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Impact of Purposeful Professional Learning on Instructional Technology Integration in Daily Classroom Practices

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IMPACT OF PURPOSEFUL PROFESSIONAL LEARNING ON INSTRUCTIONAL TECHNOLOGY INTEGRATION IN DAILY CLASSROOM PRACTICES

by:

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ABSTRACT

The Innovative Teacher Technology Project (ITTP) was designed and created to address the common misconception that teachers should be able to pull technology, both hardware and software, out of the box and begin appropriate integration with teaching and learning. ITTP was developed within a school system that continues to deal with the aftereffects of a nationwide recession and ongoing funding cuts from local, state and federal sources. While ITTP appeared to be working well, it had yet to be determined if the purposeful professional learning that occurred had an impact on the integration of instructional technology in daily classroom practices. This evaluation of the Jenkins County School System's ITTP program used Stufflebeam's (2017) CIPP Model for program evaluation. Both formative and summative artifacts were collected and analyzed to reveal individual outcomes from data sets including: focus groups, interviews, teacher leader documents, program expenditures, and professional learning documents and expenditures. Outcomes from each program strategy were identified and combined into overall program outcomes that demonstrated that the ITTP program had become institutionalized in various stages of sustainability. The researcher also identified two major concerns revealed during the study and provided recommendations for future implementation.

KEYWORDS: Instructional Technology, Purposeful Professional Learning, CIPP Evaluation

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INTRODUCTION

Millen, a small town in Jenkins County, Georgia, is a place where neighbors treat each other's children like their own and food shows up as soon as someone in the family dies--often before the death certificate is signed. These images are part of the fabric of a small community. However, other images have chipped away at this idyllic small-town life in Millen. These darker scenes begin with the quiet stillness that once was a thriving industrial park. They continue with the emptiness of what used to be a bustling downtown area and invade the mind as a steady stream of houses are being foreclosed on and businesses are left to rot.

Like most places in America during these recessional years, Millen suffered. The difference, according to Jenkins County development leaders, is that Millen suffered longer than the rest of the country because the economic downturn that started on a national scale in 2008, began in Millen two years earlier when its largest industry closed its doors. Within three years, every industrial job in the county was *gone*. Jenkins County, once a thriving community in the 1960s and 1970s, failed to keep up with current economic trends and Millen, the county seat, was left to become a modern ghost town.

Losing everything not only impacted community economics, it brought major financial woes to the local school system as well. Along with state and federal funding cuts, the local tax base all but dried up causing many years of financial hardships and continued cuts. Professional learning for instructional staff was a line item to be eliminated early from an ever-tightening budget. The second area to suffer was funding for evidence-based instructional practices. With two of the most important school improvement components being cut out of the budget, teaching quality and academic achievement suffered. This contributed to the overall decline of student

achievement, school climate, and staff morale. Creativity was stifled during this time and the system's schools were operating in a reactive mode instead of responding proactively to these challenges. Within a few years, it was evident that something had to be done.

Shortly thereafter, a new group of system leaders came on board and began meeting collaboratively to review data and discuss how to reverse the downhill trend the educational system was experiencing. This group of leaders looked at current evidence-based best practices to determine how best to move the system toward improving student learning. Several strategies were already being implemented but it was found that many of their processes and procedures could be improved to increase validity and consistency of implementation. Some of the already existing best practices that were improved included tutoring, in-school remediation, inquiry based learning instruction, peer and small group instructional models, and training for teachers and administrators on formative instructional practices.

A best practice that became a priority during these discussions was the implementation of a system-wide instructional technology plan. JCSS had never implemented an instructional technology strategy as a structured program. Moving the system into the 21st century and implementing the system's new mission of *Educating All Students for College and Careers* became a full-time focus for all instructional staff. Siko and Hess (2014) discovered that designing a professional learning program that depended heavily on fiscal resources might show great promise and yield positive results; however, it would not have long-term positive benefits if it could not be sustained and would be terminated when funding is lost.

Integrating instructional technology into daily classroom practices would become the vehicle for the bulk of this system-wide movement of instructional improvement, but the question remained of how to get there. How could a small, rural, poor system with no additional

funds begin to build an integrated instructional technology program and what was the one thing that would ensure it would work? After reading research and talking with leaders from other counties, system leaders decided that one of the key elements missing in the implementation of most instructional technology programs was the initial and ongoing professional learning needed to help instructional staff become comfortable enough with technology to use it in their classrooms. This led to the leaders of the Jenkins County School System deciding that a program designed to implement purposeful professional learning would became the cornerstone for developing an instructional technology program that enhanced instructional pedagogy, increased curriculum rigor, and increased student engagement. While anecdotally it seems to have been successful, to date no formal assessment has been conducted to confirm or deny the success of the Innovative Teacher Technology Project (ITTP).

Although there were perceived elements of success with ITTP, a formal evaluation was needed to identify specific areas of success and/or areas in need of improvement. Therefore, the purpose of this evaluation was to determine the impact of purposeful professional learning on instructional technology integration in daily classroom practices within a small, rural school district in southeast Georgia.

The CIPP evaluation model was used to determine if the Jenkins County School System effectively implemented the purposeful professional learning required to prepare teachers to integrate instructional technology. This program evaluation of the ITTP program will benefit the Jenkins County School System in showing whether the fiscal and human resources garnered positive outcomes.

Evaluation Topic

For the instructional staff in Jenkins County, as well as in other school systems, the time had arrived for educators to become equipped to effectively utilize the power of instructional technology in daily classroom practices. In 1996, Rushkoff coined the term *screenagers* and provided an accurate description of today's technology-raised generation of young people. Later in 2001, Prensky used the term *digital natives* to describe these millennials as students for whom learning is *playing* and knowledge is gained from multi-tasking with various types of technology. In a later study, Rushkoff (2006) accessed how educators are faced with embracing this reality and harnessing its power for their own purposes.

Kirschner and Van Merrienboer (2013) argued that students are not the best managers of their learning in the digital world and without formal instruction they flutter around the Internet but never dive deeply into meaningful higher order skill development. Educators should be the guide for students as they learn to navigate the world-wide-web and discern *fake news* from relevant research and quality journalism.

School improvement efforts to increase student learning should contain strategies that include the integration of instructional technology. The research of Moeller and Reitzes (2011) concluded that technology can support student-centered learning as a key practice in student individualized assessments, project-based learning, and flexible instruction. Therefore, it was vital that school administrators and staff understand the importance of learning how to integrate technology to positively impact student learning. In 2014, Levin and Schrum studied how leaders in secondary schools leveraged technology to promote school improvement, to increase school success, and to reenergize teachers. Findings revealed that for school improvement efforts to be successful, these issues must be addressed simultaneously with professional learning for

teachers, technology planning and support, vision and leadership, structured curriculum and instructional practices, school culture, funding, and partnerships. These school improvement components must work together for continuous school improvement to be sustained. Determining if purposeful professional learning focused on integrating instructional technology into daily classroom practices was the topic of this study because it was relevant to the need for increasing the rigor of instruction and improving ways to engage students in learning.

The Jenkins County School System's implementation of the ITTP program recognized the importance of an effective instructional technology integration program as a best practice for school improvement. ITTP was developed with four specific strategies designed to guide initial development and ongoing implementation: transformational leadership, purposeful professional learning, provision of needed resources, and commitment to program sustainability. The organizational foundation of the ITTP program recognized professional learning as the foundation on which to structure the implementation of this important school improvement strategy. Deciding to implement a program based on four strategies with the potential to change the culture of the entire school system was a very proactive initiative that needed to be evaluated in order to assist in sustainability and continued resource support.

Evaluation Problem

One of the most important school improvement challenges is moving classroom instructional practices toward rich environments where teachers and students utilize instructional technology naturally and effortlessly. As early as 2006, Pitler suggested that teachers understand the need to learn how to use technology once they realize how the integration of technology connects with student learning, and many early researchers in this area, such as Potter (2012), Mize and Gibbons (2000), and Page (2002), began focusing on how technology integration

might impact teacher and student use. Most agreed that professional learning should emphasize purposeful training in instructional technology integration, pedagogy, and content strategy that goes beyond the novice technology level (Kim, Kim, Lee, Spector, & DeMeester, 2013). However, there are missing links between current literature and procedures for how professional learning, that is focused on instructional technology integration, can be effectively integrated into classroom practices; the key word being *effectively*. This missing link prompted the need to study the impact of purposeful professional learning on instructional technology integration in daily classroom practices.

Within current research, it is unclear if professional learning about classroom technology integration will work across grade levels, within content areas, and across school administrations. Some teachers are enthusiastic about the idea of using technology, but it is unknown how many are willing to put in the hours, days, and weeks needed to become effortlessly efficient in the use of instructional technology within their classrooms. As Edison (1903) has often been quoted, "Genius is one per cent inspiration, ninety-nine per cent perspiration"; similarly, teachers must be willing to roll up their sleeves and accept the challenge because creating change involves a great deal of motivation, a lot of inspiration, and plenty of perspiration.

Avolio, Walumbwa, and Weber (2009) contended that authentic leadership has four components: balanced processing, internalized moral perspective, relational transparency, and self-awareness. Balanced processing is being able to analyze relevant data objectively before making any decisions; Internalized moral perspective is being guided by an intrinsic set of moral standards that guides a leader's decisions; Relational transparency is presenting one's true self by sharing information and feelings that are appropriate for individual situations; and Self-

awareness is understanding one's own strengths, weaknesses, and status within their environment. Teachers and leaders who are willing to "roll up their sleeves" and implement organizational change have internalized moral perspective and learned to embrace their own self-awareness. When the Jenkins County School System began ITTP, teachers were asked to volunteer, to step out in faith that this initiative would be worth their while and trouble. The school system displayed relational transparency by presenting a true picture of the expectations awaiting teachers with enough internalize moral perspective and self-awareness to venture into the unknown world of instructional technology that was within this school system at that time.

Change progress within a school or system also strongly depends heavily on the leadership. Burlington (2013) described how one of the foremost experts in organizational change, Jim Collins, re-learned this concept when he accepted the opportunity to teach leadership seminars at the U.S. Military Academy at West Point in 2012. Collins became convinced that all major problems are ultimately leadership problems and that all organizational problems require superb leadership in order to be solved. When ITTP was introduced as a school improvement strategy, it was integrated as a main tenant of the federal programs and school improvement departments so consistent leadership would be available throughout the development and implementation of this new system-wide program.

As odd as it may seem, the longevity of change motivation can be hampered by the most enthusiastic proponents of the change process. Being sensitive to the change process includes being aware of barriers such as the implementation dip which appears in almost every type of long-term change process. When the inevitable stalemate occurs, an effective leader will call upon his/her skills to engage in the four positive leadership styles suggested in Goleman's landmark work (2000)

- The authoritative leader will remind his/her people about their common vision and reenergize them to move forward
- The affiliative leader will build teamwork among the members and remind them of their importance in the organization
- The democratic leader will work with the organization's membership and come to a consensus regarding how and why the change efforts must continue; and,
- The coaching leader will continue to model the organizational behavior that is needed and encourage members to *try* the new strategies, processes, and procedures.

During the development of ITTP, the system adopted a transformational leadership strategy that called upon all four of Goleman's (2000) leadership styles. Acting as authoritative and affiliate leaders within the system, central office personnel have continuously reminded members of the leadership change team about the shared vision of the system work and supported the continued involvement of teachers and leaders working together as the change team. Within the Jenkins County School System (JCSS), this was done by forming a System Improvement professional learning community (PLC), conducting a book study on Kotter's (2002) eight steps, and sending school administrators and teacher leaders to the DuFour and Eaker PLC conference. As democratic and coaching leaders, the JCSS Superintendent and system Program Directors modeled the organizational behavior and supported stakeholders as they implemented newly implemented strategies and procedures.

Adopting a transformational leadership strategy also provided JCSS the framework for moving organizational change from one person to an entire team of school and system leaders. As an offspring of the work of the System Improvement Team, the ITTP program was developed and implemented. Recruiting, training, and utilizing teacher leaders to facilitate meetings and

redeliver training to school staff, facilitating professional learning and the integration of instructional technology. During the last four years of program implementation, system, school, and teacher leaders have embraced Goleman's four leadership styles.

Audience / Stakeholders

The audience for this study was the stakeholders most impacted by the outcomes presented through this program evaluation. They were members of the JCSS Board of Education, the superintendent, school administrators, instructional staff, system program directors, and P-12 students and their families. The stakeholders impacted most by this study were 1,150 students in P-12th grades within two schools: Jenkins County Elementary School (P-5th grades) and Jenkins County Middle-High School (grades 6th-12th). Demographics of the student population included the following: Black (604); White (435); 66 Hispanic; 39 Multi-Racial; 5 Asian / Pacific Islander; 1 American Indian / Alaskan Native, as well as males (585) and females (565). As of May 2017, enrollment included: 328 students in P-2nd grades; 281 in 3rd-5th grades; 233 in 6th-8th grades; and 308 in 9th-12th grades.

Key stakeholders included the instructional staff from both schools totaling 125 teachers and para professionals. This group included teachers and para professionals with a wide range of experience levels. In addition, the audience for this study included the community in which the school system serves, Jenkins County. As the largest employer in the county, JCSS continues to have a major impact on the economy and well-being of this community. Therefore, the academic success of the students enrolled in JCSS becomes a milestone for the community's ability to attract new business and industry.

Program to be Evaluated

The Innovative Teacher Technology Project (ITTP) was developed within a school system that continues to deal with the aftereffects of a nationwide recession and ongoing funding cuts from local, state and federal sources. One of the system's major barriers for academic achievement is its high poverty percentage of 65.73% system-wide. Poverty indicates the extent to which an individual does without resources. Resources included financial, emotional, mental, and physical resources as well as support systems, relationships, and even role models. As Lacour and Tissington (2011) explained, "Poverty directly affects academic achievement due to the lack of resources available for student success. Low achievement is closely correlated with lack of resources and numerous studies have documented the correlation between low socioeconomic status and low achievement" (p. 522).

Fullan's (2007) historically significant study argued that too much enthusiasm can get in the way of creating long term change when leaders are overly willing to participate, but are not equipped to lead the change process. With Fullan's argument in mind, a small, poor, rural school system in southeast Georgia developed ITTP with purposeful professional learning as the backbone of an instructional technology integration program. ITTP became the purposeful professional learning strategy implemented by this school system to positively impact instructional technology integration into daily classroom practices.

Realizing the need for technical assistance and training with implementing this new initiative, the system leaders sought expertise in instructional technology by contracting with an external consultant from Georgia Southern University, whose campus lies 30 miles southeast of Jenkins County. The external consultant, Dr. Charles Hodges, is an Associate Professor of Instructional Technology within the College of Education at Georgia Southern University. For the first two years of ITTP implementation, the external consultant met monthly with the

system's ITTP Leadership Team which consisted of the Federal Programs Director, the Instructional Technology Coach, and the Instructional Technology Teacher Leaders. This group developed a work plan to guide their work as the ITTP Leadership Team and worked over the next three years to develop an Instructional Technology Integration Plan for JCSS that included summary information about the instructional technology strengths and needs of each school.

Initially, the ITTP Leadership Team was heavily dependent on the guidance of the external consultant. As the skills of the ITTP Leadership Team increased, reliance on the consultant was able to decrease. This gradual growth in leadership skills was demonstrated within the third year with the ITTP Leadership Team's ability to facilitate the summer ITTP workshop on their own with minimal involvement from the external consultant. Although not as formal, an ongoing positive relationship with Dr. Hodges is still in place and allows for continuous support for system leaders as they work toward sustaining the ITTP program as an ongoing instructional school improvement strategy.

ITTP was designed and created to address the common misconception that teachers should be able to pull technology, both hardware and software, out of the box and begin appropriate integration. As early as 2005, Ertmer discussed the importance of teacher beliefs and their impact on effective technology integration. Ertmer explained that it is ultimately the classroom teacher who chooses whether and how technology will change classroom teaching practices. This has not changed in the decade since Ertmer's research was published. While ITTP appeared to be working well, it had yet to be determined if the purposeful professional learning that occurred had an impact on daily classroom practices.

Professional Evaluation Standards

This evaluation of the JCSS ITTP program used the CIPP (Context, Input, Process, and Product) Evaluation Model for program evaluation introduced by Stufflebeam (1971) rather than social accounting and standardized test systems. The CIPP evaluation framework uses a logic model to structure an evaluation process that captures data for both formative (decision making) and summative (outcomes) evaluations. This evaluation model reviews a program to assess current and past decision-making practices and judge the accountability and value of the program's impact and outcomes (Stufflebeam & Zhang, 2017). This type of program evaluation was crucial for a school system where ITTP was being implemented. The effective use of dwindling resources was necessary for surviving the budget cuts forced on this system but it was critical if school improvement efforts were going to succeed. The four types of evaluation of the CIPP model, Context, Input, Process, and Product, were used to assess the JCSS ITTP within each of the four strategy areas. The following is a brief description of each of the four kinds of evaluation and the ITTP Evaluation Logic Model (see Appendix A), provided details of how this program evaluation was conducted:

- Context evaluation focused on the goals of the four strategies of ITTP and assessed the needs, problems, assets, and opportunities used to judge program goals and outcomes.
- Input evaluation focused on the plans developed for ITTP around the four strategy areas. The input assessment included a review of alternative program strategies, plans, and budgets to determine their effectiveness in achieving goals.
- Process evaluation focused on the actions of efficiently carrying out activities and judging the effectiveness of program implementation

- Product evaluation focused on collecting and analyzing artifacts and data to determine the intended and unintended, short-term and long-term outcomes to help stakeholders gauge the success of meeting targeted goals.

Purpose of the Evaluation

The purpose of this program evaluation was to analyze the effectiveness of ITTP by determining the impact of a purposeful professional learning on instructional technology integration in daily classroom practices within a small, rural school district in southeast Georgia. The ITTP Evaluation Logic Model (see Appendix A) was used to determine the formative and summative outcomes for ITTP. This study sought to determine impact based on the program's implementation of the following strategies: Transformational leadership; Purposeful professional learning; Provision of needed resources; and, Commitment to intentional technology integration (planning for sustainability).

The evaluation model used for this study was the CIPP Evaluation Model: C-Context; I-Input; P-Process; and P-Product. The CIPP evaluation model is a program evaluation model developed by Stufflebeam in the 1960s. Stufflebeam (1971) determined that the CIPP evaluation model provided a sound framework to use as an accountability system for decision making and evaluative impact for educational programs. A CIPP inspired logic model was developed as a framework for the program evaluation of ITTP. The system has invested a large amount of resources, both human and fiscal, in the implementation of this program. This program evaluation of ITTP will be beneficial to the Jenkins County School System as they make decisions for the sustainability of this program. Formative data such as teacher feedback and survey results suggested that outcomes had been positive but summative outcomes were needed to determine if continued resources should continue to be devoted to its long-term sustainability.

Definition of Terms

For the purpose of this study, the following terms and references were defined as:

Accountability. Accountability refers to the ability to account for past actions in terms of the decisions, the extent to which they were adequately and efficiently implemented, and the value of their effects (Stufflebeam, 1971).

CIPP evaluation model. The CIPP is a widely-accepted and well-regarded evaluation model commonly used to review a program to assess current and past decision-making practices and judge the accountability and value of the program's impact and outcomes (Stufflebeam & Zhang, 2017) through four kinds of evaluation:

- Context evaluation: Assessment of needs, problems, assets, and opportunities to judge program goals and outcomes.
- Input evaluation: Assessment of alternative program strategies, plans, and budgets to determine their effectiveness in achieving goals.
- Process evaluation: Assessment of efficiently carrying out activities and judging the effectiveness of program implementation.
- Product evaluation: Assessment of intended and unintended, short term and long-term outcomes to help stakeholders gauge the success of meeting targeted goals.

Evaluation. Evaluation, as part of the CIPP model, is defined as the process of delineating, obtaining, and providing useful information for judging decision alternatives (Stufflebeam, 1971).

Innovative Teacher Technology Project (ITTP). ITTP is a purposeful professional learning strategy developed to positively impact instructional technology integration into daily classroom practices in the Jenkins County School System, GA. ITTP was developed so

classroom teachers would receive purposeful professional learning to ensure their knowledge and skill level would enable them to drive the technology and not the other way around.

Purposeful Professional Learning. Purposeful professional learning is continuous, job-embedded professional learning that is designed to meet a specific need that has been identified within an annual process of a systematic comprehensive needs assessment.

Transformational Leader. The Kouzes and Posner's definition of a transformation leader, as described in their 2007 landmark study, has been adopted for the purposes of this study. The transformational leader is one who manifests the five practices of an exemplary leader: inspiring a shared vision, modeling the way, challenging the process, enabling others to act, and encouraging the heart.

CHAPTER 2

LITERATURE REVIEW

The use of technology in the classroom has grown as hardware and software has become readily available and cost efficient. Integrating technology into daily classroom instruction has been researched for over a decade with new studies emerging frequently. Ertmer's (1999) conversation regarding the first (incremental and institutional) and second (fundamental and personal) order barriers to technology integration into the classroom is still very descriptive of issues acknowledged as barriers faced today. Ertmer stated, "teacher educators must be aware of potential implementation blocks and develop 'block-busting' strategies that enable them to eliminate or circumvent the changing barriers they face."

During the review of research for this study, the researcher found that information from many historical studies was still relevant to the current practice of instructional technology. These landmark studies provided a longitudinal review of the birth of current terms, definitions, and practices associated with instructional technology.

This study sought to determine the impact of purposeful professional learning on instructional technology integration in daily classroom practices. The literature review for this study focused on four areas: transformational leadership, purposeful professional learning, provision of needed resources, and commitment to program sustainability. The development of this purposeful professional learning program focused on these four strategies because: Effective leadership drives all organizational change. (transformational leadership); The missing link of most instructional technology programs was initial and ongoing professional learning so teachers and para professionals felt comfortable using technology. (purposeful professional learning); No school improvement strategy would be effective if the right *tools* were not provided. (provision

of needed resources); and, Effective school improvement strategies would not remain effective if plans were not made to sustain the program within the school system's available resources. (commitment to program sustainability)

Transformational Leadership

In their landmark study, Kouzes and Posner (2007) described the transformational leader as one who manifests the five practices of an exemplary leader: inspiring a shared vision, modeling the way, challenging the process, enabling others to act, and encouraging the heart. The transformational leadership theory demonstrated the type of organizational leadership needed to implement change processes and programs like the Innovative Teacher Technology Project (ITTP), which was the subject of this study.

Bass (1990) initiated the conversation of transitioning from transactional leaders to transformational leaders by describing the benefits of moving from a leadership role that monitors for the purpose of rewarding success and punishing unmet expectations (transactional) to one that motivates organizational change by inspiring members to raise expectations themselves (transformational). Bass accessed that transformational leaders motivate members to grow toward meeting and exceeding their own continuously improving organizational standards. Bass continued by describing transformational leaders as intellectually stimulating leaders who are able to demonstrate how their employees can view problems and barriers from new perspectives in order to find logical and creative solutions.

Benson (2015) revealed transactional leadership as focusing on the roles and tasks of staff and rewarding or punishing performance and transformational leadership as focusing on building trust in leadership and motivating staff to do more and pursue organizational goals more than personal interests. According to Benson's research, most of today's academics agree the

most effective style of leadership is a combination of both transactional and transformational styles. Benson further claimed that this combination of transactional and transformational leadership theories closes the gap between research and real work effectiveness that can be found within the workplace.

Jackson (2014) found when transformational leadership practices were implemented by a school principal, positive change was effected in student achievement, teacher collaboration, and school climate. Effective change was also demonstrated through the principal's ongoing support and encouragement which allowed teachers to develop new teaching strategies without fear of failure and enabled them to continue improving their practice. A study by Quin, Deris, Bischoll, and Johnson (2015) revealed significant differences in high and low performing schools as demonstrated by the effectiveness of school leaders implementing Kouzes and Posner's (2007) five transformational leadership practices.

One of the most important concepts of leadership is to motivate others with effective leaders knowing how to intrinsically inspire others through a variety of techniques (Benson, 2015). Inspiring intrinsic motivation is a key component of any professional learning program, and instructional technology staff development is no exception.

Purposeful Professional Learning

Purposeful professional learning within the confines of instructional technology integration has been studied for over a decade. Much of this historical research is relevant to this study's research question and, therefore, should be included in the collective research for this program evaluation. Educational technology researchers such as Mize and Gibbons (2000) have argued the importance of supporting teachers through appropriate professional learning opportunities and of allowing sufficient time for peer networking and planning for instruction.

Hew and Brush (2006), found that professional development designed for integrating technology should focus on three areas: (a) building the teacher's knowledge and skills about technology; (b) providing teachers with active learning opportunities for practicing their skills; and, (c) addressing immediate classroom needs and concerns. All three of these focus areas were integrated into the ITTP Leadership Team's planning and development work, the ITTP training provided for teachers, para professionals, and administrators, and into the school system's improvement work as well.

In a significant study, Mize and Gibbons (2000) conducted an instructional use index and individual teacher interviews, and found four emergent themes: (a) integration strategy; (b) leadership; (c) staff development; and (d) teacher turnover rate. Regarding staff development, Mize and Gibbons shared findings demonstrating that regularly scheduled technology professional learning made teachers aware of their need to improve their technology integration practice, helped them keep up with what was new, and increased their self-assurance and motivation to use technology in their classroom.

Schuler (2003) found that people fear that they lack the necessary skills and confidence to change without the benefit of effective training programs. He recommended that in order to bring about successful change, training programs should begin broad and move toward the specific. This allows people to learn what is required while minimizing their fears. Moving from broad to specific includes larger, overall informational settings where the reason and plan for the proposed change can be presented. Moving from broad to specific was the professional learning plan designed for the participants of the ITTP program. An example of this broad to specific ITTP training included beginning with a broad level such as hardware training to learn how to

use a Chromebook and moving to a specific level of utilizing Google Classroom to design instructional practices that differentiate learning based on individual student needs.

Earle (2002) advocated that teachers should be able to make choices about technology integration with the emphasis being on technology's connections to the curriculum and to learning. Earle continued by emphasizing that in-service professional learning should be primarily about instructional design, modeling exemplary practices with technology, resource sharing, and sustained training and practice. Norris, Smolka, and Soloway (2000) identified a set of critical conditions for successful integration of technology. Adequate teacher preparation was one of these critical conditions with two others being access to technology and supportive district administration. ITTP addressed these critical conditions by requiring teachers to be trained before receiving their classroom technology equipment and by mandating the continuation of their training as an ongoing, job-embedded professional learning requirement. JCSS also identified the Federal Programs Director as the district level administrative support personnel for this program. Resources were purchased, maintained, and the Instructional Technology Coach position was created to manage the day-to-day operations of ITTP and to provide ongoing support for teachers as they revised lessons to integrate instructional technology.

Gaytan and McEwen (2010) concluded their research regarding the effectiveness of professional development designed specifically for technology integration with the presentation of a five-level model of professional development evaluation of effectiveness. These levels are the following:

1) Feedback from participants;
2) Participant's learning;
3) Organizational support

4) Changed instructional practices; and,
5) Student impact.

Regarding this model, Gaytan and McEwen (2010) stated that each level builds on the previous level and they emphasized that reversing the order of these steps provides a process for planning an effective technology integration professional development program. The idea of reversing this evaluation model for the purpose of planning a technology integration professional development program is especially interesting because it would start with the end in mind, student impact. Increasing student achievement should always be the ultimate result for any professional learning program designed for educators. As of the 2016-2017 Georgia Milestone results revealed, JCSS has made significant progress in student achievement across all grade spans.

Pitler, Hubbell, and Kuhn (2012) summarized technology as an expected part of today's classroom, one which can positively impact the student's learning process by encouraging student driven learning and training for skills they will need for their future. They advocated that the key to successfully implementing a one-to-one technology initiative is careful planning. They used their expertise to guide schools across the world and developed their own priorities for professional learning. Pitler, Hubbell, and Kuhn listed twelve priorities for schools considering implementing large technology initiatives. Their fifth priority supported the integration of instructional technology through consistent mandatory professional development. ITTP participants participated in these types of professional learning opportunities throughout four school terms.

Potter and Rockinson-Szapkiw (2012) surmised that the primary reason technology goes unused in the classroom is due to the ineffectively developed professional development

opportunities for teachers. Chow (2013) experienced this first-hand in a higher education setting, where he learned that a relevant need must be established before providing staff with the latest hardware, software, and professional learning, all of which must be implemented in an environment where technology is easily adopted and used. One of the mandates of the ITTP program was that teachers must participate in ongoing instructional technology training in order to keep equipment in their classrooms. Teachers identified these ongoing opportunities for continued professional learning as an important area of support for them as they become increasingly comfortable with using technology for more inquiry based learning and not just using *canned* software programs.

Research by Beckman, Bennett, and Lockyer (2014) raised concern about educational policies that overlooked opportunities for students to experience technology in a different format than how they use it at home. Recommendations from their study suggested that students exposed to expanded technological knowledge and skills might be better prepared to be competitive in today's global, digital society. This early exposure and continued preparation for college and careers does not only align with the JCSS's mission of educating all students for college and careers, but also readies them to compete for jobs that are scarce in rural communities and supports their efforts to complete college or trade school.

In studying the perceptions of eight participants, Thompson (2015) found them to be very much aware of technology and its effect on their daily environment. Contrary to some opinions of contemporary authors who claim that technology use is automatic for this generation, Thompson's (2015) research revealed that participants, which he describes as *digital natives,* describe a strategic use of technology and a systematic approach to multi-tasking. Participants

viewed multi-tasking as something they consciously control and not as a natural by-product of their generation's exposure to multiple modes of technology.

This body of research has suggested that school systems should not just buy hardware and software and place it in the classrooms. Research has provided numerous examples of the importance of providing purposeful professional learning for everyone involved in integrating instructional technology into every day classroom practices. Purposeful professional learning as a strategy for intentional technology integration can be effective; however, research also indicates that it must be accompanied by the district's provision of needed resources including hardware, software, and personnel support for teachers.

Provision of Needed Resources

District level support such as hardware, software and personnel to support teachers is important. However, school level support such as personnel planning time, collaborative planning time, and motivational support from school leaders is just as vital to the success of professional learning communities. A historical study by Eaker, DuFour, and DuFour (2002) maintained that time for technology integration training and collaboration must be built into the school calendar. Traditional thinking in the educational setting has not allowed for collaboration and reflection, but with today's expectations, schools must embed adequate preparation time for teachers to discuss, plan, and reflect together within their professional learning communities and instructional teams. Eaker, DuFour, and DuFour's (2002) historical study also provided important information about district-level support for school-level professional learning communities (PLCs). Additional research has provided data to support ongoing professional learning communities such as ITTP rather than one-time workshops.

Vescio, Ross, and Adams (2008) compiled a mega-study of 11 studies about the impact of professional learning communities. Their study revealed that teachers participating in PLCs became more student-centered over time and increased classroom flexibility in instruction and arrangement in order to accommodate the difference in student mastery levels.

Sugar and Slagter van Tryon (2014) studied a new example of continuous professional learning, referred to as a *Virtual Technology Coach*, which was specifically designed to support ongoing technology integration. The technology coach supported and nourished long-term professional learning relationships among teachers, and between teachers and administrators. The Virtual Technology Coach was developed to offset local budget constraints that did not allow the hiring of a personnel position dedicated as an Instructional Technology Coach.

Teachers involved in systemic instructional technology integration must feel supported as evidenced in the Mooresville School District in North Carolina. Fiscal and human resources were provided to support staff as they trained over an extended period of time and within multiple methods. Levin and Schrum (2013) reported that the leadership within the Mooresville district provided more than hardware for their teacher's professional development. By implementing a transformational leadership approach to their project, teachers felt encouraged to try new things and take risks with using technology.

A review of the literature confirms that district and school level commitment to needed resources must be in place if instructional technology integration is to succeed. An especially important resource was long-term support for professional learning. A study conducted by Walker, Recker, Ye, Brooke Robertshaw, Setters, and Leary (2012) showed that participating in professional learning programs designed specifically for technology integration showed positive influences on teacher's knowledge level and skills.

Commitment to Intentional Technology Integration

According to Postman's landmark study (1993), all things relating to the human experience has been altered because of today's technology: economics, politics, religion, society, personality, and morality. Although he was not anti-technology, Postman did frequently warn about the loss of the human experience when technology was allowed to drive lives instead of enhancing them. This is also a concern when placing technology within the confines of a classroom setting.

Maintaining the type of long lasting change needed for instructional technology integration brings to the forefront an often-neglected component of the transformational change process: celebrating short-term wins. Kotter and Cohen (2002) totally revamped how organizations approach change with their 8-step process. The sixth step, celebrating short-term wins, is an essential step in validating the leader's vision and strategies, providing emotional support for the hard work that has been accomplished, building faith in the project, and silencing the cynics. Building short term wins for ongoing technology professional learning can be as simple as paying stipends to participating staff or awarding credit toward meeting local or state professional learning requirements. Paying such stipends was an integral part of the ITTP program.

Bernhardt's (2004) historically significant work on school improvement explained that the importance of lasting change can be described by the change in attitudes evident at the deepest level of an organization's culture. Bernhardt is convincing in her argument that the guiding principles for schools to change the way business is done will be reflected in the school's mission and vision as they grow out of the values and beliefs of the school community. As such,

this is even more of a reality for small, rural system like the JCSS where community expectations are mirrored by all levels of politics: city, county, and school.

Based on these precepts, ITTP was developed so classroom teachers would receive purposeful professional learning to ensure their knowledge and skill level would enable them to drive the technology and not the other way around. Richardson (2013) echoed this point, suggesting that teachers are the master-learners in their classroom. In other words, teachers should continuously learn as well as model the process of learning for their students. This commitment to ongoing, purposeful professional learning aimed specifically at intentional technology integration was a shift that required an organizational change which emerged from within the district and school communities.

In addition to instructional change, the integration of instructional technology has also been studied as a change agent for how student learning is assessed. Johnson (2012) shared several ideas of how instructional technology can assist teachers in providing timely feedback to students. Johnson suggested that teachers can utilize computers, student response systems, the Internet, and Google Docs to provide students with more efficient methods of receiving timely feedback from their teachers and peers. Johnson confirmed the use of instructional technology for providing feedback to parents and students for assignments, grades, daily work, and scores. Being able to comfortably implement formative assessments and change instruction based on this data was the most important type of feedback that led to linking instructional technology integration to improved student achievement.

In regard to the current method of measuring student achievement, Gullen (2014) recognized that one-to-one technology initiatives may also assist with preparing students for high-stake assessments that will now be online. He interviewed students after participating in a

Maine Smarter Balanced assessment administration. One key area where students did not feel comfortable was digital skills. Students reported several things they believed may have hindered their performance on the test. One of the potentially impactful barriers reported was the practice of students intentionally shortening their responses to constructed-response items because they had so much trouble typing their responses. Students also reported problems with having to use the scroll bar to see a question in its entirety, especially if they changed the font size.

Other digital skill barriers included not knowing how to use the cursor, using a mouse, and highlighting text. Gullen (2014) offered suggestions on how to use instructional technology in the classroom to prepare students before they encounter these barriers during high-stakes assessments. Some of her suggestions included integrating technology instruction to help build computing skills, promoting self-sufficiency by assigning research assignments and providing time for students to practice digital skills.

A key aspect to remember when embarking on the use of technology to improve student achievement is the comfort level teachers feel with using technology in the classroom. As the literature has already established, this is an important part of teachers and students using technology on a daily basis for more than just basic technology skills.

Program Implementation

The Jenkins County School System's ITTP program was born out of necessity. During the 2013-2014 school year, system leadership spent a great deal of time pondering how to change the culture and environment within this poor, rural school system. Poverty and economic woes had wreaked havoc on the community and the school system was also reeling from the impact of the nationwide recession that devastated many lives, personally and professionally. A new school superintendent came on board who was a change leader that supported the transformational

practice of allowing system and school leaders to facilitate organizational change through the implementation of new school improvement strategies. The development of ITTP was one of these major organizational change strategies.

Adopting an instructional technology integration program such as ITTP as a major school improvement strategy was a joint decision by system leadership, teachers, and school administrators. The Director of Federal Programs and Professional Learning took on the leadership role for this program because it was almost entirely funded by supplemental federal funds through the system's Title I, Title II, and Title V allocations. There were no local funds to designate to this project so it became one of the major program areas for the system's Federal Programs Department.

The first step toward implementing this new change strategy was to review the system's procedures and approach to instructional technology. At that time, the usual practice was for the Information Technology Department to designate 4-6 desk top computers for each core content classroom and maintain several computer labs per campus. Also, each classroom was outfitted with a SMARTboard®. This was the traditional structure for instructional technology in the P-12 world during this time. However, there were several problems with this approach which included the Information Technology Department being understaffed with just two employees, teachers only being able to utilize computer labs a few times per week, and teachers not being able to implement digital lessons for all students at the same time within their own classrooms.

Another, more prominent problem became evident as well. Teachers were not receiving adequate training on how to use the hardware or software provided to them for instructional use. This revelation became the driving force behind the foundational tenant of the program: Purposeful Professional Learning. Guskey (2000) defined professional development as, "a

process that is (a) intentional, (b) on-going, and (c) systematic" (p. 16). Guskey explained that professional development should not be separate events viewed as something to be completed for the sake of counting hours, but should be a part of an ongoing, systematic, and intentional plan for an educator's individual professional growth. Providing a structured system whereby teachers were continuously engaged in learning how to implement instructional technology into their classroom was a new concept for the JCSS's teachers and administrators. It was also not without its share of growing pains as teachers questioned why they had to keep being trained when they had *completed* their requirements.

The purposeful professional learning component of ITTP included two mandates: The first was that teachers would become a member of the ITTP cohort in order to receive new hardware for their classroom; and, teachers would continue participating in ITTP trainings in order to keep this hardware in their classroom. Both of these mandates were non-negotiables, however, membership in ITTP was not mandatory. The program began with 25 teachers who volunteered as the original cohort. These teachers were the cutting-edge change leaders within the system and through their participation in ITTP, would become the instructional technology experts in the system. Throughout the next four years, the ITTP membership process remained voluntary with subsequent cohorts adding para professionals, administrators, special education, and exploratory teachers as well as the remaining core content teachers.

Early in the development of ITTP, the decision was made to design a program that would allow the system to grow their own experts in the field of instructional technology. Three important parts of the system's new transformational approach to leadership merged in the leadership design for ITTP: developing a team of instructional technology teacher leaders;

creating a new position for a K-12 Instructional Technology Coach; and, contracting with an external consultant to train this team and guide the initial implementation process.

The ITTP Teacher Leaders were chosen from the initial group of cohort volunteers. The team consisted of one teacher leader from each grade span: K-2, 3-5, 6-8, and 9-12. Initial training for this team included face-to-face monthly meetings with the external consultant, attending the annual Georgia Educational Technology Conference, internal and online Google workshops with various trainers, online software trainings, and attending various educational technology camps held in nearby counties. The responsibilities of the ITTP teacher leaders included working one-on-one with peers and assisting them in implementing instructional technology within their classroom lessons. Additional responsibilities included: helping teachers learn how to troubleshoot minor issues encountered when implementing lessons using technology; guiding the work of the ITTP program by making decisions about future plans; making decisions about equipment acquisition and distribution; planning ITTP professional learning sessions; and, gaining the leadership skills needed to facilitate internal instructional technology trainings for their schools and the system.

Having time to devote to the operational issues of the development and implementation of a newly developed instructional technology program for an entire system was a struggle for the Federal Programs Director who already wore many “hats” as part of her leadership responsibilities. Addressing the need for additional man-power to implement the ITTP strategies was paramount to the program’s success. The Federal Programs Director approached the JCSS Superintendent of Schools with an idea to merge these responsibilities with an existing Academic Coach position. The Superintendent agreed with this move. As a change leader who embraced the concept espoused by Cherry (2017), that transformational leadership changes the

vision for themselves while inspiring others with genuine passion and support to buy into the vision and work toward its reality, the Superintendent allowed the Federal Programs Director and the newly designed Instructional Technology Coach to work together to guide the ongoing implementation of ITTP.

Since its inception, the Federal Programs Director has served as the designated system leader of this new project because federal funds have been the main funding source for the program. Training was sought for the newly developed positions of ITTP Teacher Leaders, Instructional Technology Coach, and the Federal Programs Director as this group became the Leadership Team for ITTP within the system. Assistance was sought through Georgia Southern University, located in Statesboro, Georgia about 30 miles from Jenkins County. A connection was made with Dr. Charles Hodges, an Assistant Professor in the College of Education's Instructional Technology Department, who became the external consultant for the ITTP program. The close geographical distance made it possible for Dr. Hodges to visit the school system regularly and meet with the ITTP Teacher Leader team on a monthly basis for the first two years and as needed in subsequent years. During this time, various contracts were designed with specific deliverables based on each year's needs for training the entire membership, guiding the work of the leadership team, and assisting the Federal Programs Director in researching next step opportunities for the growth of the program. This relationship continues as needed specifically to assist the Federal Programs Director in the system's efforts to identify new resources and plan for the sustainability of the ITTP program.

Since the fall of 2013, JCSS has devoted close to $1million dollars in resources to the implementation of the ITTP program as the system's structure in integrating instructional technology into daily classroom practices. These resources and the sustainability of the program

has depended heavily on the support of the system's leadership and the continued participation of teachers, para professionals, and school leaders. The operations of the program have also depended on the collaboration between different system program directors. Ongoing communication occurs between the Federal Programs Director, the Instructional Technology Coach, the Curriculum, Instruction, and Assessment (CIA) Director, and the Information Technology Director to ensure all of the *working parts* of this program are addressed. These working parts include hardware such as Chromebooks, iPads, charging carts, servers, access points, firewalls, additional cables and circuits, and many, many pairs of headphones. It also includes acquiring a vast array of software that is used as a tool for instruction, remediation, and continuous progress monitoring of individual students' academic achievement.

The coordination between the Federal Programs Director and the CIA Director meant preparing teachers to utilize these new tools to increase the rigor of their instruction as the new Georgia Standards of Excellence (GSE) were introduced for math, reading, and ELA during the 2015-2016 school year with Science and Social Studies rolling out for the 2017-2018 school year. This work also involved using Chromebooks for students to practice responding to reading and writing assignments during regular instructional time to prepare for the move to online Georgia Milestones summative assessments. The Federal Programs Director and the CIA Director coordinated school and system level professional learning to provide opportunities for teachers to learn how to prepare lessons based on formative instructional strategies, inquiry based learning and performance based learning strategies.

Aligning resources and coordinating efforts between system and school level programs increased the availability of funds for necessary resources such as hardware, software, technology supplies, professional learning stipends, supplemental pay for the ITTP teacher

leaders, registration and travel expenses for external workshops, and funds for contracting with Dr. Hodges, the external consultant. Within a small, poor, rural system like JCSS, this coordination of human and fiscal resources is the only way to maintain an initiative like ITTP. Without the support of the Superintendent and the ongoing work of all Program Directors and staff, initiatives such as ITTP would be impossible to implement, much less sustain. The system leadership continues to work together to find ways to engrain ITTP strategies into the ongoing processes and procedures of the system.

JCSS has maintained the original ITTP mandate that all teachers must be trained before receiving hardware and that they continue this training as a member of an ongoing professional learning community. This has led to a change in mindset throughout the system that includes teachers, para professionals, and administrators who all know that it is an ongoing expectation to use these tools to engage students in rigorous learning strategies that provide instruction, remediation, formative assessments, and continuous progress monitoring of academic achievement. An example of how the system continues to work toward sustaining ITTP was the embedding of this work into the system's professional learning communities. As teachers meet with their content and grade span peers, they review student data and research based on their content area, learn new instructional technology practices, and review formative instructional practices all of which promote student engagement and the development of research, inquiry learning, and critical thinking skills. Teacher leaders facilitate these system-level professional learning communities which continues the goal to grow our own experts in this field. Embedding ITTP into these ongoing, job-embedded professional learning communities provides a manageable way to use the system's sustainable resources to continue assisting other staff in their integration of instructional technology into their daily classroom practices.

Chapter Summary

Many studies have revealed the importance of implementing an ongoing professional learning program as a component of an instructional technology implementation program. However, what has not been found very often in literature are examples of programs that model the successful implementation of an effective instructional technology integration program. Therefore, this study, which was a program evaluation of the JCSS ITTP program was conducted to evaluate the impact of instructional technology integration into daily classroom practices in order to add to the existing literature about this topic. Although this program evaluation was very specific to the locally developed ITTP program, the four basic strategies for which ITTP was developed could easily be replicated in other P-12 school districts across the country.

CHAPTER 3:

METHODOLOGY

Determining the impact of purposeful professional learning and instructional technology integration on daily classroom practices will supply crucial information for the Jenkins County School System (JCSS) as they move forward with raising the bar for academic and instructional rigor while lowering the fiscal bottom line. Making this change as part of the system's ongoing processes was motivated by their desire to provide all teachers and students with the support needed in order to increase student engagement and improve academic achievement.

Program

As technology has exploded within the world of academics, so has the opinions of educators as to how, why, and by whom it should be used in regard to planning, implementing, and evaluating everything from individual student learning to system and statewide strategic planning.

The JCSS Innovative Teacher Technology Project (ITTP) was started within the system as a school improvement strategy to support the system's plan to improve student achievement by increasing student engagement. A review by system leaders of current literature on instructional technology implementation within P-12 systems revealed that one of the major barriers with successful implementation was the development of a purposeful professional learning program to lead this type of new program implementation.

The JCSS leaders worked collaboratively through their system improvement team to develop a program that would require professional learning before hardware was purchased and make ongoing training a stipulation of keeping access to hardware within the classrooms. ITTP

was developed with four specific strategies designed to guide initial development and ongoing implementation: transformational leadership, purposeful professional learning, provision of needed resources, and commitment to program sustainability. The sustainability of the program through a purposeful professional learning model was a strong component of the design of ITTP. Maintaining the commitment to the "no participation -- no hardware" was met with growing pains for the first two years of the program. Ongoing professional learning was not a concept fully embraced by most P-12 systems, especially with instructional technology programs.

The Innovative Technology Teacher Project (ITTP) was the culmination of the Jenkins County School System's implementation of a new purposeful professional learning and instructional technology integration program. Participants were recruited based on their interest and desire to be involved in the proposed change effort. The vision was simple: Honor the willingness of innovative teachers and provide the purposeful professional learning and information technology infrastructure needed for effective instructional technology integration into classroom practices.

As the use of more and more technology was adopted, it became important for the school system to determine if they were implementing programs that supported teachers through appropriate professional learning opportunities and job-embedded peer networking to plan instruction and formative assessments. In other words, was the school system doing more than just buying hardware and software and "sticking" it in the classrooms and was enough support provided to positively impact instruction?

The outcome of this study was a program evaluation of a locally developed purposeful professional learning focused on instructional technology integration that was implemented

based on the following four program strategies: transformational leadership, purposeful professional learning, provision of needed resources, and commitment to program sustainability.

- Transformational Leadership – Developing leadership capacity within a local school system with focus on instructional technology. Developing a network of teacher leaders to become experts in instructional technology implementation was a main strategy of how the Jenkins County School System evolved into a transformational change organization. Teachers and school leaders worked collaboratively with system-level personnel to participate in professional learning technical assistance from the external consultant and other professional development opportunities. Opportunities for teachers to begin viewing their role as a teacher within the bigger organization was also enhanced by using the landmark book, *The Heart of Change*, by Kotter (2002) as a book study training for the teacher leaders. This book study continues each year during the summer teacher leader workshop when the group reviews the system's current status as compared to Kotter's eight steps.
- Purposeful professional learning – Providing instructional technology skill development with hardware and software. Making sure that teachers and para professionals were ready to use the technology before it was provided to them was the most emphasized strategy of the ITTP program. Initially, 25 teachers volunteered to begin training in order to utilize iPads and Chromebooks within their regular instructional practices. Teachers then trained students and immediately began embedding instructional technology within their lessons because they were comfortable with it themselves.
- Provision of needed resources - System commitment to providing needed equipment and digital programs and resources. The ITTP program was one of the main focus areas of the

Jenkins County School System's school improvement strategies. A large percentage of the annual federal programs allotment was spent on hardware, software, professional learning stipends, external consultants, and supplemental salaries. Four teachers, one administrator, and one academic coach agreed to become the leadership team to guide the work of implementing this program.

- Commitment to intentional technology integration - Planning for sustainability. Incorporating the ITTP program as one of the main focus areas for the federal program's school improvement work provided the stability needed to get ITTP started and supported for the past four years. Growing the experts in instructional technology through the training received from the external consultant and additional external training, demonstrated the system's commitment toward sustaining this strategy as an ongoing school improvement / change strategy. Embedding ITTP into ongoing, job-embedded professional learning within the system created a way to keep the cost low and the visibility level high.

Participants

The sample for this study were the teachers, para professionals, and administrators who were purposely chosen because of their participation in the implementation of the Innovative Teacher Technology Project (ITTP) program, a locally developed project initiated by a small, rural system in southeast Georgia. Participants were asked to volunteer for this study and freely participate with complete knowledge of the purposes of this program evaluation of ITTP.

Participants in this study were mostly female due to the small percentage of males involved in the total population of this project. Teachers participating were from all grade spans including elementary (PK-5), middle (6-8), and high school (9-12). Participants were from

various core content areas (math, English, reading, social science, and science) including some special education teachers as well. Experience levels of the participating teachers ranged from induction teachers (three years or less experience) to teachers with 20 plus years of experience in public education.

Evaluation Model

The evaluation model used for this study was the CIPP Evaluation Model: C-Context; I-Input; P-Process; and P-Product. The CIPP evaluation model was a program evaluation model developed by Stufflebeam in the 1960s. Stufflebeam (1971) determined that the CIPP evaluation model provided a sound framework to use as an accountability system for decision making and evaluative impact for educational programs. A CIPP inspired logic model was developed as a framework for the program evaluation of ITTP (see Appendix A).

As the ITTP Program Evaluation Logic Model shows, the evaluation of this program was built around the four strategy areas of the program. This organization of the program evaluation, used the CIPP model to yield outcomes specific to each strategy required for the implementation of this program. In addition, the outcomes from each strategy area were analyzed to yield overall findings for a comprehensive program summary evaluation. The four strategy areas of the ITTP program included:

- Transformational Leadership
- Purposeful professional learning
- Provision of needed resources
- Commitment to intentional technology integration (planning for sustainability)

This program evaluation used both qualitative and descriptive analysis of the artifacts collected as part of the program implementation and artifacts collected specifically for this study.

Each artifact was analyzed based on the most appropriate method determined to yield data specific to that particular artifact. The specific analysis process used to evaluate each artifact was described in the ITTP Evaluation Logic Model (see Appendix A) which provides a detailed explanation for data collection and analysis.

One of the strengths of this program evaluation was the use of both descriptive and qualitative methods. While the descriptive data revealed specific information related to the financial support and participation numbers, the qualitative data, such as those revealed in the focus group and interviews, provided an extended level of data analysis. According to Nagle and Williams (2011), focus groups provide deeper insights into how people really think and a greater understanding of the study's subject. This qualitative program evaluation included interviews with a sample group of volunteer ITTP participants.

Instruments

Descriptive and qualitative methods were used to compile and analyze data sets provided by the artifacts that have been collected during the implementation of this program (formative artifacts). The summative artifacts were collected as new data for this study. Specific information about the artifacts collected, compiled, and analyzed were outlined in the ITTP Program Evaluation Logic Model (see Appendix A). Detailed information about the analysis process for each strategy's artifacts can also be found in this document.

The formative artifacts were collected as part of the system's implementation of the program. Summative artifacts included data from a focus group collected in 2015 and data from interviews and a survey were collected as part of this study.

Outcomes from two focus groups held in 2015 were also included in this program evaluation. A list of the questions used with these two focus groups can be found in Appendix B-

ITTP Focus Group and Interview Questions. These questions, with a few additions (bolded questions) were used for the ITTP participant interviews. These prewritten, open-ended questions were designed to encourage participants to describe their experiences in their own words and from their own perspective.

Procedures

The researcher collected data through the compilation of identified artifacts including outcomes from focus group data from 2015, and results from the Instructional Technology Coach Effectiveness Survey and the LoTi Digital Age Survey which were both distributed to ITTP participants in the spring of 2017. In addition, the researcher collected data from interviews with eight ITTP teachers that were completed specifically for this study in October 2017. The researcher worked with the participants throughout the implementation of the ITTP project and managed the system's federal funds that paid for a large percentage of the hardware, software, and stipends for professional learning for the ITTP program. The researcher's bias in this study was revealed as a professional interest in determining whether the expenditure of these federal funds have been used effectively. As the Director of Federal Programs and Professional Learning for the JCSS, part of the researcher's responsibilities included evaluating the effectiveness of programs where federal funds were expended. Part of this process included determining if federal funds should continue to be spent on currently implemented programs. Data revealed through this program evaluation will assist the JCSS system leadership to determine if the ITTP program should continue to receive a large portion of the system's annual federal funds allocations.

Design

Using the CIPP evaluation model as the design for this program evaluation provided the framework for organizing the formative and summative artifacts that were analyzed as data for this study. Revealing short-term (formative) and long-term (summative) outcomes provided important information for immediate data to program improvement and an overall evaluation of program effectiveness to determine if valuable fiscal and human resources should continue to be devoted to this purposeful professional learning program designed to integrate instructional technology into daily classroom instruction. Specific information about the design and the process and procedures for this program evaluation can be found in Appendix A - ITTP Evaluation Logic Model.

Data Collection Procedures

The researcher obtained permission from the system Superintendent to retrieve, compile, and analyze data from the ITTP program (see Appendix C-Letter of Cooperation). In addition, the researcher seured approval of the Georgia Southern University Institutional Review Board (IRB). Once IRB approval was obtained, the researcher provided information about the program evaluation to all ITTP participants by distributing an Informed Consent Form (see Appendix D-Informed Consent Form), which provided additional information about the interview. The artifacts described were then collected, compiled, and analyzed through the process described in the ITTP Evaluation Logic Model (see Appendix A). The researcher received permission to use this data for this program evaluation and had immediate access to this data. Using descriptive, quantitative, and qualitative data, based on each specific artifact, allowed the researcher to probe deep into the data and provide an abundance of opportunities to reveal commonalities, differences, gaps, and reoccurring themes.

In preparation for conducting this program evaluation, the researcher completed all required IRB training and studied available literature. The researcher relied on 24 years of public service in leadership to guide discussions with ITTP participants about the process of this research study and program evaluation.

For the participant interviews, participant numbers were assigned to all participants for the sake of securing their confidentiality. Transcriptions were completed of the interview and survey data. The researcher reviewed the completed transcripts to validate accuracy of the transcriptions and allowed each interviewee to review their interview transcript for accuracy as well.

Data Analysis

Data analysis was conducted on the program artifacts as described in the ITTP Evaluation Logic Model (see Appendix A), using descriptive, qualitative, and quantitative methods. All of these data were reviewed using the formative and summative questions to determine the short-term and long-term effectiveness of the ITTP program. Artifacts requiring a qualitative method of analysis were read and re-read in order to retrieve the reflective meanings buried within the data and not just rely on surface retrievals of first impressions. Creswell's (2013) process of *restorying* was used. The restorying process is the gathering, analyzing, and rewriting key elements of the stories in order to identify a chronological sequence between ideas. Data from the Instructional Technology Coach Survey and the interview data were analyzed in this same process.

The goal of restorying was to codify the data into categories and patterns that are consistent and purposeful with the feel of the database so as not to create haphazard categories

and expected rhetoric. This restorying allowed themes to present themselves and simplified the process of summarizing these themes into broader, more general themes.

Ollerenshaw and Creswell (2002) discussed how restorying or retelling provided the opportunity for people to tell stories about life experiences and how this method gained legitimacy in the educational research field. In their study, Ollerenshaw and Creswell considered using the restorying process as a method to report a story in a broader holistic approach or a narrower linear approach.

Limitations

Studying the impact of purposeful professional learning on the integration of instructional technology into daily classroom practices will make a significant impact because this program evaluation provides an original contribution to professional literature that links purposeful professional learning with instructional technology integration in the classroom. The significant *missing link* provided with this program evaluation was the evaluation of a program which focused on the purposeful professional learning of educators as a pre-requisite of classroom technology distribution.

Although not a limitation, the reader should be reminded that the importance of this program evaluation is specific to the ITTP stakeholders within a small, rural district in southeast Georgia of the United States. However, programs similar to this could be studied in order to compare the impact of professional learning programs focused on instructional technology integration. Data from these comparison studies could assist in the development of future programs in other small, poor, rural districts within the state and country.

CHAPTER 4

RESULTS

Completing a program evaluation on the Jenkins County School System's (JCSS) Innovative Teacher Technology Project (ITTP) provides important data for the JCSS stakeholders and for other counties with limited resources who want to integrate instructional technology into their daily classroom practices. This program evaluation was completed using the CIPP evaluation model: C-Context, which focused on the overall goals of the ITTP program; I-Input, which focused on the plans for the implementation of ITTP; P-Process, which focused on the actions and judged the effectiveness of program implementation; and P-Product, which focused on the collection and analysis of artifacts and data.

Using the CIPP evaluation framework allowed the researcher to develop a logic model that structured the evaluation process around formative (short term) and summative (long-term) outcomes. According to Stufflebeam and Zhang (2017), this evaluation model allows a researcher to review a program's current and past decision-making practices and to judge the accountability and value of the program's impact and outcomes. This type of program evaluation was crucial for the JCSS to determine if it was worth using dwindling resources to sustain ITTP as a prioritized school improvement effort.

This program evaluation of ITTP examined data to reveal both short-term and long-term outcomes to determine its overall effectiveness as a system improvement strategy. Both formative and summative data were collected and analyzed based on the program's four strategy areas: transformational leadership, purposeful professional learning, provision of needed resources, and commitment to program sustainability.

Formative Artifacts: Transformational Leadership

Developing leadership capacity within a local school system was an important strategy for ITTP. Muhammad and Hollie (2012) explained that utilizing teacher leaders as transformational leaders creates a positive and healthy school culture. With a system of transformational leadership embraced by the JCSS Superintendent and district and school leaders, a structure of transformational leadership was created through the development of the teacher leader network. This network of classroom leaders included the ITTP Teacher Leaders who were willing to take on the challenge of implementing the ITTP program.

This study examined how mentoring and professional learning were provided in order for the ITTP Teacher Leader Team to become local experts who could facilitate the system's ITTP training and support. The ITTP Teacher Leader Team met with the external consultant and/or the Federal Programs Director on an average of six times during the school year plus an annual summer workshop. Additional support was provided by the external consultant through email, additional training sessions, and sharing of related research and online resources.

A review of the ITTP artifacts reveal two important aspects of the development and sustainment of the transformational leadership model: (a) The sustainment of the ITTP Teacher Leadership Team (including ITTP Teacher Leaders and Instructional Technology Coach); and, (b) The consistent job-embedded professional development and support provided for the ITTP Teacher Leadership Team (including external consultant).

The first important component was the sustainment of the ITTP Teacher Leadership Team throughout the entire project from beginning (2013-2014) to present (2017-2018). Federal funds were designated to pay the ITTP teacher leaders for their service time as these

responsibilities were above and beyond their regular contract duties. Table 1 reveals the total expenditure of funds for the supplemental pay of the ITTP teacher leaders.

Table 1

JCSS Expenditures for Supplemental Pay for ITTP Teacher Leaders for the Past 4.5 Years

Expenditures	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	Total
Supplemental Pay	$6,338	$12,181	$7,165	$5,655	$6,600	$37,999

Job descriptions were developed and used to guide the expected service roles and responsibilities for each teacher leader group. Integrating instructional technology into daily classroom practices to increase student achievement was the overarching task assigned to the ITTP Teacher Leaders. As the leadership team for the ITTP professional learning community, the ITTP Teacher Leaders implemented specific roles and responsibilities as outlined in Appendix E - Sample Teacher Leader Job Description from 2016-2017.

The second component of importance to the transformational leadership of the ITTP program was the consistent job-embedded professional development and support provided for the ITTP Teacher Leadership Team. JCSS contracted with an external consultant, Dr. Charles Hodges, to mentor the ITTP teacher leaders, deliver professional learning for all ITTP participants, and to assist with monitoring the initial implementation of the ITTP program. The professional learning / work sessions were held utilizing a variety of training and communication methods. These included:

- Face-to-Face - One day workshops, after-school workshops, multiple day summer workshops, edCamps, GA ETC Conference, West Georgia RESA Technology Conference

- Online - Google Chat, emails, webinars, online apps
- Mentoring - External consultant meeting with teacher leader team, meetings with Director of Federal Programs and Professional Learning

A review of the agendas, minutes, handouts, and sign in sheets of the ITTP Teacher Leader Team professional learning and work sessions, revealed the following reoccurring work topics addressed during the four and one-half years of training: (a) Hardware distribution and maintenance, (b) Software acquisition and planning, (c) Technology support for teachers, (d) Professional learning, and (e) Instructional technology plans. Specific issues discussed regarding each of these topics can be seen by reviewing Appendix F - ITTP Teacher Leader Team Work Topics.

An important part of the ITTP program's transformational leadership model was the system's decision to fund a full-time Instructional Technology Coach. This position was designed to be the lead contact for the day-to-day implementation of ITTP, to guide the ITTP teacher leaders, and to be an on-call support for teachers and para professionals as they learned to integrate instructional technology into daily classroom instruction.

The salary and benefits of the ITEC Coach position, also paid with federal funds, serves as the facilitator for the ITTP PLC and the ITTP Teacher Leader Team. The ITEC Coach has worked along with the Information Technology Department staff to determine what needed to be done in order for teachers and students to have uninterrupted access to Wi-Fi services. This is a critical issue when moving a school system to a program where all students have access to Chromebooks in every classroom throughout their daily schedule. Funds designated for this transformational leadership role, presented in Table 2 below, serves as a confirmation to the system's commitment to support teachers during the implementation of the ITTP program.

Table 2

JCSS Expenditures for the Instructional Technology Coach Position for the Past 5 Years

Expenditures	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	Total
Salary	$56,110	$56,110	$56,110	$58,412	$63,409	$290,151
Benefits	$19,278	$19,766	$20,394	$20,765	$23,180	$103,383
TOTAL	$75,388	$75,876	$76,504	$79,177	$86,589	$393,534

As one of the main resources provided by the system for the implementation of the Innovative Teacher Technology Project (ITTP) program, the Instructional Technology Coach position was to facilitate day-to-day operations of the system's ITTP program which included assisting all instructional staff as they worked to integrate instructional technology into their daily classroom lessons. During the research for this study and during the researcher's work with the ITTP program, teachers have provided positive feedback about having the Instructional Technology Coach position because of the real-time support it provided as they learned to integrate both hardware and software into their lessons. Feedback from teachers expressed the importance of having someone available at all times to answer their questions, help them work out glitches with software and hardware, provide missing or lost log in information for teachers and students, and model or teach ways to use instructional technology for more efficient methods of planning, instruction, grading, and formative assessment. Appendix G – Instructional Technology Coach Job Description provides the specific duties and responsibilities of the ITEC Coach position.

As part of the evaluation of the strategies implemented through the JCSS Federal Programs and Professional Learning Department, an Effectiveness Survey for the Instructional

Technology Coach was administered during spring of 2017 at the end of the 2016-2017 school year. Data from this survey revealed that the effectiveness of having an Instructional Technology Coach position to provide instructional support to K-12 grade teachers was 76.9% very effective and 20.5% effective. Collectively, 97.4% of responders rated this position as an effective support for the integration of instructional technology within JCSS. Data from this survey also revealed that the professionalism exhibited by the Instructional Technology Coach was 91% very effective and 9% effective. Collectively, 100% of responders rated the professionalism of the Instructional Technology Coach as an effective support for the integration of the instructional technology within the JCSS.

Qualitative data for the Instructional Technology Coach Effectiveness Survey were collected from responses to eight survey questions. These data from the Effectiveness Survey for the Instructional Technology Coach were coded and analyzed using the qualitative research method of restorying where data are coded based on recurring themes that are revealed through the data and then recoded multiple times to reveal the most frequent reoccurring themes.

During the analysis of data, responses were coded and organized upward from narrow codes to broader themes. This data layering provided a more focused and specialized set of findings (Creswell, 2013). Initial coding produced similar interconnecting themes and revealed outcomes of effectiveness around professional learning, assistance and support, and the availability of technology and resources. Appendix H - Instructional Technology Coach Effectiveness Survey Outcome Chart provides a list of the survey's eight questions and detailed information about the frequency of these interconnecting codes and themes.

During the coding and analysis of the data, three outcomes were revealed: Providing professional learning opportunities; Providing assistance and expertise; and, Promoting the

availability of technology and resources. In evaluating the effectiveness of the Instructional Technology Coach position, some preferred outcomes might have been to increase the teachers' capacity to integrate instructional technology in their daily classroom practices. According to the data analysis, outcomes revealed from this survey suggest that the current position of Instructional Technology Coach accomplished these desired results.

CIPP Outcomes for Formative Artifacts: Transformational Leadership

An analysis of formative data supporting the transformational leadership strategy of the ITTP program included a review of the following artifacts: (a) Expenditures for the supplemental pay of ITTP teacher leaders, (b) Themes revealed from the work of the ITTP Teacher Leader Team, (c) Expenditures for the Instructional Technology Coach position, and (d) Outcomes from the Instructional Technology Coach Effectiveness Survey. The outcomes revealed through the CIPP evaluation model for the transformational leadership strategy include the following:

Context formative outcome. Demonstrating *what was done* included providing ongoing leadership for the implementation of ITTP by instilling the ITTP Teacher Leader positions and the Instructional Technology Coach position.

Input formative outcome. Describing *how was it done* involved the system allocating a portion of its federal funds and some local SPLOST funds (hardware only for SPLOST during the 2014-2015 school year) to provide supplemental pay for teacher leaders, an Instructional Technology Coach position, hardware, software, professional learning stipends, supplies, travel costs, and contractual support from an external expert.

Process formative outcome. Answering the question *was it done* involves a review of how the system provided financial support by paying ITTP Teacher Leaders for additional

service hours and by paying the salary and benefits for the Instructional Technology Coach position.

Product formative outcome. Addressing *did it succeed* meant reviewing the emerging themes that revealed two positive outcomes for the strategy of transformational leadership for the implementation of the ITTP program:

- Purposeful professional learning and support for teacher leaders, Instructional Technology Coach, and Director of Federal Programs / Professional Learning
- Provision of Needed Resources (hardware, software, and professional learning)

The primary suggestion for improvement of the transformational leadership strategy includes decreasing the dependency on federal monies to fund the ITTP teacher leaders and Instructional Technology Coach position.

Formative Artifacts: Purposeful Professional Learning

Purposeful professional learning is continuous, job-embedded professional learning that is designed to meet a specific need identified within an annual process of systematic comprehensive needs assessment. One of the major mandates of the ITTP program was that teachers must participate in ongoing instructional technology training in order to keep equipment in their classrooms. Potter and Rockinson-Szapkiw (2012) surmised that the primary reason technology goes unused in the classroom is due to the ineffectively developed professional development opportunities for teachers. This body of research has suggested that school systems should not just buy hardware and software and place it in the classrooms but should provide purposeful professional learning for everyone involved in integrating instructional technology into every day classroom practices. Teachers, Para Professionals, and School Administrators identified ongoing opportunities for continued professional learning as an important area of

support for them as they became increasingly comfortable with using technology for more inquiry based learning and not just using *canned* software programs.

Designating federal funds to provide purposeful professional learning focused on the integration of instructional technology into daily classroom practices began during the 2013-2014 school year. During this initial year of implementation, federal funds were also used to contract with the external consultant, Dr. Charles Hodges, to provide face-to-face mentoring and guidance to the ITEC teacher leaders, professional learning for all ITTP members, and assist in the implementation of the ITTP annual work plan. Table 3 reveals the total amount of funds expended for this purpose during the past 4.5 years.

Table 3

JCSS Expenditures for Purposeful Professional Learning Paid to ITTP Participants for the Past 4.5 Years (includes stipends, travel costs, contracts with external consultants)

Expenditures	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	Total
Professional Learning	$41,534	$16,605	$20,496	$20,247	$7,348	$106,230

The purposeful professional learning provided during the implementation of the ITTP program included multiple methods and was facilitated by the contracted external consultant, Dr. Charles Hodges, other external trainers, and by the ITTP Leadership Teacher Leaders. The following professional learning training methods were utilized during the past 4.5 years of program implementation:

- Face-to-Face - One day workshops, after-school workshops, multiple day summer workshops, edCamps, GA ETC Conference, West Georgia RESA Technology Conference

- Online - Google Chat, emails, webinars, online applications
- Mentoring - External consultant meeting with teacher leader team and meetings with the Director of Federal Programs and Professional Learning

A review of the agendas, minutes, and handouts from actual ITTP professional learning sessions, that were facilitated during the past 4.5 years, revealed professional learning topics similar to the work topics shown in Appendix F - ITTP Teacher Leader Team – Work Topics. This variety of professional learning and teacher leader work topics demonstrated the many *moving parts* were working simultaneously to implement the four strategies of the ITTP program.

CIPP Outcomes for Formative Artifacts: Purposeful Professional Learning

An analysis of formative data supporting the purposeful professional learning strategy of the ITTP program revealed two important aspects: (a) The designation of federal funds to pay for participation in purposeful professional learning focused on instructional technology integration, and (b) Planning purposeful professional learning focused on integrating instructional technology into daily classroom practices. Expenditures for professional learning included paying stipends directly to teachers, purchasing supplies and materials for professional learning sessions, reimbursement of travel costs for external instructional technology training, and payment for contractual deliverables for external consulting services. The outcomes revealed through the CIPP evaluation model for the purposeful professional learning strategy include the following:

Context formative outcome. In terms of *what was done,* ongoing professional learning was required for ITTP membership and was provided through multiple methods and covered all themes relevant to the implementation of ITTP.

Input formative outcome. In order to determine *how it was done*, the system allocated a portion of its federal funds to pay for purposeful professional learning. The integration of instructional technology and professional learning became two main focus areas for all federal program funding sources.

Process formative outcome. A description of *what was done* was the system's financial support by paying stipends directly to teachers, purchasing supplies and materials for professional learning sessions, reimbursement of travel costs for external instructional technology training, and payment for contractual deliverables for external consulting services.

Product formative outcome. In terms of *did it succeed*, themes revealed three positive outcomes for the strategy of providing purposeful professional learning for the implementation of the ITTP program:

- Purposeful professional learning required for ITTP membership and equipment distribution;
- Multiple methods of purposeful professional learning with necessary topics covered; and
- Provision of Needed Resources (hardware, software, and professional learning).

Suggestions for improvement of the purposeful professional learning strategy included finding a way to embed ITTP training within regular contract hours in order to decrease the amount of funds needed for professional learning stipends.

Formative Artifacts: Provision of Needed Resources

The ITTP program was one of JCSS's main school improvement strategies. A large percentage of the annual federal programs allotment was spent on the provision of needed resources, which included hardware, software, digital applications, professional learning stipends, supplemental pay for ITTP teacher leaders, funding for contracts with an external

consultant, and salary and benefits for the Instructional Technology Coach position. Four teachers, one administrator, the newly funded Instructional Technology Coach, and the system Director of Federal Programs and Professional Learning agreed to become the leadership team that guided the work of implementing this program.

A review of the ITTP artifacts revealed two important aspects of the implementation of the provision of needed resources for this program: (a) Total expenditures for ITTP program resources and, (b) Evaluation of instructional technology integration based on AdvancED standards.

With the exception of a one-time expenditure of $124,534 of a Special Local Option Sales Tax (SPLOST) funds used to purchase hardware during the 2014-2015 school year, the ITTP program's resources were entirely funded through the system's federal program's department. The level of support for the provision of ITTP resources has been demonstrated by the adoption of ITTP as a federal program's school improvement strategy, the generous amount of federal funds designated for resources, and the extensive work time dedicated to this program by the Director of Federal Programs and Professional Learning.

Table 4 below describes the overall expenditures for hardware, software, digital applications, professional learning stipends, supplemental pay for ITTP teacher leaders, funding for contracts with an external consultant, and salary and benefits for the Instructional Technology Coach position.

Table 4

JCSS Expenditures for the Provision of Needed Resources for the Past 4.5 Year

Expenditures	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	Total

Hardware (Includes SPLOST)	$448,703	$34,748	$60,556	$26,828	$15,670	$586,505
Software	$185,971	$57,647	$83,201	$94,839	$88,849	$510,507
Supplemental Pay	$6,338	$12,181	$7,1651	$5,655	$6,600	$37,999
Professional Learning	$41,534	$16,605	$20,496	$20,247	$7,348	$106,230
ITEC Coach Salary and Benefits	$75,388	$75,876	$76,504	$79,177	$86,589	$393,534
1/4 Salary and Benefits for Federal Programs / Professional Learning Director	$19,080	$24,210	$25,164	$25,914	$29,709	$124,077
Total of All Expenditures						$1,758,852

An external evaluation of the instructional technology integration practices of the Jenkins County School System (JCSS) was completed as a part of the system's 2015 AdvancED External Team Visit. In the JCSS AdvanED External Review Team Findings Report completed in February 2015, the summary findings described the use of technology throughout the school system as demonstrated in classrooms and during interviews with all stakeholders. The External Review Findings Report stated, "Teachers throughout the system were able to explain the use of computer based programs to develop remediation, research, and problem-solving applications.

Teachers also use the computer program to monitor their students' data provided by the software programs."

One of the External Review Team's Powerful Practices for JCSS was for Indicator 4.6. The team's *Powerful Practice* statement was: "Jenkins County School System utilizes a robust infrastructure and implementation of instructional technology", which meets the criterion for Indicator 4.6 - The system provides a technology infrastructure and equipment to support the system's teaching, learning, and operational needs. This was further demonstrated by the Review Team's Score of 3.0 out of 4.0 for this indicator, which is well above the international AdvancED Network Average of 2.64.

CIPP Outcomes for Formative Artifacts: Provision of Needed Resources

An analysis of formative data supporting the provision of needed resources strategy of the ITTP program included a review of the following artifacts: (a) Total expenditures for ITTP program resources and the (b) Evaluation of instructional technology integration based on AdvancED standards. The outcomes revealed through the CIPP evaluation model for the provision of needed resources included the following:

Context formative outcome. Demonstrating *what was done* involved the system providing resources for the implementation of the ITTP program including equipment (hardware), software, professional learning (stipends, supplies and materials, travel, external consultant), leadership (teacher leader pay, ITEC Coach position, and portion of Federal Programs / Professional Learning Director position).

Input formative outcome. In addressing the question of *how it was done*, the system allocated a portion of its federal funds and some local SPLOST funds (hardware only for SPLOST during the 2014-2015 school year) to provide iPads and Chromebooks, and charging

carts for classroom sets of hardware. The system has consistently provided an extensive menu of software and digital applications for teacher and student use for instruction, remediation, diagnostic assessments, formative assessments, and ongoing progress monitoring. Supplemental pay for teacher leaders, a full-time Instructional Technology Coach position, and an external consultant provided ongoing leadership, professional learning, and mentoring services.

Process formative outcome. The system answered the question of *was it done* in regard to providing resources by continuing to purchase additional hardware to continue filling classroom carts to a one-to-one ratio and to repair and maintain current hardware. Additional hardware was purchased to provide the robust infrastructure needed to support the growing network of hardware and software used during daily instructional practices.

Product formative outcome. In *terms of success*, emerging themes revealed five positive outcomes for the strategy of provision of needed resources for the implementation of the ITTP program:

- Hardware resources were provided for individual classrooms based on a continuously updated equipment distribution plan;
- Software and digital applications were provided as requested by each grade span;
- Ongoing purposeful professional learning and support was provided for teachers, para professionals, administrators, teacher leaders, the Instructional Technology Coach, and the Director of Federal Programs / Professional Learning; and,
- An ITTP Leadership Team and an Instructional Technology Coach position was developed, trained, and supported by an external consultant who provided experienced knowledge and guidance during the initial years of implementation for the ITTP program.

Suggestions for improvement of the provision of needed resources strategy included decreasing the dependency on federal monies to fund the hardware, ITTP teacher leaders, and the Instructional Technology Coach position.

Formative Artifacts: Commitment to Intentional Instructional Technology Integration (Planning for Sustainability)

As one of the original program strategies, the commitment to intentional technology integration or the planning for sustainability of the ITTP program has always been at the forefront of the program's implementation and was not inserted as an *afterthought*. JCSS began planning and implementation of the ITTP program during the 2013-2014 school year. The first *written* ITTP plan was developed on chart paper during one of the first ITTP Teacher Leadership Team meetings (See Appendix I – JCSS ITEC Plans)

Incorporating the ITTP program as one of the main focus areas for the federal program's school improvement work provided the stability needed to get ITTP started and supported for the past 4.5 years. Growing the experts in instructional technology through the training received from the external consultant and additional external training demonstrated the system's commitment toward sustaining this strategy as an ongoing school improvement / change strategy. Embedding ITTP into ongoing, job-embedded professional learning within the system created a way to keep the cost low and the visibility level high.

CIPP Outcomes for Formative Artifacts: Commitment to Intentional Instructional Technology Integration (Planning for Sustainability)

An analysis of formative data supporting the commitment to intentional instructional technology integration or the planning for sustainability of the ITTP program included a review

of the following artifacts: (a) The first JCSS ITEC Plan written in 2013-2014, and (b) the current JCSS ITEC Plan revised for the 2017-2018 school year.

Context formative outcome. In terms of *what was done*, commitment to the intentional integration of instructional technology for the implementation of the ITTP program included codifying the process and procedures of this program by developing a written Instructional Technology Plan for JCSS.

Input formative outcome. In demonstrating *how it was done,* the system collaboratively worked to morph that first written plan, which consisted of a few words on a piece of chart paper, to the current thoroughly developed written plan that outlines the present status and future needs of the ITTP program.

Process formative outcome. In terms of *process being done,* the system's ITTP Teacher Leaders worked each year to develop and revise the JCSS ITEC Plan. This document continues to provide an ongoing work plan for the identification of issues that need to be addressed in order to provide the best ITEC culture for the instructional staff and students within the system.

Product formative outcome. *Success was demonstrated* as emerging themes were revealed through the analysis of the first JCSS ITEC Plan and the current JCSS ITEC Plan. All issues listed on the initial plan have been resolved and current needs for the integration of instructional technology have been addressed in the 2017-2018 plan; therefore, the ITECH Plan was deemed a success.

Suggestions for improvement outlined in the 2017-2018 JCSS ITEC Plan include a line item in the system budget to cover the replacement of ink cartridges (one per teacher per year), light bulbs and filters for projectors, Chromebook screens, Chromebook charge cords and headphones. In addition, suggestions included that SMARTboards should be added to Special

Education classrooms, and a rotation for replacement of laptops for all teachers put in place. Additional identified needs included:

- Accessibility of iTunes account for each teacher
- A formal process for communicating the following needs:
    - teachers being aware of purchases
    - delivery of purchases to the school
    - onsite person with password for installing hardware/software
    - notified of current status of materials ordered or purchased
    - help needed (staff) for delivery of hardware / software to designated personnel
    - specific person for inventory needs

Continuing to codify the processes and procedures for a program such as ITTP with this many strategies means relying on feedback from participants to determine what has worked to meet their daily and long-term needs and what needs to be changed. The above list of recommendations for formalizing this process includes a wide span of needs from better communication to additional manpower for assistance with inventory needs. The researcher would recommend that a focus group session to gather additional and specific feedback on each of these issues may provide valuable information on what might work best for the majority of the teachers and para professionals working to integrate technology into their daily instruction. Additional purposeful professional learning should be planned after additional and more specific feedback is gathered to continue improving the system's processes for the long-term sustainability of the ITTP program.

Summative Artifacts

Revealing long-term outcomes of the integration of ITTP will assist JCSS leadership to see the longitudinal impact of a program that has spent almost two million dollars over the past 4.5 years. The initial evaluation of the ITTP program began in 2015 when the researcher completed a qualitative study on the program utilizing data from focus groups conducted with ITTP teachers. During these focus groups, several teachers described a surprising result of students demonstrating more self-efficacy toward their learning and developing more social maturity. Teachers attributed these results to the student's responsibility of caring for and using the Chromebooks for assignments and being able to check their grades every day because of the accessibility to PowerSchool that the hardware now provided to them. Many interconnecting themes emerged during the analysis of the focus group data. Table 5 shows these interconnecting themes and the revealed outcomes from that study.

Table 5

Description of Layered and Interconnected Themes from 2015 Focus Group Data

Increased Instructional Quality ↑				Increased Student Achievement ↑			
Increased Knowledge, Communication, and Motivation of Teachers ↑		Additional Resources Available ↑		Increased Rigor ↑		Focused Instruction ↑	
Information is shared inside and outside of meetings / trainings (face-to-face & via technology)	Renewed passion / positive moral	Revised procedures for equip. purchase and distribution Weeding out what doesn't work	Software used with fidelity Content available anywhere	Vertical Alignment	Social maturity of students	Student Engagement Student self-centered classrooms	Content websites are available for differentiation/ remediation/ progress monitoring

CIPP Outcomes for Summative Artifacts: 2015 ITTP Focus Group Outcomes

During the analysis of the focus group data, two outcomes were revealed: (a) Increased instructional quality; and, (b) Increased student achievement. The findings of the 2015 study provided information that guided school and system processes regarding the purchase and distribution of instructional technology and the implementation of strategy based professional learning.

Context summative outcome. Context summative outcome addresses two important questions: *Were important needs met?; and, Why or Why not?* Based on the focus group responses from the ITTP teacher leaders, their needs for hardware and professional learning were met during the first two years of ITTP implementation. The focus group participants described these outcomes as a result of their increased knowledge, communication, and motivation and the availability of additional resources.

Input summative outcome. Input summative outcome seeks to answer the following: *Was a defensible design employed?; and, Why or why not?* A defensible design was followed. Implementing an instructional technology program designed with specific strategies provided a *road map* for how to make sure all of the various pieces of the program implementation were worked on simultaneously.

Process summative outcome. The process summative outcome responds to the following: *Was the design well executed?; and, Why or why not?* The design of the ITTP program produced results that included increased student achievement, increased instructional quality, and unexpected results such as increased student efficacy concerning their academic success.

Product summative outcome. This outcome addresses the questions of, *Did the effort succeed? and, Why or why not?* The effort did succeed as the system leadership used the evaluation information from the 2015 survey data to fulfill evaluation requirements for federal programs compliance and in order to make informed decisions regarding ongoing expenditures on hardware, software, and professional learning. Suggestions for improving the program included continuing to buy additional hardware so that all teachers would be able to have a full classroom set of Chromebooks or iPads.

CIPP Outcomes for Summative Artifacts: 2017 ITTP Participant Interviews

One of the many strengths of this program evaluation was the collection of both descriptive and qualitative data. While the descriptive data revealed specific information related to formative outcomes, the qualitative data, like those revealed in the interviews, provided summative outcomes. Data for this study were collected from a homogeneous sample of eight ITTP teachers. Data collection, analysis, and interpretation followed Creswell's (2013) guidelines for research utilizing qualitative methods.

For the participant interviews, numbers were assigned for the sake of securing their confidentiality. Responses from the interview participants were electronically recorded and transcribed by the researcher for analysis. After transcribing the responses, preliminary analysis was conducted by reading the database as a whole document and writing memos in the margins of the written database pages. During the coding and analysis of data, the data were organized upward from narrow codes to broader and broader themes. As with the focus groups, these data layering processes provided a more focused and specialized set of findings. The ITTP Interviews revealed the following five specific outcomes which are shown in Appendix J - ITTP Interview Outcomes: (a) Quality professional learning was provided and was relevant to classroom needs;

(b) Teachers integrated instructional technology in ways that increased student learning; (c) Hardware and software were provided as needed; (d) School improvement processes and procedures were impacted by ITTP implementation; and, (e) ITTP has become institutionalized and is in various stages of sustainability.

Context summative outcome. Data from the ITTP participant interviews revealed that important needs were met in the areas of hardware, software, professional learning, leadership support, and positively impacted student learning. One teacher described having some maintenance issues with Chromebooks that seemed to be taking too long to be fixed and returned.

Input summative outcome. A defensible design was employed by the decision of system leaders to remain focused on implementation activities and services within the structure of the four strategy areas. This is especially true of the purposeful professional learning strategy which was the foundational strategy of the entire program.

Process summative outcome. The design of the ITTP program was well executed due to the system's decision to reserve a portion of the federal program's allocations for the provision of program resources (hardware and software), professional learning, and leadership support.

Product summative outcome. Outcomes revealed through the four strategy areas demonstrate a positive impact on teacher planning and instruction, student learning, staff professional growth, and securement of instructional resources; therefore, the effort was deemed successful.

Suggestions for continued improvement of the ITTP program included securing the same level of infrastructure required to sustain the concurrent use of classroom Chromebook sets once the schools are moved into the new P-12th grade facility for the 2018-2019 school year. An

additional *worry* or suggestion expressed by several of the interview participants was to continue maintaining the current number of Chromebooks for each classroom and funds to purchase reserve equipment in order to keep the number of equipment that is currently being used.

CIPP Outcomes for Summative Artifacts: LoTi Assessment Report

The Level of Teaching Innovation (LoTi) Digital Age Survey for Teachers was administered to 116 ITTP participants during June 2017. The current version of the LoTi Survey represents today's classroom conversion from teacher-centered / student compliant instructional practices to the digital teaching and learning practices that promote higher order thinking, actively engage students in learning, and stimulate real-world problem-solving applications. (LoTi Digital Age Profile Report: Created for Jenkins County Public Schools, 2017)

Moersh (2009), the creator of the LoTi framework and the LoTi Digital-Age Survey, explained the close alignment of the LoTi framework with national and international initiatives. Moersh explains,

> Because the LoTi framework is closely aligned with several national and international initiatives, including Daggett's Rigor and Relevance, Marzano's Research-Based Best Practices, and Webb's Depth of Knowledge, the survey results provide the participant an equivalent score (for example, LoTi 4 istockphoto.com/mannisen = Rigor Relevance Quadrant D) and aligned professional development interventions for each of these frameworks. (p.20)

The LoTi Digital Age Profile Report provided information specific to ITTP participants within five separate domains: (a) Levels of Teaching Innovation; (b) Higher-order thinking, Engaged learning, Authentic learning, and Technology use (H.E.A.T.); (c) Other technology & instructional frameworks; (d) Digital age best practices; and, (e) ISTE Standards.

Table 6 provides information regarding the alignment of the four ITTP implementation strategies and the five LoTi domains.

Table 6

ITTP Strategy and LoTi Domain Alignment

Domains	Transformational Leadership	Purposeful Professional Learning	Provision of Needed Resources	Commitment to intentional technology integration - Planning for sustainability.
Levels of Teaching Innovation	X	X	X	
H.E.A.T.	X	X	X	
Other Technology & Instructional Frameworks	X	X	X	
Digital Age Best Practices	X			X
ISTE Standards	X	X		X

Context summative outcome. ITTP leadership recommended using the LoTi Digital Age Survey as an assessment of where our teachers stood compared to industry standards.

Input summative outcome. In order to do this, ITTP participants completed the LoTi Digital Age Survey during their system level professional learning community in June 2017.

Process summative outcome. The system provided financial support by paying a site license to the LoTi Connection in order to receive the LoTi Digital Age Profile. Each teacher also has access to their own personal profile as well.

Product summative outcome. In terms of success, implementation of this survey provided a baseline of where teachers are now within each of the five domains. The plan is to administer this survey at the end of every school year and monitor the results for growth. Jenkins County teachers scored highest in Domain 2: H.E.A.T. and Domain 5: ISTE Standards. The H.E.A.T. metrics that were measured were: (a) Higher Order Thinking; (b) Engaged Learning; (c) Authentic Connections; and, (d) Technology Use. The ISTE Standards Alignment for Teachers metrics that were measured were: (a) Digital Age Work and Learning; (b) Digital Age Learning Experiences and Assessments; (c) Students Learning and Creativity; (c) Professional Growth and Leadership; and, (d) Digital Citizenship and Responsibility. Results from the LoTi Survey revealed the following staff scores as they relate to scores that were below the target score and scores that were at or above the target score:

- Below Target Score (Percentage of staff below target score)
    - Levels of Teaching Innovations – 53.4%
    - Higher Order Thinking – 68.1%
    - Authentic Connections – 62.9%
    - Technology Use – 49.1%
- At or Above Target Score (Percentage of staff at or above target score)
    - Current Instructional Practices – 84.5%
    - Personal Computer Use – 85.3%
    - Engaged Learning – 73.3%

Suggestions for continued improvement of the ITTP program in regard to the LoTi survey were to continue reserving local or federal funds for an annual administration of the

survey, continue paying the site license for access to this report, continue reviewing the results to assist with planning future professional learning, and sharing results with system stakeholders.

Chapter Summary

Reviewing the formative artifacts in relation to their alignment to the four strategy areas of the ITTP program provided a structure for this wide variety of data sets. Each data set produced individual outcomes for their aligned strategy but the following common themes were also revealed when a full review of all formative artifacts was completed:

- Transformational Leadership – Having people in place to support teachers as they learned to integrate technology was an important for teachers to become comfortable enough with the hardware and software to continue trying something new.
- Purposeful Professional Learning – Expecting all staff to continue participating in professional learning focused on instructional technology integration was a mindset change but was critical in the ongoing development of ITTP participants.
- Provision of Needed Resources – The system's dedication to providing the infrastructure, equipment, hardware, and software for staff to use during implementation of the ITTP program was crucial to the success of the program's implementation. Overall, there were few instances where teachers expressed issues with availability and access of resources.
- Commitment to Continuation (Sustainability) – Teachers have expressed concern about the level of functionality that will be available when the system moves to the new P-12th grade facility at the end of the 2017- 2018 school year. This indicates that teachers have long-term plans to continue using instructional technology in their daily instruction.

Reviewing the summative artifacts in relation to the overall implementation of the ITTP program provided specific outcomes for three overarching program evaluation data sets:

- Focus Groups – The two emerging outcomes from the focus group were (a) Increased instructional quality; and, (b) Increased student achievement. Veteran teachers explained that using digital platforms such as Google Classroom had allowed them to be better planners and increase their ability to differentiate instruction in order to meet the individual needs of their students.
- Interviews – There were five outcomes revealed through the ITTP participant interviews. They were: (a) Quality professional learning was provided and was relevant to classroom needs; (b) Teachers integrated instructional technology in ways that increased student learning; (c) Hardware and software were provided as needed; (d) School improvement processes and procedures were impacted by ITTP implementation; and, (e) ITTP has become institutionalized and is in various stages of sustainability. These teachers were very explicit about their opinion that their use of instructional technology had created a positive impact on student learning as demonstrated by the increase in their scores on last year's summative assessments and the level of engagement student's demonstrated when learning by using technology.
- LoTi Digital Age Survey – The information in the LoTi Digital Age Survey will provide a valuable baseline for continued purposeful professional learning for the JCSS ITTP participants who scored well on this survey in the areas of current instructional practices, personal computer use, and engaged learning. ITTP participants will also continue their professional growth in their levels of teaching innovation, higher order thinking, authentic connections, and technology use (by students).

CHAPTER 5

EXECUTIVE SUMMARY

The Jenkins County School System's Innovative Teacher Technology Project (JCSS ITTP) program was born out of necessity. Changing the culture and environment within this poor, rural school system located within a small Georgia county where poverty and economic woes had wreaked havoc on the community and the school system. The system's new mission of *Educating all students for college and careers* became a full-time focus for all instructional and administrative staff.

A best practice that became a priority during this time of organizational change was the implementation of a system-wide instructional technology plan. JCSS had never implemented an instructional technology strategy as a structured program. After reading the relevant research and talking with leaders from other counties, system leaders decided that a key element missing in the implementation of most instructional technology programs was the initial and ongoing professional learning needed for instructional staff to become comfortable with technology and to use it as an integrated part of their daily instructional practices.

The purpose of this program evaluation was to analyze the effectiveness of ITTP by determining the impact of purposeful professional learning on instructional technology integration in daily classroom practices within a small, rural school district in southeast Georgia. This study sought to determine the impact based on the following program strategies: Transformational leadership; Purposeful professional learning; Provision of needed resources; and, Commitment to intentional technology integration (planning for sustainability).

The audiences for this study were stakeholders concerned with the overall effectiveness of the school improvement strategies implemented by the Jenkins County School System. These

stakeholders were: (a) Members of the JCSS Board of Education; (b) the superintendent; (c) school administrators; (d) instructional staff; (e) system program directors; and, (f) P-12 students and their families. Key stakeholders include the instructional staff from both schools totaling 125 teachers and para professionals with a wide range of experience levels. The audience also includes Jenkins County, the community in which the school system serves. JCSS has a major impact on the economy and well-being of this community; therefore, the academic success of the students enrolled in JCSS becomes a milestone for the community's ability to attract new business and industry, and for students to graduate from high school college and/ or career ready.

The intended use of this study was to provide information to assist JCSS in determining the effectiveness of the ITTP program and to make decisions regarding the continued fiscal and human resource support directed toward this program. While ITTP appeared to be working well, it had yet to be determined if the purposeful professional learning that occurred had an impact on daily classroom practices. The Superintendent of JCSS provided a letter of cooperation (see Appendix C - JCSS Letter of Cooperation) that provided the agreement for conducting this study.

The evaluation of the JCSS ITTP program used the CIPP (Context, Input, Process, and Product) Evaluation Model for program evaluation introduced by Stufflebeam (1971). This type of program evaluation was crucial for a school system where an instructional technology program such as ITTP was being implemented. The effective use of resources remains critical for school improvement efforts to succeed. The four types of evaluation of the CIPP model, Context, Input, Process, and Product, were used to assess the JCSS ITTP within each of the four strategy areas. This program evaluation used a logic model based on the CIPP framework to

structure an evaluation process that captured data for both formative (decision making) and summative (outcomes) evaluations in order to judge the program's impact and outcomes.

Reviewing the formative and summative artifacts for this program evaluation provided a generous amount of data. Throughout the analysis of both the descriptive and the qualitative data, there were reoccurring themes that would reveal themselves to be positive outcomes for the JCSS ITTP program. These reoccurring themes would best be described with the outcomes identified from the ITTP participant interviews:

- Quality professional learning was provided and was relevant to classroom needs;
- Teachers integrated instructional technology in ways that increased student learning;
- Hardware and software were provided as needed;
- School improvement processes and procedures were impacted by ITTP implementation; and,
- ITTP has become institutionalized and is in various stages of sustainability.

Along with these positive outcomes, there were also two major areas of concern expressed by the ITTP participants. Their concerns involved the following:

- The availability of the same level of instructional technology integration when relocating to the new school; and,
- The ability to maintain the amount of equipment needed to keep the one-to-one ratio that is now available within each classroom.

The researcher's conclusions and observations during the review of both formative and summative data, as well as teacher and administrator feedback, has provided recommendations for continued integration and improvement of the JCSS ITTP program. These recommendations include the following

- Decreasing the dependency on federal funds for program implementation by including instructional technology as a line item in the local budget, searching for private funding, and applying for private and public grant funds;
- Developing creative ways to embed ITTP professional learning into regular contract time in order to decrease the continued expense of ongoing instructional technology professional development;
- Continue developing processes and procedures for handling day-to-day questions and concerns that arise. In particular, developing a system of two-way communication that addresses who needs to know what, when, and how soon;
- Continue providing school-level support to model and train teachers *in real time* as they are integrating technology into their daily classroom practices; and,
- Continue requiring ITTP training as a system level professional learning expectation.

A review of the literature compiled for this study provides a plethora of information about why instructional technology can engage students, differentiate instruction, and provide methods for more efficient planning, instruction, and assessment. The significant *missing link* provided with this program evaluation was the evaluation of a program that focused on the purposeful professional learning of educators as a pre-requisite of classroom technology distribution.

Researchers like Kouzes and Posner (2007), Bass (1990), Hew and Brush (2006), and Earle (2002) paved the way for linking the importance of leadership and the development of a formalized instructional technology integration program. Other researchers such as Pitler, Hubbell, and Kuhn (2012) summarized technology as an expected part of today's classroom, one which can positively impact the student's learning process by encouraging student driven

learning and training for skills they will need for their future. This program evaluation provides an original contribution to professional literature that links purposeful professional learning with instructional technology integration in the classroom.

Where other studies focus on the importance of providing professional learning as part of an instructional technology program, this study focuses on the strategies needed to develop and maintain an instructional technology program. The impact of this study was the evaluation of the impact of purposeful professional learning on the integration of instructional technology into daily classroom practices. The contribution of this study toward current literature and future studies is the evaluation of a model for implementing a successful instructional technology integration program within a K-12th public school system.

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APPENDICES

APPENDIX A
ITTP EVALUATION LOGIC MODEL
CHANCE 2017
(MODEL BASED ON CIPP EVALUATION MODEL (STUFFLEBEAM, ZHANG 2017

<table>
<tr><td colspan="3">Formative Evaluation Questions:
Context: What needs to be done?
Input: How should it be done?
Process: Is it being done? Why or why not?
Product: Is it succeeding? Why or why not?</td><td rowspan="2"></td><td colspan="2">Summative Evaluation Questions:
Context: Were important needs addressed? Why or why not?
Input: Was a defensible design employed? Why or why not?
Process: Was the design well executed? Why or why not?
Product: Did the effort succeed? Why or why not?</td></tr>
<tr><td>CONTEXT EVALUATION</td><td>INPUT EVALUATION</td><td>PROCESS EVALUATION</td><td colspan="2">PRODUCT EVALUATION</td></tr>
<tr><td rowspan="2">GOALS</td><td rowspan="2">PLANS</td><td rowspan="2">ACTIONS</td><td rowspan="2">ARTIFACTS
(Evidence based demonstration of effectiveness)</td><td colspan="2">OUTPUTS</td></tr>
<tr><td>SHORT-TERM
Participants demonstrate knowledge, skills, attitudes, and opinions regarding instructional technology integration in daily classroom instruction
(Sporadic or Occasional)</td><td>LONG-TERM
Participants implement meaningful changes in their instruction based on the knowledge, skills, attitudes, and opinions regarding instructional technology integration in daily classroom instruction
(Consistent and Ongoing)</td></tr>
</table>

Transformational Leadership **(Developing leadership capacity within local school system with focus on instructional technology.)**	Develop Instructional Technology Teacher Leaders	Selection, training, and sustainability for Instructional Technology Teacher Leaders	Supplemental pay for ITTP Teacher Leaders Agendas, Sign in Sheets, Handouts, and Minutes from ITTP Teacher Leader Meetings	*Outcomes from ITTP Teacher Leader Expenditures* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile total amount spent for supplemental pay for system ITTP Teacher Leaders for the past 4.5 years *Outcomes from ITTP Teacher Leader meetings* **DATA ANALYSIS:** **QUALITATIVE:** Review artifacts and analyze data for common themes discussed during ITTP Teacher Leader meetings held during the past 4.5 years.	*Outcomes from ITTP Focus Group* **DATA ANALYSIS:** **QUALITATIVE:** Review data from Focus Groups and discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Interviews and ITTP LoTi Assessment Report. *Outcomes from ITTP Interview* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from interviews of ITTP participants. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP LoTi Assessment Report. *Outcomes ITTP LoTi Assessment* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from ITTP LoTi Assessment. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP Interviews. *(LoTi – Levels of Teaching Innovation)*https://www.loticonnection.com/loti-framework

	Develop full-time position of Instructional Technology Coach for K–12th grades.	Selection, training, and sustainability for Instructional Technology Coach	Salary and benefits for ITEC Coach position Results from ITEC Coach Effectiveness Survey	*Outcomes from ITEC Coach Expenditures* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile total amount spent for salary and benefits for the ITEC Coach position for the past 4.5 years *Outcomes from ITEC Coach Effectiveness Survey FY17* **DATA ANALYSIS:** **DESCRIPTIVE AND QUALITATIVE:** Compile, code, and analyze data from ITEC Coach Effectiveness Survey.	

Purposeful Professional Learning (Providing instructional technology skill development with hardware, software, online applications, and evidence based ITEC instructional strategies.)	Provide purposeful professional learning for staff on evidence based ITEC instructional practices, software usage, hardware usage, and online applications usage (Example: Google).		Summary of amount paid for instructional technology professional learning for teachers, para professionals, teacher leaders, and administrators for the past 4.5 years (includes stipends, material and supplies, travel costs, and contracts with external consultant).	*Outcomes from Purposeful Professional Learning Expenditures* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile total amount paid for ITEC professional learning for the past 4.5 years (includes stipends, materials and supplies, travel costs, and contracts with external consultant). **DESCRIPTIVE:** Discuss methods and common themes of professional learning provided to ITTP participants during the past 4.5 years.	*Outcomes from ITTP Focus Group* **DATA ANALYSIS:** **QUALITATIVE:** Review data from Focus Groups and discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Interviews and ITTP LoTi Assessment Report. *Outcomes from ITTP Interview* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from interviews of ITTP participants. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP LoTi Assessment Report. *Outcomes ITTP LoTi Assessment* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from ITTP LoTi Assessment. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP Interviews. *(LoTi – Levels of Teaching Innovation)*https://www.loticonnection.com/loti-framework

Provision of Needed Resources **(System commitment to providing needed equipment and digital programs and resources.)**	Identify and procure resources needed to implement seamless instructional technology use for students and teachers (includes hardware, software, supplemental pay for teacher leaders, professional development, ITEC Coach salary and benefits, and ¼ of Federal Program / Professional Learning Director salary and benefits.	Funding for Chromebooks, iPads, Access Points, Servers, Firewalls, Instructional and formative assessment software, inventory program, article platform, training and facilitation fees, stipends, supplies, books, and funding for ITTP Teacher Leaders, Instructional Technology Coach, and partial amount for Federal Program / Professional Learning Director	Actual ITTP expenditures for the past 4.5 years	*Outcomes from ITTP Program Expenditures* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile summary of all ITTP program expenditures for the past 4.5 years. *Outcomes from AdvancED External Review Team* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile summary of data from the instructional technology section of the 2015 JCSS AdvancED External Review Team Findings.	*Outcomes from ITTP Focus Group* **DATA ANALYSIS:** **QUALITATIVE:** Review data from Focus Groups and discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Interviews and ITTP LoTi Assessment Report. *Outcomes from ITTP Interview* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from interviews of ITTP participants. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP LoTi Assessment Report. *Outcomes ITTP LoTi Assessment* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from ITTP LoTi Assessment. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP Interviews. *(LoTi – Levels of Teaching Innovation)*https://www.loticonnection.com/loti-framework

Commitment to intentional instructional technology integration **(Planning for sustainability.)**	Develop annual Instructional Technology Plans for each school Develop job descriptions for ITTP Teacher Leaders and Instructional Technology Coach positions; Plan for future needs and evaluation of program	Plan for ITTP Teacher Leader and Instructional Technology Coach positions; Budget for ongoing training for participants; Budget for additional hardware and replacement hardware; Budget for annual software subscriptions; Budget for annual online applications subscriptions.	Develop and revise system ITEC Plans	*Outcomes from integration of a system-wide ITEC program* **DATA ANALYSIS:** **DESCRIPTIVE:** Compile and summarize data from system's first ITEC plan and current JCSS ITEC plan.	*Outcomes from ITTP Focus Group* **DATA ANALYSIS:** **QUALITATIVE:** Review data from Focus Groups and discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Interviews and ITTP LoTi Assessment Report. *Outcomes from ITTP Interview* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from interviews of ITTP participants. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP LoTi Assessment Report. *Outcomes ITTP LoTi Assessment* **DATA ANALYSIS:** **QUALITATIVE:** Compile, code, and analyze data from ITTP LoTi Assessment. Discuss common themes and revealed outcomes. Compare with outcomes revealed from ITTP Focus Groups and ITTP Interviews. *(LoTi – Levels of Teaching Innovation)*https://www.loticonnection.com/loti-framework

APPENDIX B
ITTP FOCUS GROUP AND INTERVIEW QUESTIONS
CHANCE 2015 AND 201

1) How would you describe the quality of the information received during your participation of this professional learning program?

2) What part of the information that you received was most relevant to your needs?

3) Can you provide examples that demonstrate how teachers utilize more instructional technology in planning and instruction?

4) Can you provide examples that demonstrate how students, in ITTP teachers' classrooms, utilize more instructional technology during classroom learning time?

5) Were adequate resources provided by the school and / or district to support this project?

6) If yes – provide examples of resources provided by the school or district If no –provide examples of resources that were needed, but not provided by the school or district.

7) How would you describe the ways this professional learning program impacted your school's school improvement process?

8) Describe and explain whether you foresee a long term or short-term impact on your school's improvement process.

9) Describe how your school or system's processes and procedures have been altered because of the work related to this professional learning program?

10) What would need to be done to ensure that ITTP has a long-term impact; in other words, what can be done to ensure it is institutionalized

11) What evidence can be provided that participation in this professional learning program has positively impacted student achievement?

12) Is there anything else about ITTP that we have not asked that you would like to add?

APPENDIX C
LETTER OF COOPERATION
JENKINS COUNTY SCHOOL SYSTEM

Jenkins County School System
Vision: Joining Communities and Schools for Success
Mission: Educating all students for college and careers.
Tara R. Cooper, Superintendent
1152 E. Winthrope Avenue • Millen, Georgia • 30442
Telephone (478) 982 – 4305 • Fax (478) 982 – 6002 • www.jchs.com

August 3, 2017

Human Subjects - Institutional Review Board
Georgia Southern University
P O Box 8005
Statesboro, Georgia 30460

To Whom It May Concern,

Julie Chance has requested permission to collect research data from employees of the Jenkins County School System through a project entitled Impact of Purposeful Professional Learning on Instructional Technology Integration in Daily Classroom Practices. I have been informed of the purpose of the study and the nature of the research procedures. I have also been given an opportunity to ask questions of the researcher.

As a representative of the Jenkins County School System, I am authorized to grant permission to have the researcher recruit voluntary research participants from the ITTP - Innovative Teacher Technology Project. Julie Chance is also permitted to collect research data during and after school hours. The researcher has agreed to our only restriction which is to hold the interviews on campus in a place where participants will be comfortable and at ease.

If you have any questions, please contact me by phone at 478-982-4305 or by email at tcooper@jchs.com.

Sincerely,

Tara R. Cooper

Tara R. Cooper, Superintendent
Jenkins County Schools

APPENDIX D
INFORMED CONSENT FORM
ITTP INTERVIEW PARTICIPANTS

GEORGIA SOUTHERN UNIVERSITY

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL LEADERSHIP

Informed Consent Form
ITTP - Innovative Teacher Technology Project Interviews

1. The Principal Investigator for this study is Mrs. Julie Chance, a Doctoral student in the Educational Leadership Department in the College of Education at Georgia Southern University. The Principal Institutions involved in this study are the Jenkins County School System and the Georgia Southern University, College of Education.

2. The purpose of program evaluation is to determine the impact of purposeful professional learning on instructional technology integration in daily classroom practices.

3. For the procedures of this study, we will utilize open ended interview questions with selected program participants. Data will be coded through the qualitative method of restorying. Additional data will be retrieved from program artifacts and analyzed as described in the attached ITTP Program Evaluation Logic Model. Program artifacts will be retrieved from the Jenkins County School System's Central Office located at 1152 East Winthrope Avenue in Millen, GA. The Jenkins County School System Superintendent has already signed a Cooperation Letter.

4. There is minimal risk to participants involved with this study as no sensitive issues or data will be discussed or analysed. An organizational risk may include the decrease of system resources dedicated to technology integration in K-12 classrooms.

5. The benefits of this study include:
   a) Participants may benefit from their participation in these interviews as they reveal their personal and professional experiences of the ITTP program.
   b) Organizational benefits include the possible increase of system resources including professional learning and the purchase of hardware and / or software dedicated to technology integration in K – 12 classrooms.
   c) Societal benefits include the possibility of using this program evaluation to design a model program for effective instructional technology integration into daily classroom practices.

6. Participants will be interviewed by the researcher for approximately one hour. The interviews will take place in the teacher's classroom, the media center, or the central office of the Jenkins County School System. The researcher will allow the interviewee to choose one of these three locations.

7. All information collected and compiled during the research will be held in confidence and all participants' names will be replaced with pseudonyms. Actual names of participants will not appear in any report or publication of the research. During the coding process, participant information will be assigned a code number. The key list connecting a participant's name to the code number and this informed consent form will be maintained in a secure location for a minimum of 3 years following the completion of this study. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of all individuals interviewed for this study.

8. Participants will have the right to ask questions and have those questions answered. Questions about this study should be directed to researcher named above through the contact information listed at the end of this form. Questions concerning your rights as a research participant should be directed to Georgia Southern University Office of Research Services and Sponsored Programs at 912-478-5465.

9. No stipends, credit, or other incentives for participation will be offered to participants. There will be no costs associated with participation in these interviews.

10. Participation in these interviews is voluntary. You are free to refuse to participate or end your participation in this study at any time by verbally notifying the researcher that you choose to no longer participate in this study.

11. If you choose to not participate in this study, there will not be any prejudice or adverse impact on your participation in the ITTP program.

12. All information within this study will remain confidential. One exception to this confidentiality is our ethical responsibility to report situations of child or elder abuse, child or elder neglect, or any life-threatening situation to the appropriate authorities. However, we are not seeking this type of information in this study, nor will you be asked questions about these issues.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. You will be given a copy of this consent form to keep for your records. This project has been reviewed and approved by the GSU Institutional Review Board under tracking number H18064.

Title of Project: Impact of purposeful professional learning on instructional technology integration in daily classroom practices.
Principal Investigator: Julie Chance, 19 Forest Pines Drive, Statesboro, GA 30458, 706-871-0978,
Other Investigator(s): Not Applicable
Faculty Advisor: Dr. Teri Denlea Melton, 3107 College of Education Building, Georgia Southern University, (912) 478-0510,

_____ _____
Participant Signature Date

I, the undersigned, verify that the above informed consent procedure has been followed.

_____ _____
Investigator Signature Date

APPENDIX E
TEACHER LEADER JOB DESCRIPTION
SAMPLE OF ITTP TEACHER LEADER DUTIES AND RESPONSIBILITIES (2016-2017

Jenkins County School System

Vision: Joining **C**ommunities and **S**chools for **S**uccess
Mission: Educating all students for college and careers.
Sample - Teacher Leader Job Description

MINIMUM QUALIFICATIONS AND RESPONSIBILITIES:

1. Be in possession of or working towards an advanced degree or Teacher Leader Endorsement
2. A minimum of two years of successful classroom teaching experience with a minimum TAPS score of "Proficient"
3. Advanced computing skills
4. Possess ability to work well with professional personnel at all levels
5. Demonstrate professionalism at all times

SPECIFIC AREA ASSIGNMENTS:

The Jenkins County School System Teacher Leader will serve as a leadership team member for one of the following Professional Learning Communities (PLC):

I. ITTP PLC (Innovative Teacher Technology Project) Integrating instructional technology into daily classroom practices to increase student achievement.

II. ENGAGE! PLC - (Family Engagement) Planning and implementing strategies for improving family engagement and assist parents as they support their child's learning.

III. Induction - (Newly Hired Teachers & Para Professionals and Teachers with Induction Certificates) Ongoing support for newly hired, newly assigned teachers, and teachers with Induction certificates in the areas of: instructional technology integration, classroom management, time management, data disaggregation and planning, differentiation planning and instruction, formative instructional practices, and family engagement. Educators will be tracked in the Induction program based on experience and instructional technology skill levels.

IV. Literacy PLC - (Standards Based Literacy Strategies) Supporting educators in the use of online tools and resources that facilitate collaboration, content development, and vertical alignment of instruction based on K - 12th grade literacy standards. Focuses on all content areas other than math.

V. Math PLC - (Standards Based Math Strategies) Supporting educators in the use of online tools and resources that facilitate collaboration, content development, and vertical alignment of instruction based on K - 12th grade math standards. Focuses on Math.

VI. FIP PLC - (Formative Instructional Practices) Assists educators in learning how to use formative instructional practices to improve teaching and student learning. A key expectation of FIP is that teachers develop the skills to guide students to take ownership for their own learning. Research has shown that FIP strategies, when used appropriately during teaching and learning, increase student achievement.

***** Assignment to one of these specific PLC areas will be agreed upon by the Teacher Leader and the Federal Programs Director.**

SPECIFIC PLC TEACHER LEADER WORK TASKS:

- **ITTP PLC (Innovative Teacher Technology Project) - Assist PLC Facilitator with assessing, planning, implementing, and monitoring ongoing job embedded professional learning communities:**
    - Collaboratively plans, coordinates, delivers, and documents professional learning for PLC members
    - Maintains confidentiality of student records
    - Keeps accurate artifacts of all professional learning sessions (Agenda, Sign in Sheets, Minutes, and Handouts)
    - Identifies and implements high impact professional practices based on data and root cause analysis
    - Improve student performance by collaborating with teachers to facilitate classroom integration of instructional technology.
    - Provide input and recommendations regarding software purchase and usage
    - Support and monitor increased teacher and student use of instructional technology within the classroom
    - Collaborate with teachers and other instructional staff to develop curriculum materials focusing on integrated instructional technology "best practices" and local needs
    - Conduct action research using professional literature to maintain a high level of expertise in new technologies and instructional strategies
    - Work with teachers and instructional technology staff in the selection of instructional resources that are compatible with the system's capacities
    - Provide professional development for teachers and administrators based on International Society for Technology in Education Standards (ISTE) focusing on teacher and student use
    - Plan and facilitate workshops and activities and provide research-based, relevant materials for all stakeholders
    - Facilitates opportunities for vertical collaboration opportunities within the system
    - Participates in and / or facilitates professional learning including external conferences, seminars, workshops, and presentations as requested by system and school leaders

APPENDIX F
ITTP TEACHER LEADER TEAM – WORK TOPICS
(2013 - 2017)

Hardware Distribution and Maintenance

- Inventory Maintenance / Title I Monitoring Visit
- Mice for Chromebooks
- Keypad Covers for Chromebooks
- Chromebooks
- iPads
- Access Points
- Firewall
- Cables and Wiring
- SMARTboards
- Charging Carts
- Apple TVs
- Headphones

Software Acquisition and Planning

- Software check / eliminate what is not needed
- Moving from Word to Google
- Assistive Technology – Google Read Aloud
- Go Guardian

Technology Support for Teachers

- Teacher Leader Job Duties and Responsibilities
- Tech Resource Website (Tech 4 Teachers by Teachers)
- BYOD Discussion
- Student Google Emails
- Single Login for Students
- ISTE Classroom Observations (peer-to-peer)

Professional Learning

- Tech 20's, 40's, and 60's
- Videoing Tech Sessions (did not get this to work)
- Google Educator Certification (teachers and ITTP Teacher Leaders)
- ISTE NETS Standards for Students and Teachers
- Tour of GSU Technology Rooms
- edCamps
- West GA RESA Technology Conference
- GA ETC Conference

Instructional Technology Plans

- Develop ITEC Plans for System and Schools
- Annual Revision of ITEC Plans for System and Schools
- Community Internet Needs
- AdvancED External Team Report
- Next Steps – Interactive Flat Panels

APPENDIX G
INSTRUCTIONAL TECHNOLOGY COACH JOB DESCRIPTION

Jenkins County School System
Vision: Joining **C**ommunities and **S**chools for **S**uccess
Mission: Educating all students for college and careers.
Instructional Technology Plan
2017 – 2018

Purpose:
The purpose of this position is to improve student performance by collaborating with teachers to facilitate the integration of technology into classrooms and to increase professional learning opportunities for core content teachers.

Minimum Qualifications:

a) Bachelor's degree from an accredited college or university

b) Clear Renewable Teaching Certification

c) Five years of experience as a teacher

d) Working knowledge of research based strategies to increase instructional technology integration into core content classroom instructional practices

e) Candidates must not be on a professional development plan at time of application

Preferred Qualifications:

a) Master's degree from an accredited college or university in a field related to education

b) Documented experience implementing school improvement programs while serving in school administration as Assistant Principal or Principal

c) Documented experience in establishing and developing strategic community partnerships and partnerships with higher education colleges and universities

d) Documented experience with integrating instructional technology into the teaching / learning process

Duties and Responsibilities: Instructional Technology Integration

1. Collaborates with teachers and other instructional staff to develop curriculum materials and lesson plans that integrate technology into core content classrooms.
2. Conducts and coordinates staff training and workshops for staff and administrators to increase knowledge of educational software for successful integration into core content instructional programs.
3. Update school staff and administrators on new *instructional* programs and applications periodically.
4. Ensures that staff members receive assistance with integrating technology into core content classrooms.
5. Develops Instructional Technology training materials.
6. Identifies teachers with specific instructional technology skills to assist with train

7. Trains certificated and classified staff in the use of instructional software.
8. Works with groups of teachers in planning lessons that promote research based practices.
9. Facilitates, coaches, and supports classroom teachers as they infuse technology into the curriculum for students.
10. Works with teachers by modeling the integration of instructional technology strategies within diverse class groupings.
11. Implements best practices related to the use of instructional technology in the schools based on research, pilot programs, and state/national standards.
12. Works with teachers and technology staff in the selection of instructional resources that are compatible with the school technology infrastructure.
13. Provides professional development for teachers and administrators based on technology standards as defined by the International Society for Technology in Education (ISTE) National Educational Technology Society's (NETS) for Students, Teachers and Administrators (NETS – S, NETS – T, NETS – A)
14. Researches and reviews *instructional* technology information.
15. Participates in training and reads professional literature to maintain a high level of expertise in new technologies and instructional strategies.
16. Attends conferences, seminars, workshops, presentations and trade shows relating to Instructional Technology.
17. Participates in meetings, workshops and/or trainings for the purpose of conveying and/or gathering information required to perform job functions.
18. Follows a plan for professional development and actively seeks out opportunities to grow professionally.

APPENDIX H
INSTRUCTIONAL TECHNOLOGY COACH EFFECTIVENESS SURVEY OUTCOME CHART (SPRING 2017)

Description of Interconnected Codes and Themes from the Instructional Technology Coach Effectiveness Survey
(To view, start at the bottom of the chart and move upward.)

Outcomes Revealed from Survey Data:

Providing Professional Learning Opportunities (Also includes supporting teacher learning and usage.)	Providing Assistance and Expertise (Includes being available and accessible to teachers and assisting with data analysis.)	Promoting Availability of Technology and Resources (Includes positively impacting student use of technology.)

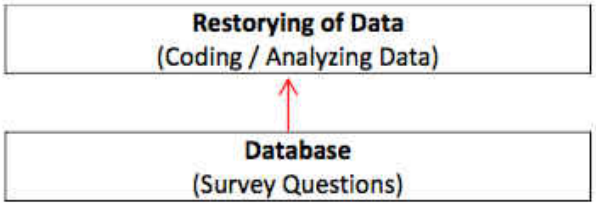
Most Frequently Reoccurring Themes from Top Three Responses for each Survey Question:

Providing Professional Learning Opportunities (172)	Supporting Teacher Learning and Usage (17)	Assisting with Data Analysis (44)	Providing Assistance and Expertise (150)	Being Available and Accessible to Teachers (24)	Promoting Availability of Technology and Resources (132)	Positively Impacting Student Use of Technology (16)

Three Most Frequently Reoccurring Themes Revealed for each Survey Question:

Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8
Providing Professional Learning Opportunities (38)	Providing Assistance and Expertise (44)	Providing Assistance and Expertise (30)	Assisting with Data Analysis (44)	Providing Professional Learning Opportunities (52)	Providing Professional Learning Opportunities (46)	Promoting availability of Technology and Resources (38)	Providing Assistance and Expertise (18)

Promoting availability of Technology and Resources (22)	Available and Accessible to Teachers (24)	Promoting availability of Technology and Resources (19)	Promoting availability of Technology and Resources (25)	Promoting availability of Technology and Resources (11)	Promoting availability of Technology and Resources (13)	Providing Professional Learning Opportunities (26)	Providing Professional Learning Opportunities (6)
Promoting availability of Technology and Resources (22)	Available and Accessible to Teachers (24)	Promoting availability of Technology and Resources (19)	Promoting availability of Technology and Resources (25)	Promoting availability of Technology and Resources (11)	Promoting availability of Technology and Resources (13)	Providing Professional Learning Opportunities (26)	Providing Professional Learning Opportunities (6)
Supporting Teacher Learning and Usage (17)	Providing Professional Learning Opportunities (4)	Positively Impacting Student Use of Technology (16)	Providing Assistance and Expertise (13)	Providing Assistance and Expertise (9)	Providing Assistance and Expertise (12)	Providing Assistance and Expertise (24)	Promoting availability of Technology and Resources (4)

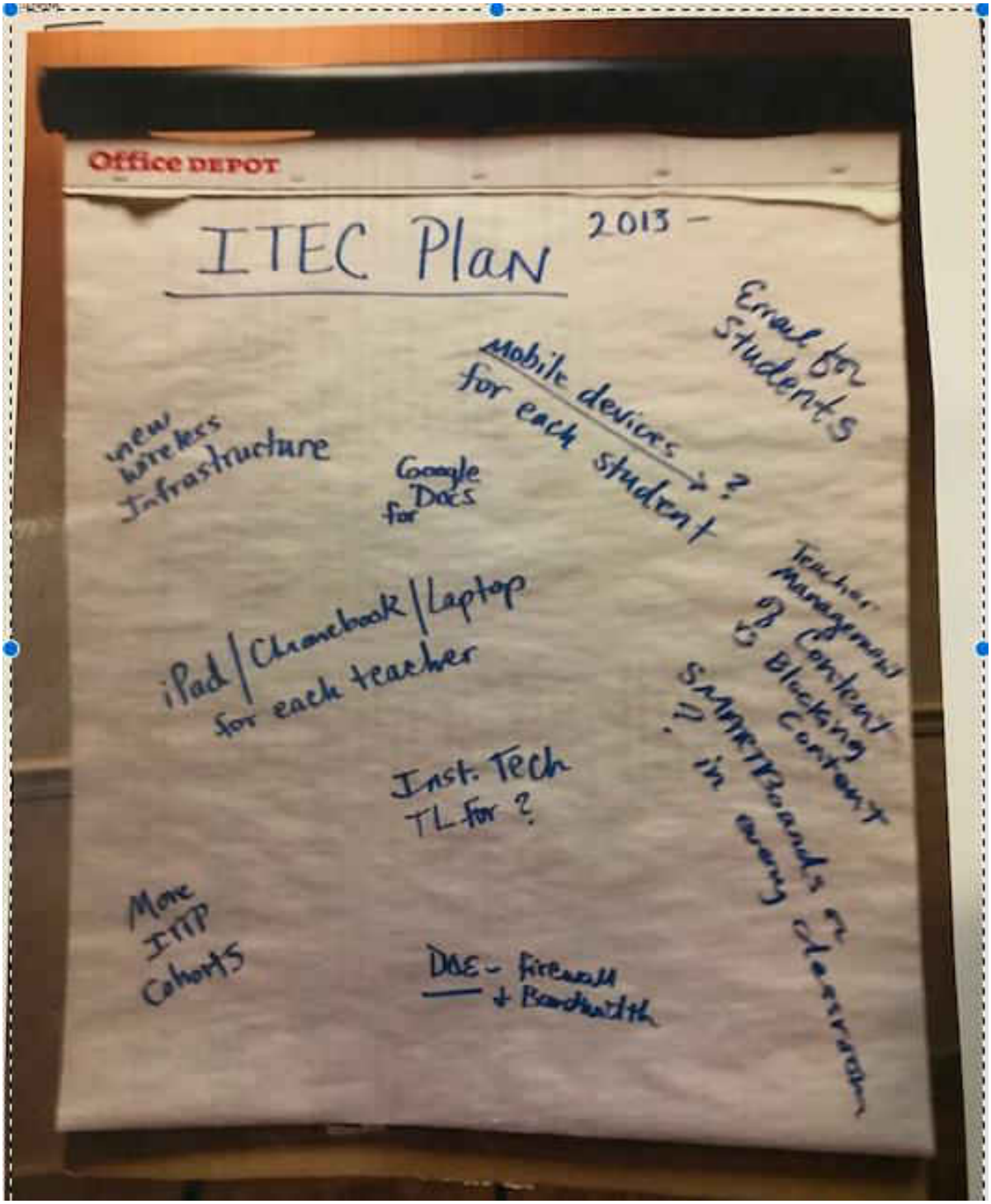


The eight survey questions from the Instructional Technology Coach Effectiveness Survey were:

1. How does our system demonstrate support for ongoing instructional technology integration into daily classroom practices?
2. How does the work of the Instructional Technology Coach support the implementation of instructional technology integration in all content areas and or grade levels?

3. How does the work of the Instructional Technology Coach support using highly effective, research-based instructional practices that positively impact student learning?
4. How does the work of the Instructional Technology Coach support using data analysis to differentiate instruction and meet specific learning needs of students?
5. How does the work of the Instructional Technology Coach provide ongoing differentiated professional learning for teachers?
6. How does the work of the Instructional Technology Coach support participation in job-embedded professional learning?
7. Explain how the Instructional Technology Coach position has provided additional resources to support continuous school improvement?
8. Please provide other comments that may assist us in improving the work of the Instructional Technology Coach?

APPENDIX I
JCSS ITEC PLANS
(FIRST PLAN 2013 – 2014 AND CURRENT PLAN 2017 - 2018)



Jenkins County School System

Vision: Joining **C**ommunities and **S**chools for **S**uccess
Mission: Educating all students for college and careers.

Instructional Technology Plan
2017 - 2018

A. Summary of Conditions:

Located in rural southeastern Georgia, Jenkins County is home to approximately 8,922 residents. Jenkins County has been particularly hard hit by the economic downturn affecting the state and nation. One of the system's major barriers for academic achievement is its high poverty percentage of over 70% system-wide. In 2015, the median household income in Jenkins County, GA was $24,604 which is a decline of 14.89% from the 2014 amount. The number of available jobs in 2015 also witnessed a - 4.95% decline over the previous year.

The Jenkins County School System (JCSS) has been affected by the economic downturn. The system has had to absorb an estimated $3.5 million-dollar reduction in state and federal revenue sources over the course of the past five years. A reduced tax digest, lack of industry, and high unemployment have severely limited the amount of local funding that is available to offset state and federal reductions. Despite the dire financial situation that it is facing JCSS is committed to providing the best education possible for its students.

JCSS has a student population of 1,150 students in P--12th grades within two schools: Jenkins County Elementary School (P--5th grades) and Jenkins County Middle--High School (grades 6th--12th). Demographics of the student population included the following: Black (604); White (435); 66 Hispanic; 39 Multiracial; 5 Asian / Pacific Islander; 1 American Indian / Alaskan Native, as well as males (585) and females (565). As of May 2017, enrollment included: 328 students in P--2nd grades; 281 in 3rd--5th grades; 233 in 6th--8th grades; and 308 in 9th--12th grades. There are 210 people employed by the school system: 118 certificated and 92 classified.

During the 2009-2010 school year JCSS sought and received District Accreditation through AdvancEd. This process was repeated during the 2014 - 2015 school year. During these past five years, we have continued to expand our system's strategic planning process and have moved beyond compliance to continuous improvement. We are a system that is proactive in meeting the needs of our students and have fully embraced utilizing data-driven decision making and collaboration in order to move our system forward.

The Jenkins County School System participated in a system-wide AdvancED External Team Visit during February 2015. One of the External Review Team's Powerful Practices for JCSS was " A robust infrastructure and implementation of instructional technology." (Indicator 4.6). This was demonstrated by the Review Team's Score of 3.0 for this indicator which is well above the international AdvancED Network Average of 2.64.

The JCSS System Improvement Team (SYIT) is composed of 42 system and administrators and teacher leaders. During last year's System Improvement Team workshop, each school collaborated to compile the system's comprehensive needs assessment and district improvement plan.

JCSS has implemented the Georgia Standards of Excellence (GSE). With this implementation, instruction has moved toward student centered performance based instructional tasks and increased instructional technology integration. Teacher use of instructional technology has increased due to an expansive professional learning program for instructional technology.

These professional learning opportunities are based on improving both teacher and student use of technology in order to increase student engagement for students and increase efficiency for teachers. Teachers and students have access and are utilizing the following during instruction: SMARTBoards, thin client labs, mobile devices such as Chromebooks, iPads, and laptops, web-based curriculums, and formative assessment programs, Google Drive, emails, teacher and student created websites, web based parent information sites, and a web-based student information system.

Teachers are integrating instructional technology as part of the required components of the new Teacher Evaluation System. Some of the standards for which teachers are assessed that lend themselves to expanded use of technology include differentiation, communication, academically challenging environment, positive learning environment, assessment uses, instructional planning, instructional strategies, and assessment strategies.

Students use of instructional technology has increased as teachers have become more comfortable integrating it in their classroom instructional practices. Students utilize technology for research, communication, student created performance tasks, and for publishing and sharing their work. JCSS currently uses technology to supplement and extend its curricular offerings. Some of the programs used throughout the system are Reading Eggs, Reading Eggspress, Math Seeds, Starfall, Accelerated Reader, Moby Max, iReady, BrainPOP and BrainPOP Jr., USA

TestPrep, My Path, MyOn, Newsela, and SchoolCity. JCHS uses the e2020 computer-based program for remediation and credit recovery. Additional courses and some Advanced Placement (AP) courses are offered through Georgia Virtual School.

JCSS must continually seek ways to utilize technology as a means to improve the rigor and relevance of our students' education. We appreciate that increasing a student's academic background knowledge is one of the most important aspects of student achievement. This can only be done through wide reading and exposure. Due to budgetary and geographical constraints, the JCSS must rely on technology to bring the rest of the world to our students. Teachers utilize digital books, core content video streaming and video conferencing to introduce topics, deepen understanding, provide visual pictures, and meet other students from around the world. JCSS will continue to explore various technology platforms to broaden its instructional offerings.

B) Current ITEC Reality:

It can be overwhelming to think about the type of change we want to embed in our system through this project. Does purposeful instructional technology integration in K – 12 classroom instructional practices increase student engagement? The answers to this question will supply crucial information for our system as we move forward with raising the bar for rigor while lowering the fiscal bottom line for one-to-one mobile devices for students. Making this change as part of our system's ongoing processes is motivated by our desire to provide our teachers and students with the support they need in order for student achievement to improve.

As technology has exploded within the world of academics, so has the opinions of educators as to if, why, how, and by whom it should be used in regard to planning, implementing, and evaluating everything from individual student learning to system and statewide strategic planning. As we adopt the use of more and more technology, we need to determine three things:

a) Are we implementing our protocols and procedures with fidelity

b) Are we supporting teachers through appropriate professional learning opportunities

c) Are we allowing sufficient time for peer networking while planning for instruction

In other words, are we doing more than just buying the hardware and software and "sticking" it in the classrooms? Our system's departments have collaborated to increase the purposeful professional learning for teachers by embedding ITTP (**I**nnovative **T**echnology **T**eacher **P**roject), into all system Professional Learning Communities. ITTP is the culmination of

our district's cross departmental planning for implementation of a purposeful professional learning program. The vision was simple: Honor the willingness of teachers to integrate instructional technology into their daily classroom practices. The Jenkins County School System has prioritized the need for integrating instructional technology in order to increase student engagement and improve academic achievement. This goal is a collaborative effort between all departments of our system. Specifically, the Information Technology, Federal Programs & School Improvement, Professional Learning, and Curriculum / Instruction / Assessment departments. All EOG and EOC testing is conducted online using TestNav browser-based test engine. Administrators, teachers and students appreciate the ease of use and quick feedback with scores.

C) Accessibility of Hardware

Jenkins County Elementary School has two stationary computer labs and Jenkins County Middle / High school has three stationary labs, only one of which is available to all teachers. This lab has twenty-five computers. The other lab is used for Business Education and consists of twenty-eight server based Thin Client student computers.

The lab used for business-oriented classes, provides students a variety of desktop publishing and productivity software including available hardware devices such as digital cameras, scanners, projectors, and SMARTBoards.

The instructional computer lab is available for teachers to reserve for whole classes to complete Internet research, utilize available software curriculum, develop media productions, and login to USA Test Prep to practice core content skills. Teachers use the Google Apps and a variety of other online resources, such as, Quizlet, Nearpod, QuizIzz, Kahoot, Create-a-Graph, Khan Academy, Webquests, Google Classroom, and others.

All core content teachers currently have SMARTboards, projectors, teacher laptops, a teacher Chromebook, and a classroom set of Chromebooks. Eagle Academy consists of eighteen ChromeBase computers for student use. Eagle Academy students complete online graduation test practice using Edgenuity Software. With this software students obtain credit recovery units for courses they were not able to successfully complete.

Teacher Leader group members and ITTP participants have Chromebooks and/or iPads as an initiative to increase teacher use of technology in planning and implementation. The

amount of student use of these devices is somewhat limited due to the number available in the classrooms.

Interactive presentation software is changing in the marketplace. We currently have Smart Technology Notebook software that works seamlessly with the classroom SmartBoards. New software may be web-based which would allow us to use different interactive equipment from any location. This plan is vague since the available solutions are being introduced and changing as continually. Over the next year we will continue to monitor and evaluate the best fit solutions for teacher-student needs.

We need replacement bulbs for the projectors, headphones for all student workstations, and ink or toner for all printers.

- Other needs will include increased training and use of School City.
- Our needs for interactive software and training may change if there are major changes in the market availability of the current materials.

We strongly feel that teachers should be able to bring and use their own devices on the school's network. Several teachers have their own devices and would like to use those devices at school.

D) Variety and Accessibility of Software

English Language Arts

- My Path
- MyOn
- USA Test Prep
- SchoolCity
- Smart Notebook software
- Turnitin
- Newsela
- ReadnQuiz
- MobyMax (K-8th grades)
- Reading Eggs (K-2nd grades)
- Reading Eggspress (3rd-5th grades)
- Starfall (K-2nd grades)
- Accelerated Reader (K-5th grades

- iReady (K-5th grades)

Math

- KUTA
- My Path
- MyOn
- Newsela
- USA Test Prep
- SchoolCity
- Pearson Envision
- Smart Notebook software
- MobyMax (K-8th grades)
- MathSeeds (K-5th grades)

Science

- USA Test Prep
- Smart Notebook software
- MyOn
- Newsela
- SchoolCity
- MobyMax (6th - 8th grade only)

Social Studies

- USA Test Prep
- Smart Notebook software
- MyOn
- Newsela
- SchoolCity
- MobyMax (6th - 8th grade only)
- Storyworks / Scholastic

Vocational

- Microsoft Office
- LAN School Management System
- Smart Notebook software

- SchoolCity

E) Internet / Broadband Capacity

Our Internet/Broadband capacity meets or exceeds state and federal guidelines this year and provides an optimal user experience for computer based learning, rich internet media and assessment platforms. Teachers were able to stream content videos without interruption. The increased bandwidth also aided the administration of the EOGs and EOCs.

F) Professional Learning Needs

Professional instructional technology support is provided to all teachers through their professional learning communities. Teacher Leaders and the School Improvement Specialists receive additional training which is redelivered to all teachers through PLCS and after school training sessions. Topics for these professional learning sessions include SmartBoard techniques, Google Suite offerings, hardware, software, and digital applications. All teachers are provided opportunities to attend external ITEC training through edCamps, MakerSpace workshops, and other ITEC workshops offered in neighboring counties. Stipends are paid for participation in these external trainings. Core content teachers need continuing professional learning using school wide software including PowerSchool, Google Drive, Edgenuity, Turnitin, USA TestPrep, and SchoolCity.

Continued support from outside professional technology specialists will be shared with teacher leader groups and then redelivered to all teachers. Teacher workshops and Tech sessions will be used for training. Professional Learning needs identified as of current time:

- School City
- Google Doc
- Powerschool

G) Internet / Broadband Capacity

To explore communication channels to further teacher and student collaboration efforts. Diagnose and remedy instances of internet blackouts. Teachers also need to have an avenue to address immediate tech support in the instance of a complete technology/internet failure during a lesson. For example, the teacher's administrator should have a way to contact technology department to get immediate help

H) Plans for Future Implementation:

Technology supplies should be added as a separate line item in the system budget to cover the replacement of ink cartridges (one per teacher per year), light bulbs and filters for projectors, Chromebook screens, Chromebook charge cords and headphones. Headphones replacement needs should be reduced if students are encouraged to bring their own for classroom use. Smartboards will be added to Special Education classrooms. A rotation for replacement of laptops for all teachers will be put in place. Additional identified needs include:

- iPad Minis available for checkout for use in the classrooms.
- Accessibility of iTunes account for each teacher with an IPad **/** Process/procedures/funds for purchasing apps for iPads.
- Headphones needed for each iPad and Chromebooks purchased, classroom computers, and future computer labs.
- Sound cards in all classroom computers.
- Purchase bulbs for replacement in projectors.
- Electronic checkout process for laptop carts. (computer lab also?)
- United Streaming compatibility with Chrome
- A formal process for communicating the following needs:
    - teachers being aware of purchases
    - delivery of purchases to the school
    - onsite person with password for installing hardware/software
    - notified of current status of materials ordered or purchased
    - help needed (staff) for delivery of hardware / software to designated personnel
    - specific person for inventory needs

APPENDIX J
ITTP INTERVIEW OUTCOMES
(OCTOBER 2017)

Description of Interconnected Codes and Themes from the Instructional Technology Coach Effectiveness Survey

(To view, start at the bottom of the chart and move upward.)

Outcomes Revealed from Interview Data:				
Quality professional learning was provided and was relevant to classroom needs	Teachers integrated instructional technology in ways that increased student learning	Hardware and software were provided as needed	School improvement processes and procedures were impacted by ITTP implementation	ITTP has become institutionalized and is in various stages of sustainability

Questions 1, 2, 11: Information and Professional Learning	**Questions 3, 4** Teacher Usage and Student Learning	**Questions 5, 6:** Resource Distribution	**Questions 7, 8, 9:** School improvement / processes and procedures	**Questions 10:** Institutionalized / Sustainability
Restorying of Data (Coding/Analyzing Data) **Data Set** (Interview Questions)				