In summary, PD programs need to be planned with active learning experiences, a problem-centered approach, relevance to the lives of the learners, encouragement to take on new roles, and the learners’ involvement in the planning process.

**Technology Training: Pre-Service Teachers**

In today’s society, technology is all around us. Technology continues to change and teachers need to be willing and able to change with their students. As schools continue to offer and introduce new technologies into their programs, teachers are expected to make use of them in their classrooms. Teachers are expected to use technology in meaningful ways that promote higher order thinking and critical thinking skills.

It is equally as important for the teachers to receive proper training and information about those new technologies. Without sufficient knowledge, technology will not be used properly or will not be used at all. An article written by Heejung An, Hilary Wilder, and Keol Lim (2011), discusses the importance of preparing elementary pre-service teachers to teach with technology. This study was conducted with students in a teacher preparation program at a university in New Jersey. These students were considered ‘non-traditional’ and came from working class backgrounds where many of them did not have exposure to a variety of technologies needed for undergraduate courses. (An, Wilder, and Lim, 2011, p. 171). This background information led the authors to design “…a two-stage educational technology curriculum that would meet the needs of pre-service elementary teachers, in order to adequately prepare them for their future technology integration classroom practices.” (An, Wilder, and Lim, 2011, p. 171).

 At the beginning of the study, the authors found it relevant to evaluate the attitudes and beliefs of the students towards technology integration. With a background knowledge of their attitudes and beliefs, the authors could then gain a better understanding of their instructional strategies, classroom practices and plans, and ways of interacting with students. Numerous researchers have also analyzed teachers’ technology use and found that their attitudes and beliefs toward technology played a key role. (An, Wilder, and Lim, 2011, p. 176).

 The main research question for the study conducted by An, Wilder, and Lim (2011) is as follows: “To what extent and in what ways did the teacher candidates’ technical competency, development of TPACK, and beliefs and attitudes toward their technology integration practices change after taking an online educational technology course?” (p. 178). The outcomes of this study showed that “As the quantitative results indicated, the online educational technology course contributed to students’ development of TPACK, rather than perceived technical competency. Further, qualitative results showed that the candidates’ attitudes and beliefs regarding their technology integration practices improved and became more specific for diverse learners.” (An, Wilder, and Lim, 2011, p. 188). The results explain the importance of recognizing that teachers may come with varying levels of basic technology proficiency. It is also important to understand that a successful technology integration may follow only when students feel confident and competent in their own technology skills. This is where professional development plays a vital role and schools should be open and willing to offer multiple programs with varying levels of technology proficiency.

**Impact of Professional Development and Support on Technology Integration**

An article titled, “Technology Integration for Instructional Improvement: The Impact of Professional Development,” written by Potter and Rockinson-Szapkiw (2012) states that, “We identify a primary reason for the lack of technology integration as ineffectively developed professional development opportunities for teachers.” (p. 22). This article talks about how too much valuable technology in schools goes to waste each year mainly due to the fact that there is no prior training for use of the technology and the fact that there is no administrative or mentor support. Professional development has been consistently showed as a way to increase technology integration into curriculums and classrooms. This study recommends, “…an administrative-supported and mentor-supported approach to professional development as an alternative to the ineffective traditional approach.” (Potter and Rockinson-Szapkiw, 2012, p. 22). And just as in the previously discussed study by An, Wilder, and Lim (2012), the role of teachers’ attitudes and beliefs about the use of technology is also discussed.

 Administration need to realize that “Effective use of technology does not necessarily happen just because the technology is available. Both knowledge of the technology and practice using it for instructional purposes are necessary for successful implementation” (Potter and Rockinson-Szapkiw, 2012, p. 23). This article explains how one-day lecture style professional developments or training sessions are ineffective because there is no follow up or support for the teachers. Teachers need professional development opportunities that are “…long-term and embedded in day to day practices.” (Potter and Rockinson-Szapkiw, 2012, p. 23). In conclusion, this article suggests that an effective professional development opportunity model should include three aspects: “(a) technology operation, (b) technology application, and (c) technology integration with mentor and community support.” (Potter and Rockinson-Szapkiw, 2012, p. 23).

**Underutilization of Technology in Schools**

As I have mentioned in the previous article written by Potter and Rockinson-Szapkiw (2012), technology is underutilized and many researchers are trying to figure out why this is so. An article titled, “Revisiting Technology Integration in Schools: Implications for Professional Development,” written by Hixon and Buckenmeyer (2009), explains the “real reasons” that technology is underutilized in schools.

*“School administrators and policymakers assumed that having access to technology would be enough to ensure that today’s students would learn about and with technology; that teachers would immediately begin using the technology and integrating it into their teaching. They were operating on an “if you build it, they will come” philosophy. This has proved not to be the case, as the wealth of technological resources in today’s schools are still underutilized and have failed to make a significant impact on educational practices.”* (p. 131).

 In this article, the authors have researched that the real reasons for technology underutilization extend far beyond lack of access, time, and training. They have identified five barriers to technology integration: “(a) resources, (b) knowledge and skills, (c) institution, (d) attitudes and beliefs, and (e) subject culture.” (Hixon and Buckenmeyer, 2009, p. 135). The authors state that current technology training is ineffective for a variety of reasons. In schools nowadays, professional developments and technology training are programs that all teachers are expected to attend. But, the administration, professional development leaders, etc. are using a “one-size-fits-all” model where learning styles and individual differences are not taken into consideration. (Hixon and Buckenmeyer, 2009, p. 141). In addition, PD opportunities are sometimes held at different locations where teachers are using technology that is different from their current schools. “Professional developers must work closely with individual teachers to constantly reassess teachers’ progress and redefine professional development strategies.” (Hixon and Buckenmeyer, 2009, p. 142). Constant and continual support needs to be consistent with where teachers are in the learning and integration process. If all of these things are taken into consideration, professional developments will be a great deal more effective in the end.

**Technology Integration in Early Childhood Education**

 Early childhood students were born into a technological age and are well-suited to use technology in their everyday lives. Recent research indicates that when integrated properly into early childhood classroom environments, technology can be an effective teaching tool, empowering children to take a more active role in their learning. (Schanen, 2003). Open-ended exploration on tablets or the Internet are excellent tools that promote higher-order and critical thinking skills in children as young as three years old. Technology is a powerful resource that can be used to supplement and support learning throughout the early childhood years. The early interaction with technology will help the children be better prepared for the real-world that is ahead of them.

 An article titled, “Touch Tablet Surprises” written by Shifflet, Toledo, and Mattoon (2012), details the impact that newer technologies and tablets in general have had on one early childhood classroom in particular. The integration of the tablets in the preschool classrooms had many positive impacts on both the students, the teacher, and the learning that was taking place. Cooperation, collaboration, digital citizenship, and connections to the real world were the four positive surprises that resulted from the integration of just four tablets in one preschool class. (Shifflet, Toledo, and Mattoon, 2012, p. 37-40). The authors state, “Many educators resist using technology out of concern that it is not developmentally appropriate for young children. However, when educators are intentional and selective in its use, technology can enhance early childhood education.” (p. 40).

 Another study by Eugene Geist (2012), was conducted to observe early childhood children naturally interacting with touch screen devices. The results show that children as early as two years old could better operate and interact with a tablet over a traditional computer. The students were able to actively use the tablet in a productive manner with little instruction provided by the teacher. (Geist, 2012, p. 32). “The AVG Digital Skills study (AVG, 2011) released in October 2010 found that while most small children age 2-3 can't swim, tie their shoelaces, or make breakfast unaided, they do know how to turn on computers, navigate with a mouse, play a computer game and operate their parents' smartphones.” (p. 33) This research goes to show that early childhood students live in a technology-rich world and they will continue to grow and learn with new technologies. Limiting technology in the early childhood classroom is a disservice to the preschool students because technology skills are what come naturally to them. Using technology such as tablets as a supplement to learning can be a meaningful addition to the early childhood classroom. “In the future perhaps tablet computers will be a staple of the toddler and preschool classroom just as are books, blocks and imaginative play.” (p. 34).

 Not only are early childhood students impacted positively by the introduction of new technologies, but teachers are positively impacted as well. An article titled, “iDocument: How Smartphones and Tablets are Changing Documentation in Preschool and Primary Classes,” written by Parnell and Bartlett (2012), explains how digital documentation is a topic worthy of study. They first go on to explain why documentation is important in preschool and primary classrooms. According to Parnell and Bartlett (2012), documentation is “the process of observing and recording children’s development and learning.” (p. 51). “As part of the process, teachers ask questions, collect data on the children (work artifacts, quotations, photos, audio recordings, and such), interpret the data, and develop an ongoing dialogue about the process with colleagues, parents, and the children themselves. This helps everyone understand the children’s development and learning and how to promote it.” (p. 51). From their observations, studies, experiences, and research, Parnell and Bartlett indicate that mobile devices and documentation have the potential to change the way students are assessed and to make learning more visible.

 “Many teachers are aware that technology is an effective means for widening educational opportunities yet most teachers neither use technology as instructional delivery system nor integrate technology into their curriculum.” (Keengwe and Onchwari, 2009, p. 210). Teachers and parents are concerned about the developmental appropriateness of integrating technology into an early childhood classroom. Also, teachers feel ill-prepared and trained to utilize new technologies effectively in their classrooms. This is where professional development plays a major role and should offer teachers guidance, training, and ongoing support. In many schools throughout the world, there is “…need to motivate, train, and equip educators with the skills necessary to enhance appropriate use and integration of technology.” (p. 217).

Chapter III: Methodology

**Research Questions and Purpose Restated**

*Research Questions*

This research project explores three models for professional development and the effectiveness of each. The three models to be researched are standardized, school-centered/site based, and self-directed. The effectiveness will be measured by how the individual models meet the needs of adult learners. The main focus will be finding effective professional development models for tablet (specifically iPad) integration in the early childhood program at Saint John Berchmans in Logan Square, Illinois. The focus question is stated below:

*“What are effective professional development models for tablet integration in early childhood education?”*

The study further explores the following sub-question related to the overarching research question:

* How does teacher training affect technology integration in the classroom?

*Purpose*

The purpose of this research paper is to explore the effectiveness of three professional development models (standardized, school-centered/site-based, and self-directed). Through surveys, an interview, a focus group, and a thorough literature review, I hope to gain more knowledge into what professional development programs and models would work best at Saint John Berchmans School in order to implement an effective tablet initiative in the early childhood program.

**Participants, Procedures, and Time Frame**

This research study used a mixed methods approach where qualitative and quantitative data were collected and analyzed. One quantitative data source used was an online survey (Google Forms) given to current preschool teachers at Saint John Berchmans and current preschool teachers at other schools across the United States. This survey was given on a Monday and was to be completed by the following Friday at the latest. The survey should only take about five to ten minutes of the participant’s time. Qualitative data sources include one interview with a current preschool teacher at Saint John Berchmans. This interview will be audio recorded using an app on an iPad. The interview took place after school at Saint John Berchmans during the week of May 6, 2013. Overall, it took about thirty minutes to complete. Another way that qualitative data will be collected is through an after school focus group. The focus group will consist of all eight Saint John Berchmans preschool teachers during a staff development day (approximately two hours). The focus group will concentrate on the needs of our early childhood educators when it comes to professional development opportunities in order to integrate technology (iPads) into our curriculum. The teachers will also be prompted to share their prior experiences of technology PDs and the different models they may have encountered. I will be recording all responses that the teachers give to the focus questions I have created. This type of data provides an overall picture of what is occurring in our building and what can be done to make a positive change.

|  |  |  |
| --- | --- | --- |
| **Research Question** | **Data Sources** | **Planned Dates** |
| **Source 1** | **Source 2** | **Source 3** |
| *What are effective professional development models for tablet integration in early childhood education?* | *Interview with current preschool teacher at SJB* | *Online Survey given to all preschool teachers at SJB* | *Focus Group: comprised of all preschool teachers at SJB* | *April 30—May 13* |
| *How does teacher training affect technology integration in the classroom?* | *Interview with current preschool teacher at SJB* | *Online Survey given to all preschool teachers at SJB* | *Focus Group: comprised of all preschool teachers at SJB* | *April 30—May 13* |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Data** | **Source** | **Planned Dates** | **Data related to which research question?**  | **How do you believe this data will answer that question?** |
| *Online Survey* | *All preschool teachers at Saint John Berchmans School will be asked to complete an online survey covering the topic of technology integration and professional development.* | *April 30-May 3* | *What are effective professional development models for tablet integration in early childhood education?**and**How does teacher training affect technology integration in the classroom?* | *The results of the survey will give a better picture of the needs, preferences, interests, skills, and learning styles of the teachers at SJB. From this data, I will be able to see what PD models teachers prefer and why.* |
| *Interview* | *One interview with a current preschool teacher at SJB will be conducted.*  | *May 6-8* | *What are effective professional development models for tablet integration in early childhood education?**and**How does teacher training affect technology integration in the classroom?* | *By interviewing the preschool teacher at SJB, I will gain greater insight into the needs of our school when it comes to professional development in order to integrate iPads and more technology into our curriculum.* |
| *Focus Group* | *All preschool teachers will be a part of the focus group which will take during a staff development day.*  | *May 13-Staff Development Day* | *What are effective professional development models for tablet integration in early childhood education?**and**How does teacher training affect technology integration in the classroom?* | *The focus group will allow for all teachers to discuss PD models and how our school is lacking or succeeding in offering PD opportunities/resources to its teachers. The teachers will also be prompted to discuss previous PD models they have attended.*  |

Chapter IV: Results

**Summary of results from data collection**

The purpose of this study was to research various models of professional development and figure out which would work best for an early childhood tablet integration. For this research project, I chose to focus on three broad models of professional development. According to Gaible and Burns (2005), three broad categories for professional development are as follows:

* *Standardized Teacher Professional Development: The most centralized approach, best used to disseminate information and skills among large teacher populations*
* *Site-based Teacher Professional Development: Intensive learning by groups of teachers in a school or region, promoting profound and long-term changes in instructional methods*
* *Self-directed Teacher Professional Development: Independent learning, sometimes initiated at the learner’s discretion, using available resources that may include computers and the Internet.*

Also included in this study is a sub-research question that focuses on how teacher training (pre-service and certified teachers) affects technology integration in the classroom.

The first piece of data I collected was a survey (see Appendix A) I created using Google docs that focused on the teacher’s overall experience, attitude, training, thoughts, etc. on iPad integration in preschool. There was a strong focus on professional development and various models that could be or are being used at SJB. I collected seven survey results from the eight preschool teachers at Saint John Berchmans (87.5%). I asked 24 total questions using a combination of multiple choice and open-response questions. From the results gathered in Google docs, I created charts/graphs that helped me to analyze the data to formulate conclusions for my study.

*Figure 1*

 Figure 1 shows the years of teaching experience from the seven surveyed individuals. This pie graph shows that the majority of the preschool teachers surveyed (86%) at St. John Berchmans have been teaching for less than six years.

*Figure 2*

 Figure 2 shows the frequency of tablet use in the preschool classroom at St. John Berchmans. All of the preschool teachers use the iPad with their students at least three times a week.

*Figure 3*

 Figure 3 shows the preschool teachers’ confidence with certain tasks on the iPad. The majority feel confident to perform basic iPad functions.

*Figure 4*

 Figure 4 shows the preferred professional development model of the preschool teachers at Saint John Berchmans. They had three PD models to choose from (each explained within the survey). The majority (71.4%) prefer the site-based/school centered model.

*Figure 5*

 Figure 5 shows why the preschool teachers believe that they received no initial tablet training prior to the implementation of the iPad pilot program. Six out of seven teachers answered “no” to receiving initial tablet training. The majority of teachers believe that the reasons for no iPad training is due to a lack of funds and the lack of a technology specialist.

*Figure 6*

 Figure 6 shows the reasons why the preschool teachers believe they did not receive iPad/tablet professional development. Again, the majority of teachers believe that the reasons for no iPad training is due to a lack of funds and the lack of a technology specialist.

*Figure 7*

 Figure 7 shows the reasons for no tablet training initially and as professional development graphed together.

*Figure 8*

 Figure 8 shows the professional development models that the teachers have experienced vs. the ones that they prefer. The majority (71.4%) have experienced individualized and site-based, and only 42.8% have experienced standardized. Although five teachers have experienced individualized, only one teacher prefers it. On the other hand, five teachers have experienced site-based and five prefer it as well. In regards to the standardized PD model, three teachers (42.8%) have experienced it, and only one teacher prefers it.

*Figure 9*

 Figure 9 shows the perceived barriers to technology integration at Saint John Berchmans School. All teachers surveyed believe that a lack of resources and a lack of available technology are barriers to technology integration. Five out of seven teachers (71.4%) believe that a lack of PD opportunities is a barrier and four out of seven teachers (57.1%) believe that the lack of technology support is a barrier. Three out of seven teachers (42.8) believe that a lack of time is a barrier. One teacher for each category believes that attitudes about technology and a lack of funds are barriers to technology integration.

Table 1 (below) shows the results from two of the open-response questions regarding tablet integration in preschool and attitudes/thoughts about the use of tablets in preschool. These responses show that the majority of the preschool teachers at SJB use the iPads during small group, free choice, or center time. All seem to use them in a similar way during these times of the day. All of the preschool teachers surveyed had positive responses to using iPads in preschool. One teacher wished they knew of more ways to integrate them into the curriculum. Two teachers are hoping for more iPads in the preschool classes. One teacher would like WiFi throughout the school to better utilize the iPad in the classroom.

*Table 1: Survey Open-Response Questions/Results (Tablets in Preschool)*

|  |  |
| --- | --- |
| **Please provide a brief description on how you intend to or how you currently integrate your tablet(s) into the curriculum.** | **What are your thoughts about using tablets in preschool?** |
| We let the children sign up and use the iPads during small groups. We share with the other preschool classes so that we have four at a time. | I think it is a great idea and very beneficial for the students. I just wish we had more iPads or had more ways to integrate them into our curriculum. |
| We intend to integrate our tablets into our curriculum by teaching student’s numbers, shapes, language skills, team work, memory skills, & group management (centers).... | My thoughts are that students gets very excited about using the tablet where others are not as excited about it. I think that the tablet is another tool to teach students in a fun way! |
| The tablet is used during activity center rotations. All PreK rooms share each tablet so that four may be in a classroom at one time. My classroom uses apps as a means of practicing basic mathematical and literacy concepts taught during direct instruction. | I think the tablets are amazing. I wish every child could have one in the classroom. It would be amazing to have wifi in the classroom though because we are limited to what we can use on the tablet in the classroom. Most of the kids have a tablet at home or have been exposed to some kind of touch screen device. It is very easy to teach the rest how to use and has so much potential for use in the preschool curriculum. |
| Tablets are used during small groups and center time. During small groups, an application that is teacher chosen is used. During center time (free play) students can choose from any of the applications on the Ipad. | I think it is a wonderful tool that can be used to enhance teaching language arts and math, as well as a useful tool in assessing children. |
| Small group time (students interact with the tables individually or in groups of 2); Religion Apps about Bible stories; Small Group Instruction with the Teacher (reading, spelling, rhyming) | I think they are wonderful and many students who have difficulty sitting still and learning during whole group instruction have improved their academic skills by using the tablet. |
| We use tablets during our center time as a way for students to practice their math and phonics. We also use them as one of the options for small groups. This allows one teacher to work with one group, the other teacher to work with another group, one group of students doing an independent activity with manipulatives, and one group working with the iPad. It is a great way to present students with an opportunity to develop their skills in a fun and interesting way. | I think that tablets are a necessity in preschool. Many families already have one, and it allows students to practice what they have learned in a different way. Not every student is going to learn in the same manner, and therefore it is essential to provide as many tools as possible. I believe that students get so excited about using tablets that they forget that they are using them for an educational purpose, and I think it can be great to "sneak" a little extra learning in. |

Table 2 (below) shows the results from the survey question regarding the preferred model of professional development, as well as the open-responses question regarding why they prefer that PD model. Five out of the seven teachers surveyed preferred site-based/school-centered professional development. One teacher preferred individualized/self-directed and one teacher preferred standardized. All of the teachers that preferred site-based/school-centered chose that one because of the convenience factor.

*Table 2: Survey Open-Response Questions/Results (Professional Development Models)*

|  |  |
| --- | --- |
| **Which type of professional development model do you prefer?** | **Could you explain in a short paragraph why you prefer that professional development model over others?** |
| Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day) | I prefer to stay at my own school (for convenience), but I wish our school offered better PD or more PD. |
| Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day) | This would be easy for me since I'm already at school.... |
| Individualized/self-direct (ex: researching PD opportunities on your own, registering, and traveling to the locations) | Based on experience, I feel better about researching and choosing which PD opportunities would benefit me the most. My school doesn't offer any anyway so I don't have a choice. |
| Standardized (ex: a one time workshop or training session; usually off site) | I come to work early and leave late most days. Quality professional development should be offered during hours I am paid and when my brain is recharged and focused, not after a long day or hours I'm not required to be at work. It is professional development, schools should offer at LEAST 5 days of professional development. |
| Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day) | I prefer site based because all of the staff is receiving the same information at the same time; therefore it is much easier to collaborate afterwards. It is also convenient since most staff lives in different areas. |
| Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day) | Most convenient |
| Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day) | I believe it is beneficial to have the professional development at the site where you teach because the questions that are asked/answered can be directly based off of that school's issues/problems. |

The second piece of data that I collected was an interview (see Appendix B) with a current preschool teacher at Saint John Berchmans. I wanted to gather more information about an individual’s thoughts, experiences, and actions with the iPad integration and professional development at SJB. The teacher I interviewed has been working at SJB as a preschool teacher for two and a half years. This teacher had no prior experience with sort of tablet or iPad and would have benefitted from more training sessions prior to implementation in the classroom. This teacher believes that teacher training does have a direct effect on technology integration in the classroom. She stated, “In my own experience, I don’t use something in the classroom until I am comfortable with it. I didn’t use the iPad in class until I taught myself how to use it. If teachers aren’t trained, they tend not to use something, or to use it incorrectly, which does not benefit the students.”

She feels that the main reason behind the lack of PD at St. John Berchmans is that no one is committed to finding PD that will suit everyone’s needs. She prefers the individualized/self-directed PD model and stated, “I prefer self-directed PD, mainly because I am not offered anything else. I find that if I research PD myself, I can focus on what I think will most benefit me, and what I need help with as a teacher.” She believes that professional development is effective when it is hands-on and real life examples are used. She wants to be able to apply what she learned in the PD session and use it in her classroom immediately. She has a very positive attitude when it comes to iPads in the preschool classroom, but she does feel that more training and PD need to be a part of the integration process.

The last piece of data I collected came from a focus group (see Appendix C) that was conducted during a staff development day at SJB. All eight preschool teachers gathered in a classroom at the school for about one hour to discuss, answer questions, and ask questions regarding professional development and iPad integration in the early childhood classroom. I facilitated the focus group by asking a list of ten set questions and gathering data from them. I recorded the focus group using an app on the iPad so that I could go through all of the data and responses once the group was over. I was also able to propose a school-centered/site-based model of professional development that could be implemented in the future. This PD was a hands-on workshop that focused on four goals and ways to achieve those goals within our school. I talked about this type of workshop and got feedback from the teachers about it.

Since the focus group turned into a lengthy discussion about iPads, preschool, PD, and more, I decided to create an Excel spreadsheet with the participant’s responses to the ten questions. Instead of transcribing the entire hour long discussion, I chose the responses from the recording and typed those into the spreadsheet. This is a much more organized and easy way for me to analyze the data I gathered. I was able to see trends and patterns within the responses which helped me formulate my conclusions. See Appendix C for the focus group responses and code.

Chapter V: Conclusion and Recommendations

**Discussion/Recommendations**

            After collecting survey, interview, and focus group data, in addition to the information researched in an extensive literature review, I found many themes that are consistent throughout all of the research. The themes found throughout my research study are as follows:

         The most effective professional development models depend on the needs and preferences of the school. There is not one set PD model that is most effective.

         Teachers need ongoing training, support, feedback, and guidance through professional developments in order to successfully integrate technology into the classroom.

         Teacher training strongly affects how technology is integrated into the classroom.

         The beliefs and attitudes of the teachers toward technology affects how and to what degree technology is integrated into the classroom.

         The integration of tablets in early childhood has had many positive impacts on both the students, the teacher, and the learning that takes place.

The data derived from various quantitative and qualitative sources shows that professional development (of any kind) is essential for teacher growth and success. According to “*One Size Doesn’t Fit All: Customizing Educational Technology Professional Development*” by Judi Harris (2008), “All professional development is designed to inspire change, whether small or systemic. Though certain PD models do support particular goals better than others overall, individual learners receive the same models differently.” (p. 24). It is important for PD leaders, administration staff, and teachers to be aware of those differences and accommodate to ensure success. After interviewing a current preschool teacher at SJB, I was able to gather that professional development is a strong need and want of the whole community, and although she prefers self-directed PD, she would be better prepared and more knowledgeable if her school provided any valuable PD at all. She stated, “I prefer self-directed PD, mainly because I am not offered anything else.”

Not only do teachers need training for new technologies in the classroom, but they need ongoing support, feedback, and guidance in order to be successful in implementing new technology into the classroom. Teachers often noted that without the support and proper training and information, they are less likely to utilize technology on a daily basis. Professional development has been consistently shown as a way to increase technology integration into curriculums and classrooms. According to the article by Potter and Rockinson-Szapkiw (2012), “Effective use of technology does not necessarily happen just because the technology is available. Both knowledge of the technology and practice using it for instructional purposes are necessary for successful implementation” (p. 23). This article explains how one-day lecture style professional developments or training sessions are ineffective because there is no follow up or support for the teachers. Teachers need professional development opportunities that are “…long-term and embedded in day to day practices.” (Potter and Rockinson-Szapkiw, 2012, p. 23). After working and discussing with the focus group, we came to the conclusion that support, guidance, and feedback from the administrative staff are necessary for the integration of any new technology into the curriculum. All seven teachers stated that administrative support would be helpful, but they are very pessimistic about the actuality of getting it.

The administrative staff needs to be aware of how the teachers feel about incorporating any new technology into their classroom. New devices or programs cannot just be thrown at teachers without first checking if they are open to the idea of it. At the beginning of the study conducted by An, Wilder, and Lim (2011), the authors found it relevant to evaluate the attitudes and beliefs of the students towards technology integration. With a background knowledge of their attitudes and beliefs, the authors could then gain a better understanding of their instructional strategies, classroom practices and plans, and ways of interacting with students. Numerous researchers have also analyzed teachers’ technology use and found that their attitudes and beliefs toward technology played a key role. (An, Wilder, and Lim, 2011, p. 176).

After surveying, interviewing, and conducting a focus group with the preschool teachers at Saint John Berchmans, I can clearly see that all eight teachers have positive attitudes and strong beliefs about the importance of integrating technology into the early childhood curriculum. Many studies question whether technology, such as iPads and other tablets, are necessary or beneficial in a preschool classroom. According to the study by Shifflet, Toledo, and Mattoon (2012), the integration of the tablets in the preschool classrooms has had many positive impacts on both the students, the teachers, and the learning that takes place. Cooperation, collaboration, digital citizenship, and connections to the real world were the four positive surprises that resulted from the integration of just four tablets in one preschool class. (Shifflet, Toledo, and Mattoon, 2012, p. 37-40). The authors state, “Many educators resist using technology out of concern that it is not developmentally appropriate for young children. However, when educators are intentional and selective in its use, technology can enhance early childhood education.” (p. 40).

After facilitating the focus group at Saint John Berchmans, I compiled all of the teacher’s responses into an Excel spreadsheet in order for me to view and analyze the data in a simpler way. From the spreadsheet, I was able to examine some additional themes that I found throughout the ten questions, discussion, and feedback about the proposed professional development model. Below I have listed these major themes.

* Theme 1: Professional Development is a necessity at all schools.
	+ The teachers at Saint John Berchmans all agree that professional development is strongly needed and wanted for a successful implementation of the iPad pilot program in early childhood.
* Theme 2: Site-based PD: Convenient and geared towards the specific school
	+ The majority of teachers at Saint John Berchmans prefer site-based/school-centered PD due to the convenience factor as well as gearing the PD directly towards the needs of the school.
* Theme 3: Teachers want PD.
	+ Not only do teachers need professional development opportunities or information about PD, but they actually want it. The teachers at SJB believe that if they had more training and development prior to implementing the iPad into their classroom, they would have more of a success rate. Currently, the preschool teachers are using the iPad for small group activities, for centers, and for a small amount of assessment, but they want to learn new ways to utilize the iPad every day.
* Theme 4: Teachers learn from other educators.
	+ When given information about the proposed (site-based) PD, all teachers responded positively to the ideas of active (hands-on) learning, and most especially, modeling. They believe they would learn a lot from visiting or Skyping with other schools that use the iPad in their preschool curriculum. They were also open to the idea of having an educator from another school come to our school to talk about iPad use in early childhood.

Technology integration in classroom settings is growing and changing each year. More and more teachers are finding themselves with a new device, feature, or program that they are expected to build into their daily curriculum. Not only are the teachers responsible to research and attend professional developments that suit their needs, but the administrative staff should make PD a top priority at the school. With the proper training, professional development, support, and feedback, technology integration will be successful even in children as young as preschool.

**Limitations**

 This research study was conducted within a short time period and is limited in the conclusions. Due to time constraints, I was only able to interview one teacher, conduct one small-scale focus group, and acquire seven survey responses. If time allowed, I would have expanded the research study by increasing the participants to include early childhood educators from other schools in the area and across the United States. The amount of research articles and peer reviewed journal articles I found about this topic are extensive and helped with my research study.

References

An, H., Wilder, H., & Lim, K. (2011). Preparing Elementary Pre-Service Teachers from a Non-Traditional Student Population to Teach with Technology. *Computers in the Schools*, *28*(2), 170-193.

This article is an examination of a curriculum for pre-service teachers that focuses on the need for a technology based learning environment. The goal was to do a research study that focused on a college’s education program and fully prepare those future teachers to integrate technology into the curriculum in order to meet the needs of their students. The two-stage curriculum consisted of a basic technology skills course followed by an online educational technology course. This article was helpful in examining the needs of teachers (or future teachers) when it comes to preparation and planning for a technology-rich curriculum and learning environment. It showed me the importance of making sure that each student (or fellow teacher) has the basic skills necessary to take on the new technologies in their classroom and feel confident and capable to utilize them to the best of their abilities. It is important to have a pre-professional development survey that helps the leader or planner to prepare a PD opportunity that is appropriate and adapted to meet the needs and learning styles of the teachers involved. Another major thing to take into consideration is the teachers’ attitudes and beliefs toward technology integration. Numerous researchers have found that the attitudes and beliefs of a teacher played a key role in the way they integrated technology into their classroom environment and curriculum.

AVG. (January, 11 2011) AVG Digital Skills Study. Retrieved April 22, 2013, from http://avg.typepad.com/files/avg-digitalskills-study-full-briefing.pdf.

Beavers, A. (2009). Teachers as Learners: Implications of Adult Education for Professional Development. *Journal of College Teaching & Learning*, *6*(7), 25-30.

 This article includes many suggestions for the planning and preparation of a successful and effective professional development. Most importantly, this article takes into consideration the characteristics of adult learners and how those affect how and what individuals learn. These article helped me focus on these characteristics and plan an effective PD program knowing that teachers a) are problem-solvers, b) utilize the support and resources from their colleagues, and c) have had experiences that may shape their learning and ideas. Research shows that having a PD based around a collaborative setting will allow teachers to share experiences, brainstorm ideas, and problem solve. This, in turn, will build a community of learners and an atmosphere of trust. This article has helped me to focus on the uniqueness of adult learners when planning PD programs. Adults learn differently than children do and it is important to keep that in mind at all times.

Big Shoulders Fund. (n.d.). Our Mission. In *Big Shoulder Fund: About Us*. Retrieved April 18, 2013, from <http://www.bigshouldersfund.org/content/index.asp?s=477&t=About-Us>.

Culatta, Richard. (2013). Andragogy: M Knowles. *Instructional Design Learning Theories.* Retrieved on April 21, 2013, from http://www.instructionaldesign.org/theories/andragogy.html.

Gaible, E. and Burns, M. (2005). Using Technology to Train Teachers: Appropriate Uses of ICT for Teacher Professional Development in Developing Countries. Washington, DC: infoDev /World Bank.

Garet, M., Porter, A., Desimone, L., Birman, B. & Yoon, K. (2001). What Makes Professional Development Effective? Results from a National Sample of Teachers. *American Educational Research Journal,* 38 (4), 915-945.

Geist, E. A. (2012). A Qualitative Examination of Two Year-Olds Interaction with Tablet Based Interactive Technology. *Journal of Instructional Psychology*, *39*(1), 26-35.

 This article is a study conducted as an examination of early childhood children interacting with touch screen devices. The children were given very little direct instruction about how to use the tablets, and yet, they were able to maneuver them with ease. This article also discusses many of the conflicting beliefs about technology integration in the classroom. Some view it as a “digital distraction” and many people feel as if technology should be kept to a minimum. Most articles that I have researched examine the benefits and positive impact that technology has on students. It was interesting to read other opinions and gain perspective on other points of view. In the end, this article makes a strong point to have an equal balance of “screen play” and “actual play.” As beneficial and important as technology is in a child’s life nowadays, it is important to remember that they have other needs to and need to experience life without using technology. When planning PD, it is important to take this into consideration and push for technology integration within the classroom setting, while at the same time promoting creative, active, and imaginary play in our young children.

Hanover Research. (April 2012). Effective Teacher Professional Development: What the Literature Says. Hanover Research. Retrieved April 19, 2013, from http://isminc.com/documents/research/general/Effective-Teacher-Professional-Development-What-the-Literature-Says-Hanover.pdf.

Harris, J. (2008). One Size Doesn't Fit All: Customizing Educational Technology Professional Development. *Learning And Leading With Technology*, 35(8), 22-25.

This article is part three of a large study that reviewed the range of educational technology professional development program goals and explained various educational technology professional development models. In part three, the author addresses how to combine goals and models to fit teachers’ characteristics. This article helps PD leaders plan professional development opportunities by offering tips and strategies when designing them. The author states that it is important to set goals for the PD and that these goals need to be based on the needs and preferences of those involved. Once these goals are set, the PD leader can match certain models to those goals. (The models are discussed in the second article of the series). This article helped me familiarize myself with my different PD models and how an effective PD is planned. It is easy to read and follow and gives a nice, brief recap of the twenty different PD models discussed in part two.

Hixon, E., & Buckenmeyer, J. (2009). Revisiting Technology Integration in Schools: Implications for Professional Development. *Computers In The Schools*, *26*(2), 130-146.

This article addresses the concern of underutilization of technology in schools. Many teachers are to blame for the lack of technology integration, and this article examines the real reasons behind this underutilization. It is interesting to read about the “real reasons” including resources, knowledge and skills, institution, attitudes and beliefs, and subject culture. All of these in some way can be changed, enhanced, or helped with the introduction of more professional development opportunities. This article also addresses the concerns of a “one-size-fits-all” PD model where individual needs and styles are not taken into consideration. Without this major factor, PDs are bound to be a failure. Effective technology PD must show how technology can fit into instruction, how it will impact learning, and offer long-term support that is consistent with teachers’ needs.

Keengwe, J., & Onchwari, G. (2009). Technology and Early Childhood Education: A Technology Integration Professional Development Model for Practicing Teachers. *Early Childhood Education Journal*, *37*(3), 209-218.

 This article describes a project involving early childhood educators and the introduction of various technology tools. The PD model used in this study was a standardized model that took place over an 8 week summer session. This PD was mainly a hands-on experience where the focus was on integrating technology into specific content covered in early childhood. When planning PD, it is important to focus the tasks and content on specific needs and interests of the teachers. The topics and tasks need to be geared towards the specific early childhood curriculum at the school in order for teachers to keep high-level interest in learning about how to integrate and incorporate new technologies into their specific curriculum. The “Strategies for Technology Integration” were extremely helpful for my research. I took the five ideas listed in the article and focused on them as a means to an effective PD program.

McCaughey, Sr. M. P., & Garstki, M. W. (2011). Technology Integration Plan 2011-2014. *Archdiocese of Chicago Office of Catholic Schools.* Retrieved April 10, 2013, from <http://ocs.archchicago.org/LinkClick.aspx?fileticket=ndJlVIE5vfY%3D&tabid=772>.

Muir, M. (2012). Professional Development for Auburn’s iPad Kindergarten Teachers. *Multiple Pathways Wordpress blog*. Retrieved May 11, 2013 from http://multiplepathways.wordpress.com/2012/02/21/professional-development-for-auburns-ipad-kindergarten-teachers/.

Oji, S. N. (1980). Adult Development is Implicit in Staff Development. *Journal of Staff*

*Development*, 1(2), 7-56.

Parnell, W., & Bartlett, J. (2012). iDocument: How Smartphones and Tablets Are Changing

Documentation in Preschool and Primary Classrooms. *Young Children*, *67*(3), 50-57.

This article examines the effectiveness of documenting early childhood students with a technological approach. The two authors worked together to investigate what technological documentation processes looked like and how these can interpret a child’s learning. This is an excellent article for teachers who have access to technology at their school and want to learn more about new tools and strategies to enhance their practice and their students’ learning. This article discusses the importance of documenting a child’s learning in the early childhood classroom. Once a teacher has this documentation, he or she can use it as a tool for reporting and understanding learning. One valuable tip for teachers within this article is to document the learning process, not only the product.

This article also includes two stories from real teachers that demonstrate the power of using technology in classroom practices: especially for documentation and evaluation. Reading the stories of Will and Jackie helped me gain a greater understanding of how technological documentation works in the early childhood classroom and showed me the many benefits of doing it. This article is very recent (May 2012) and the authors realize that much more research and studies need to be done surrounding this topic in order to corroborate the evidence shown in this study.

Potter, S. L., & Rockinson-Szapkiw, A. J. (2012). Technology Integration for Instructional

Improvement: The Impact of Professional Development. *Performance Improvement*,

*51*(2), 22-27.

This article focuses on one main reason that technology goes underutilized in classrooms: ineffectively developed professional development opportunities for teachers. After researching and examining constructivist learning theories and adult learning theories, the authors recommend and administrative-supported and mentor-supported approach to professional development. This article states that a one-day or several-hour lecture approach with no follow up is an extremely ineffective form of PD. In the past, Saint John Berchmans has used that model of PD and I can see why it is ineffective. Teachers leave after the PD day being more informed and knowledgeable about the topic discussed, but lack ways to integrate the new information into their learning environment. It is important for the administrative staff to be supportive and available when new technology is introduced. Feedback, mentoring, training sessions, etc. are all excellent approaches as an addition to PD programs that will help teachers effectively integrate technology into their curriculums.

Schanen, L.K. (2003). The Internet and the Early Childhood Classroom. *PBS Teachers*.

Retrieved April 22, 2013, from

http://www.pbs.org/teachers/earlychildhood/articles/internet.html.

Shifflet, R., Toledo, C., & Mattoon, C. (2012). Touch Tablet Surprises: A Preschool Teacher's

Story. *Young Children*, *67*(3), 36-41.

This article was written by three early childhood educators that shared an interest in integrating new technologies into the curriculum. It describes one of the authors’ preschool classrooms and how they are testing out their ideas of technology integration in a real-life setting. This article gave great insight into a preschool classroom and the four surprises that came with technology integration: a) cooperation, b) collaboration, c) digital citizenship, and d) connection to the real world. Of course, many individuals will argue that touch screens and tablets are not developmentally appropriate for young children, but it does have many benefits that are often overlooked. This article helped me to focus on the ideal balance of technology and traditional teaching approaches. Being selective and intentional in the use of technology can enhance early childhood education.

Trotter, Y. (2006). Adult Learning Theories: Impacting Professional Development Programs.

*Delta Kappa Gamma Bulletin*, 72 (2), 8-13.

**Appendix**

**Appendix A**

**Tablet Integration and Professional Development Online Survey**

The purpose of this survey is to collect perceptions of tablet use, integration, and support within your school. This survey should take no more than 10 minutes to fill out. Thank you in advance for your participation in this survey.

Megan Tennant

**Questions**

1. What is the name of the school where you currently work?
2. How many years have you taught at this school?
3. Less than one year
4. 1-2 years
5. 3-5 years
6. 6-10 years
7. 11-15 years
8. More than 15 years
9. How many years has your school had tablets in the early childhood (preschool) program?
10. None
11. Less than one year
12. 1 year
13. 2 years
14. What is the ratio of students to tablets within the preschool classroom? (ex: 21 students to 1 tablet; 10 students to 1 tablet; 1 student to 1 tablet, etc)
15. How often do you use tablets in your early childhood (preschool) classroom?
16. Never
17. Once per week
18. 3 times per week
19. Daily
20. Please provide a brief description on how you intend to or how you currently integrate your tablet(s) into the curriculum.
21. I currently use the tablet(s) in preschool as much as I would like.
22. Strongly disagree
23. Disagree
24. Neither agree nor disagree
25. Agree
26. Strongly agree
27. What are your thoughts about using tablets in preschool?
28. Specific to the type of tablet your school uses, please check any of the following that apply: I feel confident in my ability to:
29. operate a tablet
30. use terminology related to technology appropriately in written and oral communication
31. describe and implement basic troubleshooting techniques for tablets
32. research applications for tablets
33. download applications for tablets
34. Would you prefer to have more tablets within the early childhood (preschool) program at your school?
35. Yes
36. No
37. If you answered “No” to the previous question, please explain why.
38. When your school first received/purchased tablets for student use, did you have prior experience with them?
39. Yes
40. No
41. Did your school offer initial tablet training (basics of the tablet)?
42. Yes
43. No
44. If you answered “No” to the previous question, choose the reason(s) as to why your school did not offer initial tablet training. (Check all that apply)
45. Lack of funds/budget to have a professional development workshop
46. Didn’t think there was a need for professional development
47. No technology specialist at the school to plan and prepare professional development
48. Unsure
49. Other
50. Did your school offer any professional developments for integrating the tablet into the curriculum?
51. If you answered “No” to the previous question, choose the reason(s) as to why your school did not offer any professional developments for integrating the tablet into the curriculum. (Check all that apply).
52. Lack of funds/budget to have a professional development workshop
53. Didn’t think there was a need for professional development
54. No technology specialist at the school to plan and prepare professional development
55. Unsure
56. Other
57. What do you consider to be a barrier to technology integration at your school? (Check all that apply)
58. lack of resources
59. lack of available technology
60. lack of knowledge or skills of technology
61. attitudes and beliefs about technology integration
62. lack of time
63. lack of technology support and guidance
64. lack of professional development opportunities geared towards technology integration
65. Other
66. Which type of professional development model have you experienced or been a part of before? (Check all that apply)
67. Individualized/self-direct (ex: researching PD opportunities on your own, registering, and traveling to the locations)
68. Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day)
69. Standardized (ex: a one time workshop or training session; usually off site)
70. Which type of professional development model do you prefer?
71. Individualized/self-direct (ex: researching PD opportunities on your own, registering, and traveling to the locations)
72. Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day)
73. Standardized (ex: a one time workshop or training session; usually off site)
74. Could you explain in a short paragraph why you prefer that professional development model over others?
75. Would you like to partake in more professional development opportunities that promote the integration of tablets into the early childhood curriculum?
76. Yes
77. No
78. If you answered “No” to the previous question, please explain why.
79. As of today, rate the degree of success your school has had in the following: (not successful, moderately successful, very successful)
80. Providing/hosting tablet-focused professional developments at your school
81. Informing you of tablet-focused professional development workshops or sessions off-site (not at your school)
82. Informing you of where to look for and research professional development opportunities
83. Please list any comments or suggestions that you may have to better enhance technology integration (specifically tablets) at your school.

Thank you for taking the time to complete this survey!

**Appendix B**

**Interview Questions for Preschool Teacher**

1. How long have you taught preschool at Saint John Berchmans?

Two and a half years.

1. How did you feel when you found out you would be receiving one iPad for your classroom use?

I was really excited because I didn’t have any other technology in the classroom besides a computer.

1. Did you have prior experience with iPads before receiving the one for your classroom?

No

1. Did your school offer any basic training professional developments for the iPad? (besides the PD session that I led for my graduate school class).

No

1. Would you have benefitted from more iPad basic training PD sessions?

Yes

1. Do you believe that teacher training has a direct effect on technology integration in the classroom? Please explain.

Yes. In my own experience, I don’t use something in the classroom until I am comfortable with it. I didn’t use the iPad in class until I taught myself how to use it. If teachers aren’t trained, they tend not to use something, or to use it incorrectly, which does not benefit the students.

1. Did your school offer any professional development opportunities that focused on integrating the iPad into the preschool curriculum?

My school asked my co-teacher and I to lead a basic PD about how to use the iPad. I didn’t have any experience with the iPad before but was expected to teach others.

1. Would you have benefitted from more iPad integration PD sessions?

Yes. It would have been helpful to not have to do all the research about useful apps by myself. Also, it would be helpful to learn ways to integrate the new technology into the classroom instead of figuring out how it works with trial and error.

1. (*If there is a lack of PD*) What do you think are the main reasons behind the lack of PD at Saint John Berchmans?

I don’t think anyone is committed to finding PD that will suit everyone’s needs. Preschool never has anything productive to do on PD days set aside by the school.

1. What type of PD do you prefer? And why do you prefer it? (*Explain all three models used for the purpose of this research*).

I prefer self-directed PD, mainly because I am not offered anything else. I find that if I research PD myself, I can focus on what I think will most benefit me, and what I need help with as a teacher.

1. What do you think makes professional development effective?

I think PD is most effective when real life examples are used and there are hands on activities to practice whatever skills are being presented. If I can apply what I am learning right away, I am more likely to bring it into my classroom the next day.

1. Can you describe how you currently use the iPad in the preschool classroom?

Right now I use the iPad in the classroom for child directed play and assessment. During center time, my students are allowed to play different games on the iPad that I have purchased. Sometimes I watch them play specific games and use what I see for assessment. I have also created some PDFs with different skills for the students to practice so I can assess them.

1. How have the preschool students responded to iPad(s) in the classroom?

They love the iPad! Assessment is much easier because they want to see the new games or activities I put on the iPad for them. Some of them would play on the iPad all day if it was an option.

1. How do you believe the iPad integration could be better managed? Or what plans does your school have to improve the iPad integration and how it is used in the future?

I think everyone needs basic training on the iPad and should get some apps already loaded on the iPad. It is a wonderful piece of technology, but just like other things, we need money to buy apps so the iPad will be useful. My school’s current plan is to have the classes who received an iPad take a survey on how it is used in the classroom. I think the plan is to see if everyone will benefit from one or more iPads in the classroom.

1. Do you implement any other technology in your classroom?

Occasionally I play a movie on the computer or let my students play a game on the computer.

**Appendix C**

**Focus Group Consent Form**

**Consent to Participate in Focus Group Study** **for Professional Development Models at Saint John Berchmans.**

The purpose of the group discussion and the nature of the questions have been explained to me.

I consent to take part in a focus group about the professional development opportunities at my school, various PD models, and PD sessions that I have attended in the past. I also consent to be tape-recorded during this focus group discussion.

My participation is voluntary. I understand that I am free to leave the group at any time.

The information that I provide during the focus group will be grouped with answers from other people so that I cannot be identified.

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Please Print Your Name Date

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Please Sign Your Name

**Focus Group Questions**

Facilitator: *Welcome! Thanks for agreeing to be a part of this very important focus group. I appreciate your willingness to participate and look forward to sharing my findings with you.*

*The purpose of this focus group is to discuss three separate professional development models and compare them to each other. I want to hear about people’s experiences with all three and hopefully we can decide which one is most effective for the early childhood program at Saint John Berchmans. Later on in the focus group, I will propose a specific professional development model to see what our thoughts are regarding that type of approach. In the end, I plan on using the information and data gathered in this focus group and my other research to help Peggy Roket (principal) plan more effective PD opportunities for the preschool teachers. I need your input and want you to share your honest and open thoughts with the group.*

*I have a list of ten questions that will guide us through the focus group, but feel free to expand upon them if necessary. Let us begin.*

1. Approximately how many professional developments have you attended (online, at SJB, or at a different location) this school year?
2. How many of those were planned/set up by the administration at SJB?
3. How do you feel about the amount of PD at SJB or the amount of PD the administrative staff informs us of?
4. For my research study, I am focusing on three models of professional development:
	1. Individualized/self-direct (ex: researching PD opportunities on your own, registering, and traveling to the locations)
	2. Site-based/school-centered (ex: takes place at your school after the school day or on a staff development day)
	3. Standardized (ex: a one time workshop or training session; usually off site)

Which of these do you prefer and why?

1. What is the main reason you would want more PD opportunities offered at SJB or information about off-site PD?
2. What are everyone’s thoughts, attitudes, and beliefs about iPads in early childhood?
3. Does anyone feel highly confident in using the iPad (or another tablet) for daily use in the preschool classroom?
4. What can our school do to improve how we use the iPads in the preschool classroom?
5. Would you like to see support, guidance, and feedback from the administrative staff?
6. Any other comments, suggestions, etc?

Proposed Professional Development Model

* Site-based/school-centered
* Hands-on/active learning
* Start with 4 goals
	+ Link iPads to learning
	+ Problem solve technology-related issues
	+ Discuss best practices
	+ Discuss and review apps
* Achieving those goals
	+ Modeling:
		- Visit classrooms that are incorporating the iPad into lessons and the daily curriculum.
		- Have a teacher model a lesson or best practice in a PD session.
	+ Provide opportunities for educators at school to connect and communicate with other educators using the iPad in their classroom. Network through Skype, Twitter, blogs, conferences, webinars, etc. Build a diverse professional learning network.
	+ Constructivist approach: have teachers start by exploring apps (on a limited budget, but could download as many free apps they wanted). Then, the teachers make app recommendations. Could also give teachers two apps and have them decide which one is better to get them thinking about criteria for app selection (could be developed into a rubric). Finally, correlate apps into the preschool curriculum/standards.
	+ Continuous improvement focus: teacher completed surveys on a regular basis (provide data on what the teachers need right now). Plan PD sessions based on teachers’ needs.
	+ Imbedded support: Technology specialist? Someone to go to for guidance, troubleshooting, questioning, etc.
	+ Time: PD days, after-school opportunities/meetings, couple of days in the summer before school starts

Information gathered by: http://multiplepathways.wordpress.com/2012/02/21/professional-development-for-auburns-ipad-kindergarten-teachers/

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| --- |
| *Focus Group Code:*  |
| Preschool Teacher 1 (AB): PK1  |
| Preschool Teacher 2 (JP): PK2  |
| Preschool Teacher 3 (ES): PK3  |
| Preschool Teacher 4 (CO): PK4  |
| Preschool Teacher 5 (LF): PK5  |
| Preschool Teacher 6 (SM): PK6  |
| Preschool Teacher 7 (MS): PK7  |

|  |  |
| --- | --- |
| **Code:**  | **Response:**  |
| **Question 1: Approximately how many professional developments have you attended (online, at SJB, or at a different location) this school year?**  |
| PK1 | I've only attended two, because I took over for \*\*\*\*\*, who left for maternity leave. |
| PK2 | I'm not 100% sure, because I do a lot of professional development on my own, but I would say approximately 25. |
| PK3 | I have attended three that I can remember, maybe four. |
| PK4 | I also do a lot outside of school and on my own time. I would say I have been to about 20. |
| PK5 | I would say about 5. |
| PK6 | I can only remember the ones that took place at St John Berchmans and the Handwriting Without Tears workshop, so maybe 4. |
| PK7 | I have been to about 10, mostly researched and registered by myself. |
|  |  |
| **Question 2: (Referring to Question 1 above) How many of those were planned/set up by the administration at SJB?** |
| PK1 | 1 you set up for us, and the other one I went to on my own. Since I am a permanent substitute, I am not required to go to the ones at SJB. |
| PK2 | Out of the 25 PDs, I would say maybe 3 were set up by SJB, and only 1 was worthwhile. |
| PK3 | Half of the ones I have attended. |
| PK4 | I'm with (PK2), 3 were set up by SJB. |
| PK5 | 3 |
| PK6 | I can only remember 1 being at SJB.  |
| PK7 | 3 were set up by SJB. |
|  |  |
|  |  |
| **Question 3: How do you feel about the amount of PD at SJB or the amount of PD the administrative staff informs us of?** |
| PK1 | Since I have only been here a few months, I am not really sure how well SJB handles PDs. I haven't had enough experience at the school to gauge this properly. |
| PK2 | I am really disappointed with not only the amount of PD, but also the amount of PD that takes place at school on specific staff development days. But also informing us of PD opportunities happening around us. |
| PK3 | I have been here for a number of years, and the school has never had a really good showing of professional development.  |
| PK4 | Since this is my first year teaching at SJB, I really expected a lot out of the administrative staff. I too have been pretty disappointed with the PD, but I do feel like I can do my research and find PDs that suit my needs on my own.  |
| PK5 | Since it is also my first year, I haven't experienced a lot of PD and I don't have a lot to compare this school to. But, I do feel that they need to inform us more of PDs, and make better use of the staff development days we have here at school. They kind of seem to push pre-K PD to the side. I also feel that I could be doing a better job researching and going to PDs on my own.  |
| PK6 | I have also been here for quite a number of years and never experienced really good professional development. Now, with the integration of new technologies, such as the promethean board and iPads, I think that we need PD opportunities more than ever.  |
| PK7 | I wish our school took professional development more seriously. They really need to make those staff development days worthwhile for Pre-K teachers |
|  |  |
| **Question 4: Which of the models of PD do you prefer, and why? (Individualized, Site-based, Standardized)** |
| PK1 | Site-based. I like when all of us are on the same page and receiving similar information. Then, we could meet on our own terms to discuss how we will use it or how it will benefit the early childhood classroom. Also, it is a lot more convenient for me to just stay after school then it is to drive somewhere else.  |
| PK2 | I prefer individualized for now, but if our school offered better PD, I would enjoy site-based as well. In our current situation, I feel better about researching on my own and choosing the PD that would benefit me the most. Right now, I am going to many iPad PD sessions on my own because I want to learn new ways to integrate them into the curriculum in preschool. I think these PDs are very worthwhile and more teachers should come with me!  |
| PK3 | I prefer site-based because I don't have to leave my school.  |
| PK4 | I actually prefer standardized because I like getting out of SJB for a bit. I like seeing other schools or hearing what other people have to say about certain topics. It gives me different points of view and I can bring back what I learned to SJB and teach those that want to learn about the specific topic. I think that if PD were to be offered more at SJB, it would have to take place on staff development days because I don't want to stay late if it is unnecessary.  |
| PK5 | Site-based because I think it is beneficial to have PDs that are specifically geared towards our school. We can ask questions and get information about topics that are important to the early childhood program at SJB specifically.  |
| PK6 | I prefer site-based like many of the other teachers here. I prefer it mainly because of the convenience factor. My husband drops me off and picks me up from work so it would be very helpful to have it here at SJB.  |
| PK7 | I like many others prefer site-based because I like when PD is centered around the needs of our school.  |
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| **Question 5: What is the main reason you would want more PD opportunities offered at SJB or information about off-site PD?**  |
| PK1 | Again, since I'm a sub and probably won't be here next year, I don't care too much, but I think more PD would be very helpful for the teachers that are staying.  |
| PK2 | Since we started this new iPad pilot program, PD would have been very helpful. We started with the iPads in January not even knowing much about tablets at all. Some of us (like myself) have never even held an iPad before. I am really proud with how much I have taught myself about the iPad and how much standardized PD works, but I would love to have the convenience of PD at my own school. If we get more iPads for the preschools next year, we better get some PD about ways to integrate them into our curriculum or at least give us resources and app lists. Also, I really want more CPDU hours.  |
| PK3 | I am an older teacher and don't handle technology as well as the younger ones, so PD would be very helpful in that regard. |
| PK4 | This conversation is great, but just shows me how much we all want more technology PD at our school, but we aren't getting it. I know we have all complained about the lack of PD but the administration doesn’t seem to care. How are we supposed to properly integrate iPads and use Promethean boards if we don't even have basic skills? I wish some of the administrative staff were here.  |
| PK5 | I would really prefer more PD at this school and I could also use the CPDU hours. I think I got like three hours this year and that is just not cutting it.  |
| PK6 | I think our staff development days need to be better planned out (especially for preschool).  |
| PK7 | I'm with (PK4) on this one. Our school is pretty much wasting our time with staff development days and don't do anything to help us find PD opportunities elsewhere. Yeah we get emails every once in a while, but usually the PD is going to happen the next day and it is too late to register. Our school really needs to get more organized. We need someone in charge of just PD.  |
|  |  |
| **Question 6: What are everyone’s thoughts, attitudes, and beliefs about iPads in early childhood?** |
| PK1 | I think the iPads have been a great addition to prek. I think the pilot is going well and hopefully next year, SJB will get more for each class. |
| PK2 | I love having iPads in preschool (even though we only have four at the moment). I think the parents like them too and they are a good selling point for SJB. Right now, we are definitely not using them to their fullest potential, but maybe with a new PD plan in place next year, we will be on the right track.  |
| PK3 | I think the kids love the iPads and that is all that matters. If they have fun and can learn something at the same time, it is good for me! |
| PK4 | I am a big proponent of technology in early childhood. I never pictured myself being a preschool teacher, but now that I am, I love how the kids interact with technology at such a young age. Sometimes I think they know how to play and maneuver with an iPad better than I can.  |
| PK5 | The iPads are a great addition to early childhood and I would love to see or learn about how other early childhood programs utilize the iPads. Maybe we should have a professional development next year that allows us to hear from other preschool teachers in the surrounding areas that are currently using iPads.  |
| PK6 | The kids like the iPads, but I am still not confident in my ability to teach with them. Right now they are mainly used for play.  |
| PK7 | I think the iPads are great, but we could use more in the classroom.  |
|  |  |
| **Question 7: Does anyone feel highly confident in using the iPad (or another tablet) for daily use in the preschool classroom?**  |
| PK1 | Not highly confident, but I know how to work one.  |
| PK2 | Not at all highly confident. I feel like I have to teach myself everything first before I let the kids use them. I would really love to teach my kids by using the iPads throughout our curriculum and not just for play.  |
| PK3 | I am a new learner and I am a slow learner at that. Not too confident.  |
| PK4 | I could really use more professional development before I could say that I am confident in using the iPad to enrich and enhance the students' learning in my class.  |
| PK5 | This is all new to me so I am definitely not confident yet.  |
| PK6 | Just like (PK3) I am a pretty slow learner, but I am willing to learn if SJB takes the time and effort to offer us the proper training.  |
| PK7 | I am pretty confident using the iPad for my own personal use, but to teach kids with it, I feel like I am lacking.  |
|  |  |
| **Question 8: What can our school do to improve how we use the iPads in the preschool classroom?** |
| PK1 | The obvious answer would be more professional development.  |
| PK2 | I agree, professional development is key. Also, I feel that our school needs to take technology more seriously and offer support when we need it.  |
| PK3 | I think we should get more iPads in each preschool class and more money for apps.  |
| PK4 | Definitely need more iPads (but don't get me wrong, I'm more than happy with the 4 that we have). More training and PD opportunities as well.  |
| PK5 | Just having more information about certain apps, and ways to integrate the iPad into the curriculum.  |
| PK6 | I think we need more support from the administrative staff, and they need to make an effort to make our staff development days worthwhile. |
| PK7 | More iPads, more money for apps, more professional development.  |
|  |  |
| **Question 9: Would you like to see support, guidance, and feedback from the administrative staff?**  |
| PK1 | Yes |
| PK2 | Yes, just knowing that we have someone that we could go to with questions and concerns would be helpful.  |
| PK3 | Yes, any support would be greatly appreciated.  |
| PK4 | Yeah, I don't feel like we get any support from the administrative staff and they don't know what we are doing in the classrooms with our iPad. Maybe if they knew how much we needed the support and feedback they would make an effort to do so.  |
| PK5 | Yes. |
| PK6 | Yes, but I don't know if we will ever get it.  |
| PK7 | Yes that would be helpful.  |
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| **Question 10: Any other comments, suggestions, etc?**  |
| PK1 | We should have an additional meeting or focus group with \*\*\*\*\* (the principal) and any other administrative staff that we feel necessary so that they can hear our concerns and hopefully they can provide us with what we need.  |
| PK2 | I like the idea of meeting with the administrative staff, especially \*\*\*\*\* (the principal) because she needs to know what our needs are as a group. Sure, we can go to her in person, but she hasn't done much up to this point. We need more staff development, resources, and information that will be valuable to us.  |
| PK3 | Maybe we could meet on a bi-weekly basis as an early childhood group to discuss some of our own findings about integrating the iPad into the curriculum. I think it would be great if the school helped us out more, but I don't see that happening in the near future. We need support and guidance now, so maybe we should be our own support system.  |
| PK4 | I would love to share what I learn at the workshops and PDs I attend after school or on the weekends. Some of the things are really valuable. I will try to be better at sharing my own research and looking for worthwhile PDs.  |
| PK5 | I would love to have more PD at school. If the administrative staff is not going to help out, maybe we could do our own research and get some things set up for next year. I know this is more work for us, but it will benefit us in the end.  |
| PK6 | I don't really want to spend time researching staff development days when I feel like it is the administrative staffs’ job to provide us with valuable speakers, workshops, training sessions, etc. I think we just need to voice our concerns louder.  |
| PK7 | I'm optimistic about PD next year because I think the administration knows just how bad our staff days are.  |
|  |  |
| **Feedback from Proposed Professional Development Model** |
| PK1 | I really like the hands-on approach to workshops. Sitting through a lecture or PowerPoint is not helpful to me, but actually doing something keeps my mind interested and me motivated. I think this is definitely something that should be tried next fall.  |
| PK2 | I would totally be up for something like this. I like how we would start with goals and make sure we accomplish them by the end of the PD session. Currently, I feel like we never accomplish anything because we have no set goals in mind. If we come to the PD with goals, we will be more motivated to get things done. I think modeling is awesome. I would love to visit other schools, Skype with other teachers, or have guest speakers come in to talk about how they integrate the iPad into their curriculum. I would also be interested in visiting each other's classroom to see how each of us are using the iPad. Then, we can come together and give feedback and critique one another.  |
| PK3 | I think it would be helpful to see what other teachers in other schools are doing with the iPad in preschool, especially the schools that have a limited number of them. I also like the idea of planning PD based on our needs.  |
| PK4 | Of course, I am not a fan of staying after school too late, but I think that this would be worthwhile and very valuable. I love the idea of Skyping or having guest speakers come to talk about their iPad use. I also think the idea of researching apps and comparing apps would be helpful. We could make it fun and pair up to help one another out.  |
| PK5 | First of all, I love that it takes place at school. Even if I have to stay after one day or maybe we could have this on a staff development day, it would be worth it. Second of all, I love the hands-on approach. I am definitely a hands-on learner and this would benefit me a lot. I also like the idea of visiting other classrooms using the iPads (whether it be in our school, via Skype, or at another school). I love to get ideas from people that have experience with things.  |
| PK6 | I like the idea as well of having two apps and deciding which one is better for the classroom. This is a really big hands-on approach and allows us to become familiar with the apps before sharing them without students. I also like the idea of goal setting because I like getting things done and here at SJB I feel like we never get things accomplished like (PK2) said.  |
| PK7 | I would love to visit other classrooms (whether they be in SJB or outside), or Skype with other educators, or have other educators visit our school. I'm totally open to those ideas. Also, love the hands-on approach! I don't want to be bored by a PowerPoint presentation anymore.  |