6-2019

Creating A Systemic Approach To Technology Integration Through Job-Embedded Professional Growth

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CREATING A SYSTEMIC APPROACH TO TECHNOLOGY INTEGRATION THROUGH JOB-EMBEDDED PROFESSIONAL GROWTH

Andrew P. Kohl

Educational Leadership Doctoral Program

Submitted in partial fulfillment

of the requirements of

Doctor of Education

In the Foster G. McGaw Graduate School

National College of Education

National Louis University

March 17, 2019

A THREE-PART DISSERTATION:

ONE-TO-ONE LEARNING: SUCCESS FACTORS FOR MEANINGFUL TECHNOLOGY INTEGRATION

CREATING A SYSTEMIC APPROACH TO TECHNOLOGY INTEGRATION THROUGH JOB-EMBEDDED PROFESSIONAL DEVELOPMENT

ESTABLISHING A PROGRAM FOR TEACHER MICROCREDENTIALS TO SUPPORT INDIVIDUAL PROFESSIONAL LEARNING: A POLICY ADVOCACY DOCUMENT

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4/23/19

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This document was created as *one* part of the three-part dissertation requirement of the National Louis University (NLU) Educational Leadership (EDL) Doctoral Program. The National Louis Educational Leadership EdD is a professional practice degree program (Shulman et al., 2006).

For the dissertation requirement, doctoral candidates are required to plan, research, and implement three major projects, one each year, within their school or district with a focus on professional practice. The three projects are:

- Program Evaluation
- Change Leadership Plan
- Policy Advocacy Document

For the **Program Evaluation** candidates are required to identify and evaluate a program or practice within their school or district. The "program" can be a current initiative; a grant project; a common practice; or a movement. Focused on utilization, the evaluation can be formative, summative, or developmental (Patton, 2008). The candidate must demonstrate how the evaluation directly relates to student learning.

In the **Change Leadership Plan** candidates develop a plan that considers organizational possibilities for renewal. The plan for organizational change may be at the building or district level. It must be related to an area in need of improvement, and have a clear target in mind. The candidate must be able to identify noticeable and feasible differences that should exist as a result of the change plan (Wagner et al., 2006).

In the **Policy Advocacy Document** candidates develop and advocate for a policy at the local, state or national level using reflective practice and research as a means for supporting and promoting reforms in education. Policy advocacy dissertations use critical theory to address moral and ethical issues of policy formation and administrative decision making (i.e., what ought to be). The purpose is to develop reflective, humane and social critics, moral leaders, and competent professionals, guided by a critical practical rational model (Browder, 1995).

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ABSTRACT

This change plan employs Wagner's (2008) change leadership model to assess culture, context, conditions, and competencies of a small suburban school district and to develop a systemic plan for implementing job-embedded professional development in the area of technology integration. However, this plan is meant to be applicable to all content areas. This plan is informed by data that I collected as part of my program evaluation of a one-to-one technology program and also applies additional survey data and interviews with building principals, to examine staff attitudes towards professional development and understanding of instructional coaching models. Using this plan, I hope to move the Grove School District towards a more inclusive and relevant approach to professional development. I also hope to use this plan to build a consistent and common vision for and language about professional development among district stakeholders. Finally, I analyze the change levers of data, accountability and relationships in regard to developing a plan for job-embedded professional growth, as well as a plan for evaluating and evolving the change.

PREFACE

In my current role of Director of Educational Technology in my district, I work closely with teachers, specialists and administration, developing curriculum, reviewing resources and planning professional development. This is a difficult process, since there are many competing interests in a district, making demands on teacher time and attention. Changes have to be communicated to staff very clearly and coupled with critical support and professional growth resources. Otherwise, teachers can become fatigued by the number of initiatives they need to address and unable to focus deeply on anything. A district needs to establish routines that shepherd in changes in a way that is supportive and considerate of the work teachers need to do.

In addition to my administrative work, I have also served on my district's Staff Development Committee, and have been included in many conversations about professional learning in the district. Teachers hope for more of a process in the planning, delivery and evaluation of professional development in the district. They also hope for more opportunities for professional collaboration in the district, both between classroom teachers and instructional specialists. In order for these changes to become reality, the district's culture needs to change. Leadership needs to become more inclusive in how it plans professional growth, inviting more voices and opinions into the conversation. Teachers also need to become more open collaboration with one another and less "siloed" in their own classrooms. The desire for this shift was one discovery that I made during my program evaluation (Kohl, 2018)

I hope that this change plan can expand upon the discoveries of my program evaluation and suggest a path by which my district can evolve it's curriculum planning

and staff development models, empowering teaches and encouraging them to innovate and grow together, benefiting all students in the district.

ACKNOWLEDGEMENTS

I would like to acknowledge my wife and children for all of the sacrifices that they made in helping me complete my doctoral degree. For the many early mornings, late nights and days that I was off writing or attending classes, they have been patient, supportive and inspiring to me. I could not have completed this work without them. All my love and appreciation to Karen, Caleb and Maddy.

Thank you to Dr. Brian Wegley and all of the members of my school district's administrative team. Thank you also to my Board of Education and every teacher who took the time to honestly inform my work. You inspire and challenge me every day, and help me to be a better colleague and educator.

Thank you to my dissertation chair, Dr. Gloria McDaniel-Hall for the time she has taken to guide me in my work. You have been patient with me as I've worked, and encouraging throughout. Thank you also to Dr. Jason Stegemoller, for your insight, feedback and encouragement. You have both helped me to be a better writer and researcher, and this work has been possible because of your example.

Finally, I wish to acknowledge my NLU cohort classmates, especially Dr. Scott Carlson and Lauren Schulman, who never gave up on me and continue to inspire me to learn and grow. You are both amazing. Thank you.

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SECTION ONE: INTRODUCTION

Background

In his book, The Global Achievement Gap, Tony Wagner (2012) makes the statement "and so our schools are not failing. Rather they are obsolete" (p. 17). Wagner goes on to point out several areas where conventional education is underserving students, as well as strategies and resources which may help schools to reimagine themselves and the experiences they provide for students. The purpose of this change plan is to develop a strategy for increasing the integration of technology into the core curriculum and classroom instruction of The Grove School District. The proposed strategy seeks to employ best practices in job-embedded professional development and learning theory to grow educators' mindsets in how they view technology use in the classroom, as well as to develop a clearer philosophy for teaching and student learning in the 21st century.

In 2011, The Grove School District began a pilot of a one-to-one learning environment, in which the district gave every fifth-grade student a tablet device to use for the school year. The district provided teachers with several weeks of professional development in various curricular areas related to technology, and teachers spent time adapting the curriculum and developing routines and guidelines around the use of classroom technology. Throughout the year, teachers spent professional development time with leadership and technology specialists, reflecting on the program and building capacity for additional grades to join the pilot.

The pilot program grew steadily in the years that followed, adding sixth grade in 2012, and providing additional professional development throughout the expansion. During this time, parent engagement also became a priority, and the district held several

events for parents, discussing digital literacy, citizenship and 21st Century Learning. In 2013, Grove added all middle school students (grades 6-8) to the program, moving it out of the pilot phase and into a full-scale implementation. The district added third and fourth grades to the program in 2014, and the one-to-one learning program remains a 3-8 initiative for Grove. In addition to robust support from building leadership, the district continues to support the program through district funding, as well as a dedicated technical support staff of three technicians, two certificated instructional specialists and a Director of Educational Technology.

During the time that Grove evolved its one-to-one program, The Common Core curriculum for Mathematics and English Language Arts was also released, along with revised state tests to better assess these new curricula. This change caused Grove to initiate a complete review of both its Math and Language Arts curricula. The massive curricular change that this undertaking represented created a need for more professional development in both these core areas. Simultaneously, teachers continued to adjust to other new building initiatives and instructional practices. Ronald Heifetz discusses the "productive zone of disequilibrium," which articulates leadership's need to maintain the level of change so that people can understand it and be productive within it. For the Grove School District leadership, The Common Core resulted in many competing professional development interests throughout the schools, including technology integration (Heifetz, Grashow, & Linsky, 2009).

Douglass Reeves (2006) describes initiative fatigue as attempting to utilize the same amount of time, money, and emotional energy to accomplish more and more objectives. Eventually, in Grove, noticeable initiative fatigue began to grow among the

building staff. Teachers would become irritated at the introduction of anything "new," and some individuals became vocal about "waiting out" any new changes that the district introduced.

As the one-to-one program entered the 2016-2017 school year, teachers continued to use technology in the classroom, and surveyed teachers were vocal about wanting to keep the program in place moving forward. However, professional development for the one-to-one program became less systemic and focused, and the conversations around technology integration remain inconsistent.

As Michael Fullan (2011) states in his book, Change Leader, "realized effectiveness is what motivates people to do more" (p. 45). In any change movement, momentum is dependent upon people seeing the benefits of what they are doing, and being inspired to move the change forward. As Grove's one-to-one program grew in size, additional curricular initiatives competed for teacher time and attention and obscured the apparent effectiveness of any individual program. This confusion created fatigue among teachers which slowed the motivation to integrate more deeply and meaningfully. While recent staff surveys evidence an appreciation for the district's many technology resources, there is a need to reconnect with teachers and re-establish a vision for technology as a catalyst for learning and a platform for student engagement.

Problem

While technology integration in Grove District has grown in ways that have fostered technology use and instructional benefit, the current structure of curriculum and professional development inhibits opportunities to extend digital literacy experiences deeply into the core curriculum. It is also difficult to foster teacher and student

innovation with technology. In Grove's recently developed strategic plan, the primary goal of the district is to "create rich learning experiences and dynamic environments that promote student growth, build a culture of innovation and prepare students to be productive global citizens." Technology can play a critical role in realizing this goal and transforming classrooms. In order to truly evolve learning in the district, a collaborative approach to professional growth, as well as curriculum development, is needed. Through the use of Wagner's 4Cs framework, Grove can identify its challenges and strengths, and move towards becoming a district with a clearer view of its professional growth needs in all areas of study, including technology, as well as having a culture that approaches professional growth as a collaborative and collegial endeavor. A core component of this change in professional growth is a well-articulated and commonly understood approach to collaboration, instructional coaching and job-embedded professional learning.

Rationale

In his digital book, Why School, Will Richardson (2012) states that schools were built upon a fundamental premise that teachers, knowledge, and information were scarce. He adds that this is no longer the reality. As technology makes information easily accessible in a moment's notice, the shift needs to be less about teachers revealing knowledge to students, and more about helping students learn to curate their knowledge and apply the appropriate information in the appropriate situations. Tony Wagner (2012) expresses similar ideas to this when he states "rather than worry so much about graduating all students college-ready, I have come to understand that the most essential education challenge today is to graduate all students innovation-ready" (p. 2). The Grove School District began their one-to-one learning initiative with a similar goal: to connect

students to information and create opportunities for them to create, communicate, collaborate and innovate. This phrase was the mission presented to the board of education when district leadership introduced the program, and Tony Wagner's writings helped initiate the conversation.

When working with teachers at the start of the one-to-one initiative, as well as during earlier technology-focused professional development, the TPACK framework by Koehler and Mishra (2009) was a foundational framework for the discussion. The TPACK framework expands on Schulman's concept of pedagogical content knowledge but adds technology as an additional component. In TPACK, as the graphic below describes, each of these three components influences the others and are part of a coherent instructional conversation. At Grove, the framework was instrumental in professional development conversations and in framing technology integration for teachers. TPACK helped teachers as they considered the use of technology – making it another variable to consider, just like pedagogy and content knowledge. The use of this model allowed technology to become an essential factor when planning instruction and reviewing content. For some teachers, it remains a reference point in the conversation.

As other professional growth priorities began to take precedence and compete with technology integration for time and attention, TPACK became less of a consistent focal point in professional conversations. Because of this shift in professional development time, there is a growing inconsistency among teachers regarding a clear philosophy for the integration of technology into instructional practice. This inconsistency has been most prevalent in the area of English/Language Arts, where the curriculum has undergone the most revision. When technology integration specialists

have been able to meet and collaborate with classroom teachers, they have noted the difficulties of not having a common language with teachers around technology practice. This program represents an attempt to help Grove to identify the needs that exist in teacher support of technology integration. Once identified, the district can build an approach to professional learning that addresses those needs. The process begins with an examination of the one-to-one program and the district approach to professional growth that supports it.

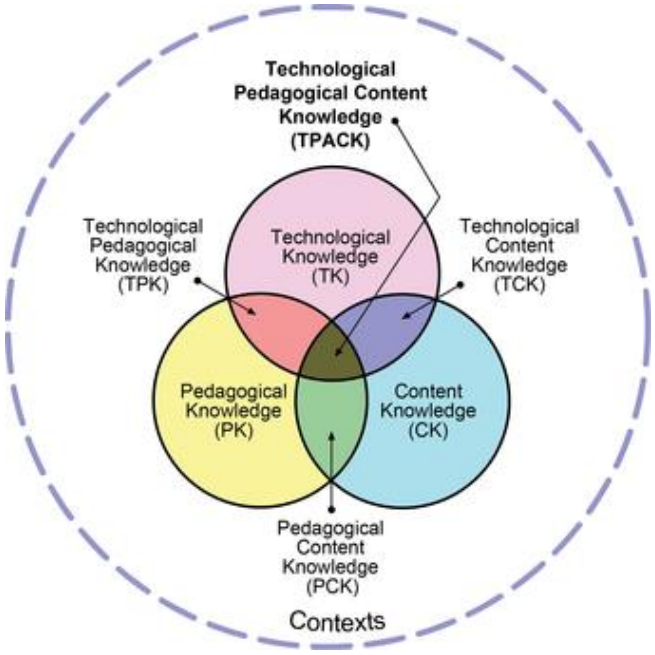

Figure 1. The TPACK Framework (Koehler & Mishra, 2009)

Looking at the Grove School District's one-to-one initiative from a student perspective, the program intended to create opportunities for students to access information, create digital artifacts, evidence their learning in new ways and experience the power of digital publishing as a learning experience. Research has suggested that students who create and publish digitally performed better in areas of language usage, critical thinking, and learning motivation (Yang & Wu, 2012). Grove intends that these

digital learning experiences add value to traditional literacy and create new opportunities for students to apply their knowledge in new contexts. Much like the introduction of the TPACK framework, cultivating these approaches to technology integration requires a reexamination of teacher knowledge of technology and curriculum, as well as a new engagement with staff through job-embedded professional learning experiences. It is still Grove's goal to create "innovation-ready" students, and it is time for the district to refocus their efforts in this area.

I have been teaching in the area of instructional technology since 1998 when I began to experiment with student blogging and digital storytelling practices. Since then, I have worked as an English teacher, technology integration coach, technology coordinator, and director of educational technology. I have seen, first hand, the power of digital learning experiences and how it can add tremendous value to the curriculum. Technology has the potential to reach students who have previously seemed unreachable and to give them a voice.

I have also seen the challenges that exist in integrating technology into the curriculum in a meaningful way. While frameworks like TPACK can give structure to planning and curriculum development, technical knowledge and skills also present challenges for schools. Many school efforts around technology professional development have lingered in the area of technical training. Trainers show teachers how to use programs, iPads and AV equipment as if teaching the device was immediately going to result in meaningful integration. Frameworks like TPACK invite the conversation to go deeper than the technical level and provide a roadmap for coaching conversations to take place between colleagues regarding technology, and how integration can transform the

classroom experience. However, in order for those conversations to take place, it has always been essential for the specialist to understand the teachers' view of professional growth, as well as their needs as a learner. When I worked as a technology specialist, I sought to understand where teachers were, concerning their thinking on the topic of technology integration, as well as how comfortable they were with using technology in the classroom. Once understood, both of these areas can be cultivated through a job-embedded coaching relationship. I have seen this approach work with many colleagues, and I feel that a change program focused on making this model an embedded part of The Grove School District's learning culture could bring the one-to-one initiative, as well as curriculum and instruction, to new heights.

However, a move towards instructional coaching requires openness towards professional collaboration, as well as a clear vision for what job-embedded professional development, or coaching, should resemble. Like most districts with a one-to-one technology program, The Grove School District has "pockets of innovation" that occur in some classrooms. In some cases, this may be a teacher who understands integration and works closely with the technology specialists to create a vital learning space for students. Alternatively, it may be a single lesson or unit that captures the power of technology in the classroom. Regardless of the product, these teachers and classrooms serve as powerful examples of a new way of teaching and learning. Currently, as Grove District teachers remain focused on their classrooms and reluctant to invite outsiders into their "domain," teachers who desire more professional collaboration have difficulty in sharing what they know, for fear of disrupting the culture. Previousy, I have worked with innovative teachers who were ignored by other teachers and, in rare cases, shunned and

discredited by colleagues. The learning culture and mindset that sustains a coaching model is not an overnight fix, but Grove has the opportunity to use the one-to-one program as a means of shifting the approach to curriculum planning around tech integration, which may open the door to this model becoming the norm for all instructional conversations.

The focus of this change plan intersects with several conversations that are happening in The Grove School District right now. The District leadership team has begun to discuss the creation of an instructional coaching program, and are looking at a model that would best serve our teachers, as well as one that would fit the expectations that this model would bring for teachers, coaches, and administrators. The district has had several conversations, and has begun an examination of how we use our professional development time and who has a voice in determining our professional development needs. I would introduce this change plan as a way of collecting and reviewing data to inform this conversation, providing details and dispositions towards job-embedded professional growth.

This change plan exists as an outgrowth of the program evaluation that I began, evaluating Grove's one-to-one program (Kohl, 2018). As Grove entered the sixth anniversary of the one-to-one program, I wanted to engage with teachers to learn what parts of the program have proven to be useful to them and which components needed additional support and attention. Teachers were invited to share their impressions of the program, successes that they experienced and challenges that they faced. This change plan cannot occur in isolation, and the voices, and involvement of teachers, administrators and students help to move the program, and district, forward.

Goals

The goal of this change plan is to create a system of targeted professional learning and instructional coaching to foster technology integration in The Grove School District. The plan will be created with input from teachers and instructional leaders. Over the past five years, the district introduced and fostered a one-to-one learning environment in third through eighth grades, as well as robust technology environments in the primary grades. During this time, conversations about technology and instruction gained traction and resulted in some transformative experiences in classrooms. However, the professional development demands of new curricula shifted the conversation away from integrating technology. If a change is not proposed to help teachers re-engage with technology integration in their planning and practice, the momentum that has been generated by the one-to-one learning initiative will be lost. This regression would potentially have a ripple effect that would undercut innovation in all areas of the curriculum. Most important, it could potentially remove an engaging, motivating and effective instructional tool from student's hands.

Setting

The Grove School District is a northern Illinois suburban district, near the shores of Lake Michigan, just outside Chicago. It is a Pre-K-8 school district, with two elementary schools (PK-5 and 1-5) and a middle school (6-8). For the 2015-16 school year, 76.8% of Grove students met or exceeded expectations on the PARCC examination, and 76.3% met or exceeded expectations on all state tests.

The racial makeup of The Grove School District is approximately 65.6% White, 0.4% Black, 3.6% Hispanic, and 27.6% Asian and the remainder from other races. The racial makeup is relatively equal at all three schools. Attendance in Grove is made of students from two neighboring communities. Both communities occupy a similar socio-economic status, and a recent survey of parents revealed that over 99% of families have internet access at home.

Average class sizes in Grove is approximately 22 students per class, with Kindergarten classes being approximately 18 students per class. Grove offers full-day Kindergarten classes. The pupil to teacher ratio for the district is approximately 12.4 students to each teacher. The district has a 0.0 chronic truancy rate, and an attendance rate of 95.8. Grove's teaching staff is 95% White, and 5% Asian. Over 83% of teachers have a master's degree or above. The teacher retention rate of the district is 93.4%.

This organizational change plan for professional learning and technology integration acknowledges the makeup of our student body and the expectations of our community. Knowing the access that students have to technology at home, for entertainment, information, and communication, it is essential to consider the guidance that these students need in learning technology literacy, as both a means of crafting a message and also critically reading online texts. The skills that Tony Wagner describes as necessary for students are equally necessary for students in Grove, and I hope to integrate those skills and experiences into the district's excellent curriculum to prepare students for the future, as lifelong learners and responsible citizens.

SECTION TWO: ASSESSING THE FOUR C'S

In his book, Change Leadership, Tony Wagner (2012) introduces a framework by which change can be looked at systemically, and a leader can more easily identify challenges and goals. Wagner's 4 C's framework identifies four areas that a leader should assess and consider when planning for change: context, culture, conditions, and competencies. Using Wagner's framework, a more in-depth look at Grove's instructional technology program, its professional learning vision, and its leadership structure will help to provide a more in-depth view of the system in which this change plan is endeavoring to build capacity.

Context

The Grove District is fortunate to support a high-achieving student body, as well as a community of supportive parents with high expectations for the programs that their children are experiencing. Parent and student feedback data evidences a focus on achievement and a desire for cutting-edge educational programming. Grove also has a very stable staff of highly-qualified teachers, most of whom have advanced degrees. Grove hires very few teachers without previous teaching experience. Most teachers who get hired in Grove complete their careers in the district.

In the area of educational technology, Grove has a reliable infrastructure, as well as access to many instructional resources for teachers and students. A partnership with the neighboring high school district has equipped Grove with affordable access to a high-speed internet connection. This access has fostered an environment where access to media, video conferencing and ubiquitous access to Wi-Fi is expected in our schools. Through collaboration with teachers and leadership, Grove has curated a collection of

online tools to enhance the curriculum. These tools include a Learning Management System (LMS), Google Apps for Education, online access to student textbooks and student blogging and portfolio sites.

The Grove School District's Staff Development Committee formed in 2010, with the intent to encourage teacher input and collaboration between schools and administration. Another goal was to better define goals and practices in professional learning. The committee, chaired by the Assistant Superintendent for Curriculum and Instruction and with representation from teachers and administrators from all schools, meets approximately every month to plan staff development days and assess the needs of staff. In recent years, professional learning opportunities that the committee develops have become less collaborative between stakeholders, and are often generated by leadership with less teacher input. This change to the planning process has resulted in committee members feeling less empowered, disenchanted with the committee and asking for more of a voice in the professional learning conversation.

Grove's curriculum review committees have also evolved into a more "directed" approach to curriculum development. Before the introduction of The Common Core in 2009, when a curriculum underwent review, groups of district teachers, along with specialists and led by administration, would examine the existing mapped curriculum and look for gaps or redundancies. Then, groups of teachers would meet to review the curriculum and re-align and revise the content. More recently, the administration has begun to make many of the curricular decisions themselves, occasionally with outside consultants and smaller groups of teacher representatives. Later, staff receives professional development about how to deliver the content to students, with the

assistance of outside consultants or a "train the trainer" model. Survey data suggests that District teachers would like more clarity about the review process and better communication about changes in the curriculum they are delivering.

Culture

Grove's mission statement states that "we exist to create a community that craves learning, fosters resiliency, and cares deeply for every child." This description of the district culture is very apt, and it is a mission statement developed through deep thought and discussion. The Grove School District is a culture that is deeply rooted in traditional learning but also has a desire to embrace innovation and "cutting edge" practices. Educators, students, and parents all place high value on learning and are very supportive of the schools. The district, due to its small enrollment and geographic size, has a history of healthy communication, and parents, students, teachers and administrators regularly interface with one another about questions and issues.

While communication between staff is frequent, collaboration between teachers is less so. Many teachers choose to remain focused on their classrooms and do not go out of their way to share what they know or observe their colleagues. Recent focus group data suggests that some teachers desire more collaboration and a chance to learn from their colleagues, but for some teachers, this is an intimidating prospect and they will need support in shifting their perspective on professional collaboration. Recently, a lab classroom program at the elementary schools has attempted to shift this culture, toward one where colleagues regularly observe and learn from one another. Two teachers at each elementary school have opened their classrooms to colleagues for guided observations of English/Language Arts lessons. While these experiences have been very

positive and well-received, other teachers have not yet sought out the opportunity to share their practicr in new lab classroom opportunities, and the program has not expanded over its two-year existence.

In the area of technology, while there are innovation and integration examples in all of our schools, Grove still lacks a clear and consistent vision about the use of technology in the classroom. While this conversation began several years ago, using the TPACK framework and through the curriculum review process, shifts in professional learning and curriculum review have caused the discussion around technology to backslide, leaving questions and uncertainty from staff. Technology Integration Specialists still work with teachers in developing their technology use in the classroom, but time constraints and competing priorities make it difficult to assure work with every teacher. Despite this, however, teachers and leadership still see value in the use of technology and a desire for more clear direction about its use in the classroom.

While Grove prides itself on the quality of the educators that it hires, recent comments from teachers, during a book study in the district, revealed a feeling that they did not feel free to innovate in their classrooms. I believe that this is reflective of the volume of change that has happened over the past five years, where new initiatives and curriculum changes resulted in a large number of top-down decisions being made with less communication and engagement. Grove teachers are high-achieving and have very high expectations for themselves, and we need to work harder to keep them informed and involved in the changes we seek so that they have a deeper understanding of and commitment to the change.

Conditions

Wagner et al. (2006) defines conditions as the "visible arrangements and allocations of time, space and money" (p. 102). Grove is a well-funded district, with many qualities that can serve as a foundation for student learning and achievement. The district is well-resourced, and all classrooms have access to a variety of materials. The district has a reliable and stable technology infrastructure, and the district has invested in digital resources that every teacher may utilize. The one-to-one initiative itself represents a consistent program, giving every student easy access to technology for learning. In addition to these resources, the district has hired two technology integration specialists. The technology integration specialists are certified teachers who act as professional resources for all three schools. They provide support for teachers and students, as well as partake in instructional planning with teachers.

While the presence of technology integration specialists is a terrific opportunity for teachers, time becomes a challenge, as there is a difficulty for teachers and specialists to find common planning time to work together. This is also a common challenge for math, science and differentiation specialists, as they also strive to build capacity in classroom teachers.

As was mentioned previously, the district lacks a clear vision for technology use in the classroom. When the one-to-one program began, some of those conversations occurred during the curriculum mapping and review process, as educators were explicitly asked to determine where technology could be applied to various subject areas. As the curriculum planning process became more top-down and less collaborative, those conversations were taken out of the process, making it more difficult for there to be

common discussions about technology and literacy. This condition is both a function of time and a shift towards a more directed approach to curriculum and professional learning.

Competencies

Wagner et al. (2006) describes competencies as the "repertoire of skills and knowledge that influences student learning" (p. 99). Grove is blessed to have a highly-educated and stable staff of motivated teachers. The district's schools are staffed with educators who are committed to children, and most students come out of the district prepared to excel in high school and beyond. As we prepare students for the future, 21st Century skills, many of which Tony Wagner discusses in his writing, need to become a larger part of the curricular conversation. Using the Partnership for 21st Century Skills as a framework, along with ISTE's NETS framework, district leadership should seek to help staff build their competencies around designing instruction that provides experiences for students in the areas of creativity and innovation, critical thinking, problem-solving, collaboration, and information literacy (Trilling & Fadel, 2009). Currently, staff lack clear, consistent competencies in these areas, and these concepts are not explicitly discussed within the structure of our curriculum maps. More important, while teachers and administrators may acknowledge that these skills are important, this acknowledgement has not translated into prioritizing them within curriculum planning or professional growth.

Technology integration needs to be part of all conversations with teachers, including the conversations that principals have with teachers as part of their evaluation process. Currently, principals and other evaluators have not developed a common

understanding of what instructional practices involving 21st century learning skills should look like in a classroom observation. This may send a message to teachers that these experiences are not understood by leadership or valued by them. A common language and vision around 21st Century learning would allow evaluators to include these ideas in conferences with teachers, and also foster consistent learning experiences for students. This would also create more need for these conversations in professional learning.

Finally, as Grove looks to build an instructional coaching program that transcends technology and functions across the curriculum, clarity and consistency about that program needs to be cultivated among administrators and teachers. Currently, teachers, administrators and specialists have an inconsistent knowledge of a coaching model, as well as the responsibility that each party has in a coaching program. Building this clarity and capacity among staff will lead to a higher chance for a sustainable program, and will also ensure that the coaching experiences that occur are more meaningful for both teachers and specialists.

SECTION THREE: RESEARCH METHODOLOGY

Research Design

Building upon my evaluation of Grove's one-to-one technology program (Kohl, 2018), my second-year change plan seeks to look at how a clearer vision for job-embedded professional learning can create more opportunities for meaningful technology integration and teacher innovation. Similar to the methodology of my program evaluation, this change plan will also utilize a mixed-methods approach to data analysis. By definition, "mixed methods" is an approach that employs both quantitative and qualitative data. As Wagner (2012) writes, qualitative data can play a critical role in illuminating key insights and tracking the validity of change efforts. Quantitative data may also shed light on key facts and measures, while relying strictly on things that can be counted. These data sources converge to create a more complete picture of Grove School District, as well as the conditions under which the change plan will operate.

Patton (2008) discusses the practice of *triangulation* between data sources, considering how well one data source supports or relates to another. This process contributes to the knowledge generating process, where multiple data sources combine to clarify each other and contribute to a more fulsome vision. For this change plan, my mixed-methods approach consisted of online surveys, focus group discussions and interviews with principals. Teachers were given two surveys, one about professional development and another about the one-to-one technology program. These data establish a baseline of information about teacher attitudes and dispositions. The qualitative data, then, adds dimension to the measurable data, sometimes contributing a context or a disposition to the answer.

Participants

This change plan brings together an array of district voices, as it attempts to create the conditions for a job-embedded professional learning program. The Grove School District staff development survey, a seven-question survey with two open-ended response prompts, was given to every teacher in the district, grades K-8. Sixty-seven of a possible 140 teachers responded to the survey link and shared their feelings on the survey. In addition to this survey, 28 teachers in grades 3-8 responded to the online survey link, regarding the one-to-one program.

The support and professional development of teachers who work in a one-to-one environment involves many stakeholders, including principals, technology specialists, and district administrators. This change plan's qualitative data will engage participants from three schools in The Grove School District, grades K-8. To inform this plan I will utilize focus group interviews with 18 educators who currently teach in one-to-one classrooms for this district, grades 3-8. The focus groups were conducted in Spring of 2017, as part of my program evaluation data collection. The focus group participants were evenly divided, with nine middle school teachers and nine teachers from grades 3-5. The teachers involved were also from different grade levels and experience levels. However, all of the participants had at least three-years of teaching experience in the district. The middle school participants included math, English, science and social studies teachers.

I also conducted individual interviews with building principals from Grove's one-to-one schools, who work with and evaluate teachers in the one-to-one program. The principals all come from differing levels of administrative experience, nine, twelve and

twenty years respectively. Two principals work in elementary school buildings and the third principal leads the middle school.

Both quantitative survey data and qualitative interview data will serve to develop a more in-depth view of the district's vision of technology integration, as well as current and desired approaches to professional learning and instructional coaching.

Data Collection Techniques

The baseline qualitative data for this plan was collected from two sources. First, I administered a survey to teachers who taught in Grove's one-to-one classrooms in grades 3-5, regarding technology integration and support for Grove's one-to-one program. Sixty-five teachers were asked to participate in the survey and approximately 43% (28 teachers) completed the survey. Teachers were asked a combination of multiple choice and Likert-style questions, constructed around the Florida Center for Instructional Technology's Technology Integration Matrix (see Appendix D), a framework that describes various levels of technology integration in the classroom. These questions surveyed attitudes toward instructional technology, as well as questions about their use of instructional technology in their classroom, and their feelings towards technology professional development and leadership in the district. In addition to this survey, I will also utilize data from a professional development survey, which was taken by 67 teachers in spring 2017. All Grove teachers were given the opportunity to respond to this survey and about 48% (67 teachers) responded to the survey. This survey included five multiple choice questions about staff development, as well as two open-ended response questions. Both surveys will provide a critical foundation regarding teacher attitudes towards technology integration and also towards current professional learning in the district.

In addition to these data, I collected qualitative data through focus group interviews with 18 teachers in the one-to-one program and also through individual interviews with three building principals. Teachers participated in the focus groups, grades 3-8, to set the context for the change plan and to understand the perceived vision behind one-to-one learning and professional development in the district. Teachers were asked questions about their observations of how students utilized technology in the classroom, as well as how they felt the district supported the program through curriculum and professional development. Next, three principals were interviewed individually, to discuss their attitudes towards technology integration in the classroom and also professional development in the district. Finally, these interviews engaged principals about their knowledge of and support for instructional coaching.

The data collection described occurred during the 2017-18 and 2018-19 school years within a northern Illinois public school district. All participants signed a confidentiality agreement before participating in the survey, interview or focus group. The agreement detailed how their data will be collected, analyzed and maintained. All participant names will be anonymous throughout the research, and any personal experiences that are shared will be held confidentially. These data were collected with informed consent, and any personal information that is shared will be held in confidence. Ultimately, these data will help to add dimension to the conditions, context, competencies, and culture of the district, and help to inform strategies and actions that can further the change plan for technology integration and job-embedded professional learning.

Data Analysis Techniques

The quantitative data was collected through an online form. The collected data was then reviewed for incomplete or empty responses, which were eliminated. The survey data was then analyzed using counting and coding of responses, as well as calculating the frequency, percentages, and averages of responses. These calculations were displayed using charts and tables through the Data Hero tool within Survey Monkey. The data was examined to determine teacher responses regarding attitudes towards staff development and technology integration. The data also looked for indicators regarding how well the district has communicated with teachers, regarding technology integration and staff development.

Also, open-ended responses were collected on the staff development survey. These answers were reviewed, grouping the comments into themes and using them to provide greater depth and context to the survey questions.

Audio recordings of the focus groups and individual interviews were transcribed and coded. As Strauss and Corbin (1997) describe as part of their Grounded Theory Methodology, the coding process is an in-depth, process that involves reviewing data multiple times and looking for themes that emerge from the data. After establishing the themes through open coding, the interviews will be reviewed again to determine statements that relate to the identified themes (Charmaz, 2006). The power of this approach will be the way in which this method allows some themes and contexts to emerge independently from any existing preconceptions.

The qualitative data that is collected will comprise mostly of open coding and analysis of interview transcripts, looking for themes and keywords. These inductive data

will be used in conjunction with previously collected online survey data to look for alignment with identified factors of technology integration, one-to-one learning, and professional development, as well as for connections between the perceptions of leadership and the responses of teachers. Through this triangulation of data, all of the sources of data that I'm employing will contribute to a deeper sense of Grove, and a clearer direction for the change plan.

SECTION FOUR: RELEVANT LITERATURE

Connecting Program Evaluation with a Need for Change

The 2017 National Educational Technology Plan update highlights the challenges that exist for schools, in helping educators learn how to teach with technology and keep themselves current in the latest technologies and practices. The plan emphasizes that professional development for teachers needs to be job-embedded and available just in time (NETP, 2017). Technology Integration, with a focus on the one-to-one classroom environment, was the subject of the program evaluation which led to this change plan (Kohl, 2018). In Kohl's program evaluation, the author explored the success of a one-to-one technology program, including the role that professional development and administrative support played in this success. In the literature review for this program evaluation, professional development, especially the role of coaches, mentors, and colleagues, was often cited as a significant success factor in one-to-one programs. Due to the dynamic nature of technology, and the shifting pedagogies that accompany its use in the classroom, research that accompanied this program evaluation suggests that the best professional development for these environments are those who are targeted, relevant to the teacher's area of instruction, and collaborative in its nature (Mazzella, 2011; Shapley, Sheehan, Maolney, & Caranikas-Walker, 2010; Silvernail & Buffington, 2009; Storz & Hoffman, 2012). The program evaluation sought to use this body of research as a base to connect directly with educators in the one-to-one program, to assess how their attitudes towards technology affected their teaching in a one-to-one classroom. The evaluation also reviewed the role that professional development played in the success of the program, specifically how effective technology integration specialists and job-embedded

professional development had been for teachers in the program. It emerged that, for teachers in schools that had a technology specialist in the building, teachers were more familiar with a collaborative coaching relationship and took advantage of these individuals for their professional learning. For other teachers, their views of technology-focused professional growth were much more transactional, contacting the specialist when they needed a resource or tool, but not for co-planning, feedback, and collaboration (Kohl, 2018).

Foundations of Job-Embedded Professional Development

As a core philosophy of adult learning and professional growth, Drago-Severson (2004) defines growth as increases in cognitive, emotional, and interpersonal capacities which allow teachers to adjust to the complexities of the profession. As these capacities increase, a learner can shift their perspectives and also achieve a deeper level of self-knowledge. Drago-Severson (2008) Identifies four "pillar practices" to support transformational learning in adults. Teaming provides opportunities for adults to work together with a common focus and goal. Leadership roles allow teachers to share authority and ideas with principals and colleagues, deepening their perspectives and knowledge. Collegial Inquiry brings teachers together with a common purpose and a charge to share ideas, research, and ideas. Finally, mentoring, or coaching is a more private way for teachers to share expertise and work together. All of these pillar practices are dependent on the personalities involved and the relationships that result, but they also provide excellent potential for authentic, deep learning. It is also important to note that Drago-Severson's practices are all rooted in a job-embedded approach and not a method of learning that exists outside of the professional environment.

This approach is consistent with the results of a study conducted by Bush (1984), looking at teacher transfer of instructional strategies from workshop to practice. Bush's study discovered that approximately 95% of educators adopted the strategies that they learned in a workshop if they were also provided additional site-based support for their work. The study also revealed that the percentage of teachers who applied the newly-learned skills were doubled when they received modeled support on-site.

In 2003, Truesdale looked more closely at coaching, to determine if teachers who were peer-coached would transfer new knowledge to their classroom practice at a higher level than non-coached teachers. Truesdale's research confirmed this hypothesis, with non-coached teachers showing very little application of new knowledge from workshops, as opposed to those who received follow up coaching from a mentor.

The term "coaching" has several different applications and definitions. Coaching roles can evolve organically in an organization, among teacher leaders, or they can be part of an organized initiative with more strictly defined roles (Taylor, 2008). Instructional coaching models can also utilize many titles and approaches, including cognitive coaching, literacy coaching, technology coaching, peer coaching, or a hybrid of these approaches. The coaching approach defined by Jim Knight (2007) is the definition being applied in this change plan. Knight defines the theoretical framework of coaching as "a partnership between coaches and teachers, for the purpose of learning and development." This partnership is governed by several partnership principals which are the following:

- Equality: Teachers and coaches are equal partners.
- Choice: Teachers should have a choice regarding what and how they learn.

- Voice: The coach and teacher need to have respect for the other's voice and perspective.
- Dialogue: Teacher and coach need to strive for authentic dialogue with one another.
- Reflection: Personal reflection is a crucial part of the coaching relationship.
- Praxis: Teachers should apply their knowledge to their professional practice as they are learning.

According to Knight (2013), effective coaching is reliant on an impact cycle, which involves a teacher working with their coach to identify and understand a goal for their professional development, learn with the coach through a variety of experiences that might include modeling, co-teaching or even video analysis. Finally, the objective is for the teacher to improve by reflecting with the coach and considering new areas of growth that emerged from the coaching experience. The nature of the coaching cycle is to build a more self-reflective teacher and a culture of continuous improvement.

Success Factors for Instructional Coaching

In addition to the presence of a defined coaching cycle, several additional factors affect the success of an instructional coaching program. Knight (2011) stresses the importance of communication skills in an instructional coach and the ability of the coach to build a healthy, trusting relationship with the teachers they support. As Knight writes, "We have found that coaches are more effective when they have particular communication skills and habits. Effective coaches usually are good listeners, ask good questions, build emotional connections, find common ground, build trust, and redirect destructive interactions" (p. 37).

Along with communication skills, Knight (2007) points to the need for a coach to be a leader in their building. Knight is quick to draw a distinction between his vision of leadership and the idea of a strong, directive personality. Knight describes coaching leadership as being a mix of "humility and ambition, a desire to provide service that is at least as powerful as the drive to succeed" (p. 129).

While there are many identified benefits of instructional coaching, including personal growth and improved communication, there is also a risk with the framing of any instructional coaching program that the coach may be considered an evaluative position (Mangin & Stoelinga, 2011). In cases when the introduction of instructional coaching coincides with the introduction of a new initiative or practice, the coach can risk becoming an informal evaluator of teachers, providing input to the administration on the degree of success that a program is having or identifying any difficulties that might be affecting program buy-in (Stoelinga, 2010). These risks underscore the importance of distinguishing the coach's role from any supervisory role and providing a clear focus for their work. As Killion (2008) writes, "When coaches' work is so expansive, the potential exists that they will take on too many roles and, as a result, dilute the impact of their work" (p. 9). It is the work of leadership to clearly define the role of a coach and be stewards of their presence in the building.

The role of the building principal in the success of instructional coaching is essential. As instructional leaders in their building, the principals can identify the use of coaches as a critical component of professional learning, and they can also understand how this impacts student achievement. Principals can support coaching by communicating the importance of coaching to their staff and participate in coaching

themselves. As Knight (2011) writes, "if a principal does not speak out about the value of coaching, something needs to be changed, or a coach will struggle to succeed" (p. 87).

Beyond the structural and philosophical factors that affect the success of a coaching program, a viable program must also have time for teachers and students to work together. The time concern can either be because of a lack of common planning time, or an ill-defined instructional coaching role. A survey of over 2000 instructional coaches revealed that many of them are given so many non-coaching tasks to accomplish in a day, that they often do not have time to meet with teachers (Knight, 2007). Principals and district administration need to establish an expectation for the amount of time that and coach spends coaching, and avoid assigning other tasks that do not support this time allotment.

Professional Development for Technology Integration

As Koehler and Mishra (2009) illustrate in their PTAC framework, technology integration is a complex instructional decision and requires thought and consideration. To this end, professional development is an essential component in the successful integration of technology into instruction. Penuel's (2006) review of one-to-one technology programs identified professional development as an essential success factor. Penuel singled out targeted and job-embedded professional development as the most effective and preferred way of learning for teachers in a one-to-one program. This conclusion was supported by Kohl (2018) as feedback from teachers in a one-to-one program attributed the presence of a technology integration specialist as a catalyst for their comfort with technology and their willingness to try new things in the classroom.

In his research, Mazzella (2011) concluded that before teachers can effectively integrate technology in the classroom, they must have professional development that both familiarizes them with technologies and also allows them to change their habits and preconceptions about teaching and technology. Technology professional development needs to move beyond technical knowledge, and equip teachers with the skills to easily provide students with the unique learning experiences that technology invites. As Knight (2012) also writes, "teachers should be more concerned with using technology as a tool that is integrated effortlessly into classroom instruction rather than teaching about the technology itself" (p. 53).

Schrum and Levin (2013) examined the professional development practices at three excellent 21st century learning schools and identified impactful characteristics of these programs. They made note that the presence of a technology "coach" to work with teachers as a mentor was a typical role. The coach would not only orient teachers to the technology but also model the planning and delivery of instruction, followed by co-teaching. This approach to coaching built trust between teacher and coach, and also allowed the coach to identify areas of need and development in the staff. Schrum and Levin also cited that administrators in these schools created opportunities for exemplary teachers to be leaders for their peers, sharing their knowledge and leading professional development.

Simmons and Martin (2016) research into one-to-one learning stresses that professional development is also needed at the leadership level. He identifies two areas of need for professional development for leaders: change management and technology modeling/ evaluation. In his research, gaps existed in the administrator's ability to assist

staff in adapting to the changes of a technology-rich learning environment and the ability to plan for long-term support of staff as they adapt to the new model. Additionally, leaders need to understand how to identify and model exemplary technology integration and be able to discuss these practices with teachers as part of their evaluation process.

Change Management

In his book, The Fifth Discipline, Peter Senge (1991) considers the role of leadership in change. "While pursuing what is new and emergent," Senge writes, "they are also stewards for something they intend to conserve" (p. 335). What he means by this is that when an organization changes, the focus is on the new practice or knowledge, and not on the core values and practices that remain, though in a different context. A strong leader needs to help his organization learn through change and see the value in this growth.

In the school context, this model for change leadership has not always been as consistent. As Tony Wagner et al. (2006) writes in Change Leadership, "many teachers are attracted to the profession because of the relative 'autonomy' it offers. Individual teachers work in isolated rooms all day. They are not expected to work together..." (p. 61). While teacher collaboration has become more commonplace in recent years, Wagner's assertion that schools are often slow to change their traditional practices is an apt one. Wagner identifies three common obstacles to change: reaction, compliance, and isolation (p. 64). Reaction results in leadership, and therefore the entire organization to react quickly to every demand that comes to them from parents, the government or the community. This focus on reaction does not always afford the time to make the best decisions for students (p. 66). Compliance results when everyone in the organization

"goes along" with the change, so nobody makes waves. This may give the illusion of harmony, but it also results in an organization with no real investment or commitment to the change. Finally, isolation is the culture in which everyone chooses to work alone. As Wagner says "this isolation of adults at all levels in the system actively discourages their learning and capacity to improve their practice" (p. 72).

The obstacles that Wagner describes are reflected in other research as well. As Maschmann (2015) suggests in his research, "School traditions can be generational, and people not born in the technology age may be unwilling to accept the new technology as they perceive some traditions will be lost within this transition" (p. 18). This focus on traditions and need to maintain what has always been done can cause teachers to react negatively to change or to comply but not embrace new practices or technologies. In Maschmann's research, teachers who viewed the one-to-one initiative as "top-down" or "administrator-led" saw less of a point to technology instruction, and they saw less value in the data they received about student learning. Conversely, teachers who saw the initiative as "teacher-led" and collaborative saw much more value in the program and the resulting student engagement.

Research by Ertmer, Ottenbreit-Leftwish, Sadik, Sendurur, and Sendurur (2012) discovered that not only did technology integration increase when teachers saw value in the program but that the change the teachers adapted was governed by where they saw value in the program. For example, if a teacher felt that technology was most useful for exposing students to different experiences, the change in their teaching with technology was heavily focused on simulations and games. This discovery suggests that attitude is more than just a catalyst for change but also a lens which can help focus change adoption.

Wagner looks at change as simultaneously individual and organizational, and as Fullan (2011) contends, successful change is built around collective ownership of the change. Fullan points to intrinsic motivators as true engines of change, rather than extrinsic motivators which have less impact and longevity. Examining intrinsic motivators, Fullan looks for work that carries with it a sense of purpose, work that increases their capacity, allows them a degree of autonomy and connects them with other colleagues. For Fullan, these motivators give change a much higher chance of taking root in an organization (p. 51).

As Ron Ritchhart (2015) describes, we want to cultivate "cultures of thinking" in our schools, for both students and educators. Characteristic of these cultures, Ritchhart specifies that "we learn when we are being challenged, stretched and pushed in novel ways, performing just beyond what we are able to do already on our own" (p. 101). He also specifies that coaching and feedback have great potential to "propel" learning and create momentum in an organization.

SECTION FIVE: DATA ANALYSIS AND INTERPRETATION

When analyzing the data collected for this change plan, two sets of themes emerged. As described in Section Three of this plan, two surveys were administered to staff. The first survey was given to all teachers, as part of a district staff development evaluation. This survey was designed to inform a professional learning plan, as well as to determine the effectiveness of various delivery methods of professional development that Grove presented to staff that year. On the staff development evaluation survey, teachers were asked to rate their interest in various forms of professional development, along a Likert-type scale, rating from "very interested" to "not interested". Teachers were also given two open-ended questions which asked them to name areas of professional development that would interest them and to reflect on their experiences with job-embedded professional development.

The second survey was administered to one-to-one classroom teachers in grades 3-8, as part of an evaluation of the district's one-to-one technology program. This survey consisted of multiple-choice questions, asking teachers to rate their level of agreement or disagreement with various statements about technology, support and professional development. In this survey, teachers were also given Likert-scale questions, where they were asked to rate the frequency that they observed several technology-based learning activities in their classrooms.

Data from these two surveys were collected and analyzed, looking for patterns and universal themes. From the quantitative data, the following key themes emerged:

1. Most teachers desire more collaborative, job-embedded approaches to professional development.

2. Teachers have concerns that there is not enough time for them to focus on meaningful professional development experiences.

The qualitative data used in this change plan included two focus groups that were held with 18 teachers in the one-to-one program (grades 3-5), where they discussed technology integration and the support for their program, including professional development. Also, individual interviews were conducted with each building principal in the Grove School District, two elementary and one middle school principal. The interview and focus group data were analyzed and coded, looking for patterns and universal themes. In these data, the following themes emerged:

1. All parties see value in moving past a traditional professional development model, towards a more job-embedded model.
2. There is not a clear vision among leadership, regarding a model for and approach to job-embedded professional development.
3. There is inconsistent knowledge among teachers, regarding how to work with existing instructional specialists.
4. All parties desire more time to spend on professional development priorities and to collaborate with colleagues and specialists.

These themes will emerge as we review the data along three categories: attitudes towards current professional development, a consistent vision of job-embedded professional development models, and support conditions for successful job-embedded professional development.

Moving towards Job-Embedded Professional Development

A theme that emerged from the data is that teachers and principals both see a need to move beyond traditional professional development in the Grove School District. Grove still offers a number of facilitated professional development sessions for teachers, with outside presenters or consultants. In addition to this, Grove has begun to utilize more job-embedded approaches to professional development. Specialists have worked to establish routines with teachers for co-teaching and planning. Also, Grove's elementary schools have established a small "lab classroom" program, which involves structured observations of classes by colleagues. Some teachers at one school have also organized their own "community of thought" which allows colleagues to explore a topic and learn together. The data that I reviewed for my change plan suggests that these new approaches to professional learning have engaged staff and given them a clear preference for how they like to learn.

The quantitative data that I reviewed evidenced this preference for job-embedded learning in several areas. The staff development survey in which 68 Grove teachers participated, asked respondents to rate their interest in various types of professional development, from outside experts presenting workshops to more collegial forms for job-embedded professional development, like coaching and professional learning communities (PLC). As the table below shows, teachers expressed the highest level of interest in working with in-house experts (colleagues or specialists) as well as instructional coaching and PLCs. The professional development practices that garnered the least amount of interest included bringing in outside consultants or having classroom walk-throughs. This data suggests that, while teachers are excited at the idea of learning

with their peers and having fewer facilitated professional development "events", they are still apprehensive about opening their classroom doors to one another and putting themselves in a position of being observed.

Table 1

Professional Learning Designs

Please indicate your interest in the following professional learning designs by ranking each on a scale from 1-very interested to 5-not interested.					
	1	2	3	4	5
In-house experts	31%	33%	16%	10%	10%
Outside Consultants	15%	9%	17%	34%	25%
Classroom Walk-throughs.	15%	18%	27%	18%	22%
Job-embedded PD (coaching)	25%	24%	21%	17%	13%
Professional Learning Communities.	22%	22%	13%	22%	21%

In the survey administered to 28 teachers in the one-to-one program, over 92% of teachers agreed that curricular support is important for technology integration, but an equal percentage of responses (36%) agreed and disagreed about whether current professional development was able to address their needs, as they worked to integrate technology into the curriculum.

Table 2

Curriculum Support

Curriculum support is an important part of integrating technology into my instruction.		
Strongly Agree	21.43%	6
Agree	71.43%	20
Not Sure	3.57%	1
Disagree	3.57%	1
Strongly Disagree	0	0

Table 3

Professional Development

Professional Development is currently able to address issues that are directly related to technology integration in my curricular area.		
Strongly Agree	3.57%	1
Agree	35.71%	10
Not Sure	25%	7
Disagree	35.71	10
Strongly Disagree	0	0

Also, over 67% of teachers also strongly agreed or agreed that professional development for technology happened more along a "just in time" model, responding to a need during curriculum planning or when initiated by the teacher. This evidences the current approach to professional development for the one-to-one program: a reduced

presence in planned professional development days, but an increased presence in a more job-embedded model.

Table 4

Technology Professional Development

Technology professional development takes place when teachers have a specific need.		
Strongly Agree	10.71%	3
Agree	57.14%	16
Not Sure	17.86%	5
Disagree	14.29%	4
Strongly Disagree	0	0

The open-ended responses that teachers provided in the professional development survey asked them to reflect on current professional development, including things that went well and things that they would change in the future. Teachers were generally positive about the job-embedded professional development experiences that they had, and were hopeful that this was a direction that Grove would be moving towards in the future:

> The job-embedded PD for our new science units was invaluable to me. Also, having (a specialist) in my math classroom allowed me to observe another teacher weekly. I feel this strengthened my skills as a math teacher. I worked closely throughout the year with (technology specialist), and this integration also helped me to broaden my experiences and strengthen my skills.

Teachers at all levels favored professional collaboration with their colleagues as an approach to professional development but also desired a structure and guidance to that

collaboration. It is unclear if these comments indicated a structured program or more collaboration time built into the school schedule and calendar.

> When I had the chance to collaborate with other teachers in a structured way it was helpful. If we could move to a more structured way of collaborating in teams, it would be helpful. In Grove, we do not have this at all.

During focus group conversations with one-to-one teachers, they also preferred the job-embedded professional development approach that technology specialists allowed, mainly when they had an opportunity to co-teach with these individuals. Teachers felt that this approach gave a better context to the learning and also increased their retention.

> If you just sit in a meeting and someone shows you something, but you're not doing it and you're not doing it with kids, you know it's not going to stick as much, and you're going to leave it and, at least for me, feel kind of timid.

While teachers preferred working with the instructional specialists in a job-embedded approach, it was sometimes tricky initiating the professional development experience, since they were not always aware of new ideas and practices that they might want to try. One teacher said "it's a good idea as long as teachers are willing to say something to (the specialist), but we're all kind of imprisoned in our classrooms and don't always know what's cool to do."

One principal commented that job-embedded professional development is dependent on having a solid knowledge of the curriculum so that the coach or specialist can easily create connections with the teacher.

The coach or trainer needs to be really forward-thinking on seeing those curriculum connections and opportunities and be able to partner with the teacher and connect them with the necessary technological or pedagogical skills.

A Consistent Vision of Job-Embedded Professional Development Models

Another theme that emerged from the data was the need for a consistent vision for, and knowledge of, a job-embedded professional development model. As the previous data suggested, staff were positive towards job-embedded professional development models. In the survey given to one-to-one teachers, 75% of respondents agreed or strongly agreed that technology integration staff were available to support their needs.

Table 5

Technology Integration Staff

Technology integration staff are available to support my integration needs.		
Strongly Agree	32.14%	9
Agree	42.86%	12
Not Sure	10.71%	3
Disagree	7.14%	2
Strongly Disagree	7.14%	2

The table above indicates a strong agreement that the technology integration specialists were available to support them in their curriculum work. However, in the qualitative data there were apparent differences among teachers regarding how these specialists could be used for their professional growth.

When speaking with the elementary teachers in a focus group, teachers were able to describe a traditional coaching cycle approach with the technology integration specialist:

> I think that job-embedded model, where (tech integration specialist) comes in and does things with me, that's actually how I feel like I learn the best, rather than just her showing me…. We'll plan things together, and then she'll actually come in and teach with me.

Similarly, teachers in the elementary focus group looked to the specialist to help advocate for technology integration during their planning, reminding them of previous professional development and helping to put the information in context: "With so much going on we maybe forget about something that was shown to us, but with a teacher to help you apply those things, you know, she gets it. She makes it happen." The middle school teachers, however, discussed the specialists in much more transactional terms, providing resources for the teacher but not planning, observing or following up on their work with the teacher.

> I feel really comfortable reaching out to (the technology specialist) when needed. It's a good system where I feel supported when I need it as long as the teachers are willing to self-advocate and reach out - that works nicely.

A second middle school teacher described the relationship with the instructional specialists in a similar way:

> The specialists are great at getting back to me, but it's really more in those situations when I need something facilitated versus – meeting all the time. I'm

> sure there are a million things out there that I could be doing but I have no idea about it.

For the middle school teachers, the instructional specialist was more of a pipeline to new ideas and source of resources, rather than a coach or a colleague with whom they would plan and co-teach. It's important to note, however, that teachers in both groups identified classroom management as an area where they would be open to co-teaching, planning, and observation.

Also, teachers mentioned a desire for a more structured technology framework to help them in the planning. They felt that this structure would help them in their work with specialists as well, identifying areas of focus that they could explore in their planning.

Conversations with building principals also revealed differences in how they felt an instructional coaching program would be structured and the role that they would play in supporting such a program. On principal felt that the program should be tightly connected to the strategic plan and expected goals and outcomes for that plan:

> I would like the instructional coaches to follow the school improvement plan, and the strategic plan of the district… Always the goal being that we are going to move forward at a systemic way and we're going to move forward on the goals of the district.

Another principal had a much less structured vision of a coaching program.

> A coaching program would be simply about helping people with new ideas of creativity and innovation, utilizing solid teaching methodologies that are going to help teachers become better professionals and people.

While these two views are not mutually exclusive, a clearer vision would help instruct teachers on how the program is structured and also help coaches understand how they should be approaching their partnership with teachers.

A critical difference between administrators regarding coaching, and one that Jim Knight (2007) also stresses as a critical component that needs to be defined is the relationship between the building principal and the instructional coach. Administrators in The Grove School District had distinctly different views on this relationship, as well as the relationship between coaching and evaluation. One principal felt that the relationship between himself and coaches was critical, but with definite boundaries.

> I see the coach as someone that informs me, keeps me as the Building Principal informed of the patterns and the needs, strengths, weaknesses of the building. But not someone that, that certainly takes direction from me, really takes direction from the teachers they're working with.

Another principal felt that coaching could perhaps have a connection to the evaluation process on some level:

> Definitely, the coach should be working with the principal to help the principal understand what the teachers are doing and then how the principal can help as part of the evaluation system, help guide that teacher into, you know, areas of growth, and direct them to the coach. But then, there is that next level, which is, in my mind at least, does that – does the coach then also become part of an evaluation program to allow the great work that typically goes on between coach and teacher be realized and be part of the evaluation program?

Finally, another principal felt that the coaching program should exist completely separate from administration or any evaluation process.

> My goal would not be I don't want to sit down on anything that's going to be discussed – there is no evaluative piece here or appraisal. You have to have a non-evaluative person running the program to start with. Whoever is going to be directing the coaches cannot be somebody who is an evaluator. I just think there are too many risks with that.

One final critical component of a coaching program that principals discussed was the need to be aware of teacher feelings and competing relationships among staff.

> Are teachers comfortable being vulnerable with another professional? What is their level of familiarity with that coach, or coaching in general? Do they trust that the coach is not going to go back and tell their supervisor that they took a risk and failed?

Another principal discussed how coaching may affect collaboration between teachers:

> I think there's a fear among teachers that there is a ranking, a rank order of them and where do they fall on that scale. And if they allow someone in that's in a quasi-administrative role, will they be placed or ranked?

While the data continues to support a move towards collaborative, job-embedded coaching, it also suggests several areas where clarity and consistency needs to be achieved in order to make the program effective and rewarding for teachers, administration and for coaches and specialists.

Time Constraints for Successful Job-Embedded Models

One of the most common themes in all surveys and interview data was the need for additional time to support teacher collaboration and professional learning. The survey of one-to-one teachers agreed that the district had not created enough time for teachers to work on developing instructional strategies with technology.

Table 6

Instructional Strategies with Technology

Time is made available for teachers to work with others to develop new instructional strategies with technology.		
Strongly Agree	3.57%	1
Agree	32.14%	9
Not Sure	17.86%	5
Disagree	42.86%	12
Strongly Disagree	3.57%	1

Open response questions on the professional development survey also invited discussion of the time issues an area that the district needed to explore. “We need to find time for teachers to visit other classrooms/schools where curriculum is similar to ours.”

> The collaboration among colleagues had been the most helpful so that the learning can become more specific to the needs of each grade level/ department. There is just no time to do this consistently.

Principals also brought up the time issue and the challenge that it presents to all professional development, not just instructional coaching. The principals also described some of the ways that teachers currently find time to collaborate professionally:

> Time is a challenge that might be the biggest challenge. It think they mostly find time during planning breaks before and after school – mostly before, since our culture does not have a lot of after school meetings, I'm finding. What's particularly difficult is that our grade levels have so little common planning time. If you had a specialist or a coach who wanted to push in with an entire grade level, before school is the only time they have.

A related concern is how the expansion of a coaching program will impact our current available time. As another building principal stated,

> If we struggle to find consistent time for coaches to work with teachers, I'm not sure how much we can expect of the program. If we add additional coaches as well, time is going to be even harder to find.

One additional theme that emerged from the data was the voice that teachers feel that they currently have in Grove's professional development program. On the survey of one-to-one teachers, over 30% of respondents felt that teachers were not included when designing professional development activities.

Table 7

Professional Development Activities

Teachers are included when designing professional development activities.		
Strongly Agree	3.57%	1
Agree	25%	7
Not Sure	39.29%	11
Disagree	17.86%	5
Strongly Disagree	14.29%	4

Feedback from teachers in the one-to-one focus groups echoed this sentiment. One teacher response summed up several other teacher statements by saying

> Five years ago, I felt like it was much more teacher-centered and collaborative. Now it's become more district-focused and we all need to find our path in that area. I miss being able to connect more with other teachers in that way.

SECTION SIX: A VISION OF SUCCESS (TO BE)

My vision of success involves a transformation in professional development at the Grove School District, resulting in more job-embedded and collaborative professional learning experiences, and a clearer, more consistent vision from leadership, regarding job-embedded professional development practices and expectations. Survey and interview data with teachers indicated that they value professional development and crave opportunities to collaborate. Interviews with leadership also identify this desire, as well as a hope for a clearer vision for all stakeholders and a plan to create time for these experiences to happen. This change involves a plan to orient teachers and leadership about a consistent approach to job-embedded professional development, the development of clear standards for technology integration in the area of Language Arts, and a commitment to review the school schedule to create more collaborative planning time for teachers to work together.

Wagner's (2012) 4C framework is designed to encourage a systemic view of an organization, as well as the change that is desired. Earlier in this change plan, the 4C framework was used to assess the current state of The Grove School District, and the strengths and challenges that existed within it. In this section, the framework will again be used to describe the desired change in the district and the impact that it would have in each of Wagner's "Arenas of Change" (p. 98). Below, I will describe the change, as well as the resources and commitments that are required in the areas of context, conditions, competencies, and culture. Taken alongside my "As-Is" (see Appendix B), this "To-Be document (see Appendix B) establishes the distances that need to be bridged in order for lasting change to be achieved in The Grove School District.

Context

As was discussed in Section Two of this plan, Grove serves a community with high-socioeconomic status and parents have always been supportive of technology and innovation projects within the district. Parents participate in family education events, conferences, and are well-informed of activities within the district. Grove School District students traditionally excel on standardized assessments and in the classroom, and it can be expected that these factors will continue for Grove. Similarly, Grove's teaching staff will continue to be well-credentialed and educated. Despite a controlled deficit reduction initiative that the district is undertaking over the next three to five years, it is expected that Grove will continue to prioritize highly-qualified teachers and staffing to maintain class sizes of under 24 students.

Also, despite deficit reduction efforts, Grove will continue to support its robust technology infrastructure and classroom innovation initiatives like one-to-one learning. Through careful use of money from government eRate funding, as well as a well-designed refresh/recycle plan for the one-to-one program, both infrastructure upgrades and sustainability for one-to-one learning are budget neutral. Additionally, Grove expects that they will continue to participate in their consortium of municipal entities, to provide affordable internet access to all of their schools. These resources continue to establish an excellent backbone for classroom innovation. They also increase staff confidence in using technology in the classroom.

The planning process for professional development and the dialogues involved in this process will be the most impactful shift in the "context" arena, and one of the necessary changes to support the overall goals of this plan. The Grove School district

would profit from a more collaborative and inclusive approach to professional growth planning and curriculum review. A plan that involves more staff members and leadership would ensure a more significant amount of clarity around expected goals and outcomes, as well as a more significant buy-in from stakeholders overall. A more inclusive approach would also ensure that individual building priorities and district priorities were both considered and balanced in planning professional development. In the case of an instructional coaching program, it would help to spread a standard message and greater clarity around the purpose of a role like this in the district and the expectations that leadership has for its use.

Finally, a more inclusive planning process for curriculum and staff development would create more opportunities for data collection and program evaluation as the coaching initiative evolved. This approach would be empowering for everyone involved and has the potential to result in better decisions, shared accountability and deeper buy-in for any change in the district.

Conditions

The first essential condition that exists for Grove is to maintain adequate funding for instructional technology and also professional development initiatives. As I mentioned in the "context" arena, Grove is undergoing a deficit-reduction initiative, as they complete a capital improvement process. While the district attempts to identify areas for savings, care must be taken to protect funding for the existing one-to-one program, and the growth of an instructional coaching program, including staffing and resources.

With adequate staff development resources, Grove will evolve their current approach to job-embedded professional development into a well-articulated instructional coaching program. Existing specialist positions will be evaluated and changed to suit the delivery and support of coaching in Grove. The vision and expectations for the program will be communicated to all staff members, and a timetable will be established for orienting staff to coaching philosophy and process.

As an area of focus for technology and literacy coaches, leadership will work with teachers and specialists to establish a common language and expectations for digital literacy in the curriculum. This goal is developed in response to data from staff focus groups, asking for some common digital literacy standards to guide teacher planning and student assessment. This common language will also give coaches an area of focus and engagement for their work with teachers.

Finally, Grove administration will work with teachers and the Board of Education to create additional time for teacher collaboration, planning and coaching to occur. This is currently a problem at Grove, particularly at the elementary schools which have no common planning time for teachers. Various options for capturing time will be explored, and a solution will be reached that maintains the current level of educational excellence while also opening new avenues for collaboration and professional learning.

Competencies

Wagner et al. (2006) describes the competency arena as involving "the skills and knowledge that influence student learning" (p. 99). As a result of this change plan, teachers in The Grove School District will have a common understanding of the district's philosophy for and approach to instructional coaching. Teachers will utilize a coaching

cycle with an instructional coach, involving Knight's (2013) impact cycle, including shared goal setting and follow up reflections with the coach. Teachers will also have a clear understanding of the expectations that Grove will have for their partnership with those in the instructional coach role. Similarly, district leadership will have a role in creating the coaching program and, therefore, in-depth knowledge of the program as well. Building and district leadership will work together to communicate this program and help all stakeholders understand their roles within the program.

In order to deepen coaching conversations around technology integration and to make sure that integration is as meaningful to students as possible, Grove will work with teachers to define and understand core technology competencies for students, across the curriculum. Not focusing on discrete skills, teachers will utilize ISTE's NETS for Students (ISTE, 2016) to focus on habits of mind across the curriculum, such as "Empowered Learning," "Digital Citizenship," "Knowledge Construction," and "Innovative Design" to embed experiences into the curriculum that employ technology but address thinking skills and information skills that can be applied to many situations. At the same time, Grove will work with building principals and other teacher evaluators, to help them understand these standards as well and see how they can be evidenced in the classroom. This knowledge will help evaluators identify exemplary uses of 21st-century learning during classrooms observations and help reinforce the importance of technology integration. This common language will elevate the conversation around technology, as well as innovative teaching.

Finally, all of these competencies rely on Grove continuing to hire and retain a staff of highly-qualified educators. Grove must continue to recruit and cultivate a strong

group of teachers, who embrace lifelong learning and innovative teaching. A stronger instructional coaching program and common language around technology and 21st-century learning can increase confidence among teachers to innovate in the classroom in a challenging and supportive environment. Also, a common approach to professional development that includes teacher and administration voices can also help to grow the quality of our teaching staff, to the benefit of the district's children.

Culture

Wagner (2012) describes culture as "the invisible but powerful meanings and mindsets held individually and collectively throughout the system" (p. 102). The Grove School District currently has a culture of parents, students, and teachers who value learning and work hard for achievement. Through this change plan, Grove's conversations about technology instruction will evolve, from a focus on skills and discrete lessons to a discussion that's embedded within the rest of the curriculum. Technology instruction will not be the "extra thing" that teachers do with students, but a tightly integrated approach that aligns with all content areas.

As this change plan seeks to employ a shared decision-making approach to the development of a new professional growth plan and coaching program, the increased communication and collaboration between district leadership and building leadership will shift the culture from a top-down approach to one that celebrates all voices. This cultural shift can increase communication and clarity among all stakeholders in the district and increase everyone's ownership of district and school initiatives

Finally, a new culture of collaboration will grow among Grove teachers, who previously were not comfortable opening their classrooms to one another and sharing

ideas. Instead, this new culture will encourage collaboration between teachers and coaches. Classroom observations and sharing among colleagues will become the norm. Potentially, every member of the Grove community will feel like they have a stake in each other's success, which will result in a more innovative teaching and learning environment and infinite possibilities for student learning.

SECTION SEVEN: STRATEGIES AND ACTIONS FOR CHANGE

As we are faced with the challenge of moving our "as is" vision of the organization towards the "to be" eventuality, it's critical to approach the change strategically and globally for the entire organization. Wagner et al. (2006) discuss the phases of change as *preparing*, *envisioning* and *enacting*. The preparing phase involves the planning for the changes ahead and developing a shared knowledge about the change (p. 134). The envisioning phase involves growing the change into different stakeholders and allowing them to shift their roles and responsibilities to support the change (p. 134). Finally, the enacting phase includes a focus on instructional improvement and communication about the program to everyone (p. 134). Grove School District will undertake this approach in their shifting of professional growth, as well as their goal of technology integration in the curriculum. Supporting these three phases of change are three change levers: data, accountability and relationships. These levers, as Wagner et al. describe, "come into play and serve different purposes within each phase... but a laser-like focus on improving instruction becomes evident in all three phases" (p. 136).

The goal of this change plan is for targeted, job-embedded professional learning to result in more meaningful integration of technology across the curriculum. Included in this plan is building a program for instructional coaching that can improve instruction in all areas of the curricula. Also included is the development of clearer standards for technology integration, giving teachers and administrators a common language and vision for exemplary instruction in this area. Both of these areas present opportunities to employ all three change levers, collecting and examining data, clarifying roles and

responsibilities and building relationships with a focus on improving instruction and student learning.

Developing a Clear Technology Integration Framework

A recurring theme in conversations with teachers at all levels was that they still struggled to understand technology integration. While many teachers were doing wonderful things with technology in the classroom, they felt that they could be doing more integration and were interested in further conversations about new instructional practices using technology. Also, teachers inquired about the possibility of creating a framework to aid them in integration. Both of these comments felt like levers that could open doors to increased collaboration, professional growth, and technology integration.

Drawn from these data, my first strategy is to work with teachers and leaders to develop a clear technology framework, which can be applied across the curriculum. Utilizing ISTE's NETS Standards for Students (see Figure 2), teachers will think about technology from a different lens: one that can be utilized in many ways to facilitate student habits of mind. This approach will result in deeper technology integration and one that is not as focused on skills. Teachers will become less concerned with teaching an application and will create lessons that employ technology but require less technical instruction.

From the NETS standards, teachers, specialists and instructional leaders will determine the best areas of focus, and they will work together to develop a document with core experiences which students will have at each grade level. Specialists can use these conversations to build partnerships with teachers and invent new areas of professional development which can occur throughout the year.

Another key product of this strategy is the creation of a system to evaluate the framework and how it is being implemented in the classroom. This may involve lesson studies and classroom visits among grade level teachers, as well as discussions about technology integration as part of a teacher's evaluation. Principals will come out of this process with a common language about technology integration and instruction, as well as a better idea of things they can look for when observing a teacher.

Figure 2. 2017 ISTE NETS for Students

Increasing Teacher Openness towards Collaboration

As the district creates the structures for technology integration in the curriculum, the administration will also need to simultaneously work on developing opportunities for

teachers to build their comfort with and confidence in collaborating with colleagues in a job-embedded learning practice. Leadership can look to Drago-Severson (2008) and her learning-oriented leadership model to establish pillar practices that the district can establish for teachers. Since many teachers in the district still express discomfort in opening their classrooms to colleagues for observation and discussion, leadership will need to work to establish a culture that can support practices like these. This, in turn, will open new opportunities for instructional coaching as well as teacher leadership in professional learning.

While Grove's lab classroom program has not expanded beyond its first pilot groups, teachers that have a lab classroom in their building have commented on the benefits they have gleaned from visiting these classrooms and having professional discussions. Grove can use this existing program to encourage more teachers to make their classrooms a collaborative learning opportunity for colleagues. Perhaps, as new technology integration strategies are being employed, technology specialists can seize the opportunity to invite teachers in to observe one another, utilizing the lab classroom approach for a new purpose.

As teachers begin to participate and open themselves up to sharing their practice and being "learning leaders" in their schools, leadership can establish a system to recognize those teachers who take this step. While Grove does not want to create a competitive system, simple recognition can remind all educators that professional learning and collaboration are things that are valued and celebrated. Similarly, teachers can have a larger presence in staff development planning, giving them a bigger stake in professional development. For Grove, professional development can evolve from

something “handed down” from central office to something that is planned and built by all stakeholders in the organization.

Finally, as teachers increase in their comfort with opening their classroom and collaborating in professional development, existing instructional specialists, including technology specialists, can begin to explore aspects of a coaching cycle with teachers. Several of Grove’s specialists recently participated in a year-long coaching workshop with Jim Knight (2007) and have become knowledgeable about aspects of his impact cycle. As Grove develops a model for their coaching program, essential aspects, such as reflection and observation, can begin to play a role in Grove’s current approach to job-embedded professional development.

Similar to Grove’s development of a technology integration framework, leadership should identify a system for evaluating the work that is being done and measuring its impact on teachers and their classroom practice. From these data, Grove can best build a foundation for instructional coaching that makes sense for its teachers and its culture.

Developing an Instructional Coaching Program

At a recent presentation, Anthony Robero (2018) stated that “schools often have a ‘culture of talk’ around improvement. By working with teachers to identify needs and set compelling goals, instructional coaches can turn that into a ‘culture of action’”. As Grove moves forward in their clarity around instruction technology integration, as well as in their mindset towards professional learning and collaboration, leadership can establish the foundation and structure of an instructional coaching program, including philosophy, expectations, and roles for coaches. Grove’s instructional leadership team can review my

program evaluation and data to learn more about staff perspectives about technology and professional learning. There are also opportunities available to visit neighboring school districts that have established instructional coaching programs. The primary challenge in this phase is to identify the appropriate coaching model for the district, as well as specific expectations for how teachers will use the coaches. If Grove chooses to focus coaches in a specific area, such as literacy or technology, will cycles be based upon data analysis and goals, or will coaches and teachers be allowed to arrive at their goals more organically? Will every teacher be expected to engage in a coaching cycle every year? Questions like these should be considered before hiring new staff since each approach involves specific strengths and personality traits.

Once chosen, district and building leadership need to work closely with teacher leaders to explain the coaching program and use teacher feedback to refine their ideas and plans. As much as possible, integrating teacher ideas and needs can help to make this a program that everyone has a stake in. Professional development for teachers will orient them to the program and prepare them for the conversations and stages in a coaching cycle. Technology Integration and the new tech framework can be a useful tool for introducing coaches since it invites conversation and does not disrupt an instructional area that teachers may hold more strong beliefs about. Coaching around technology or a similar practice can help to build relationships between coaches and teachers, while also orienting teachers to the practice of working with a coach, on "safer" grounds.

Leadership will also establish expectations and success indicators for the coaching program, as well as for coaches. As the program begins, it is essential for building principals to be involved in the program, even participating and being coached if

possible. This will demonstrate the support for the program. However, constant evaluation of the program is also essential, so poor practices or bad habits can be identified and changed early in the program. The early years of the program could very well determine the path it will take for many years, and it is much easier for leadership to the right path early in the program's history.

Staffing for the program must also involve many perspectives, since this is an individual who will be collaborating with many staff members, sometimes having intimate conversations about professional practice. Jim Knight (2011) stresses a partnership coaching approach, as opposed to a top-down coaching model. As Knight says, "when we give up top-down power and adopt a partnership approach to interaction, we replace the empty power that we get by virtue of our position with the authentic power gained through choice" (p. 20). The coaching position needs to be designed for coaching, with any additional responsibilities removed from the position.

Finally, district and building leadership need to think about the time constraints that currently hamper professional learning and collaboration and determine a plan for when professional learning can occur. Grove's middle school currently has sufficient planning time during the school day, so there are opportunities for coaching sessions. However, for grades K-5, large content area blocks and additional specials have made planning time a premium. At the elementary schools only have two half-hour planning times per week. Grove School District is currently undergoing a time study, to consider ways to expand opportunities for collaboration and planning during the school day. As this group discovers possible solutions, the leaders who have built the instructional

coaching program will need to work with teachers and other colleagues to understand the best way to make use of this time.

Establish a Program Evaluation Standard

One of the most valuable discoveries that I made during this change plan, as well as in my program evaluation on one-to-one learning, was the value of identifying a process for ongoing program evaluation. As I collected data and investigated my findings, not only did I discover some unexpected attitudes and perspectives, but many of the teachers that I collected data from really appreciated being included. I received more honest feedback and a more in-depth view of my topics than I initially expected.

Grove will develop surveys for students and staff, to periodically collect data about the one-to-one learning program. A survey will be also be developed for teachers, gauging attitudes and the impact of the coaching program. In addition to surveys, focus group interviews with small groups of students and teachers will be held throughout the evaluation year, to give a broader context to the data being collected.

In addition to these data, academic measures will be identified for review. Analysis of these data can help note the effectiveness of a program on classroom instruction and student learning. While many factors can impact the outcomes in these measures, it may highlight areas for further inquiry. In many cases, it may provide areas for celebration.

As Grove School District moves forward with coaching, technology, and a host of other initiatives, it will create a standard program evaluation practice that can be employed to learn more about the success of a program, and give a more in-depth snapshot of how it is being implemented in the classroom. Most importantly, a regular

commitment to program evaluation can help gauge the effectiveness of a program and the impact it is having on student learning.

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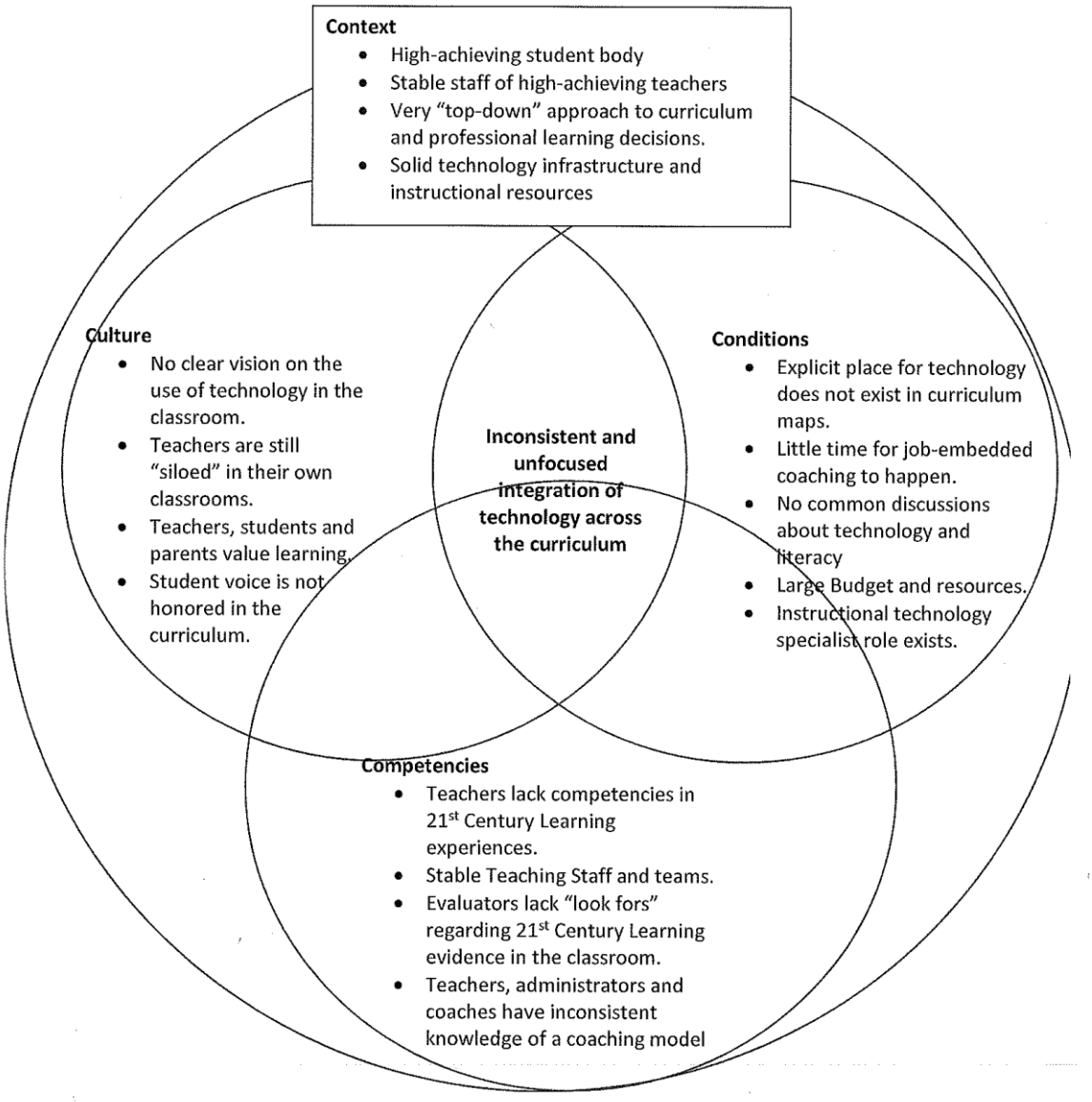
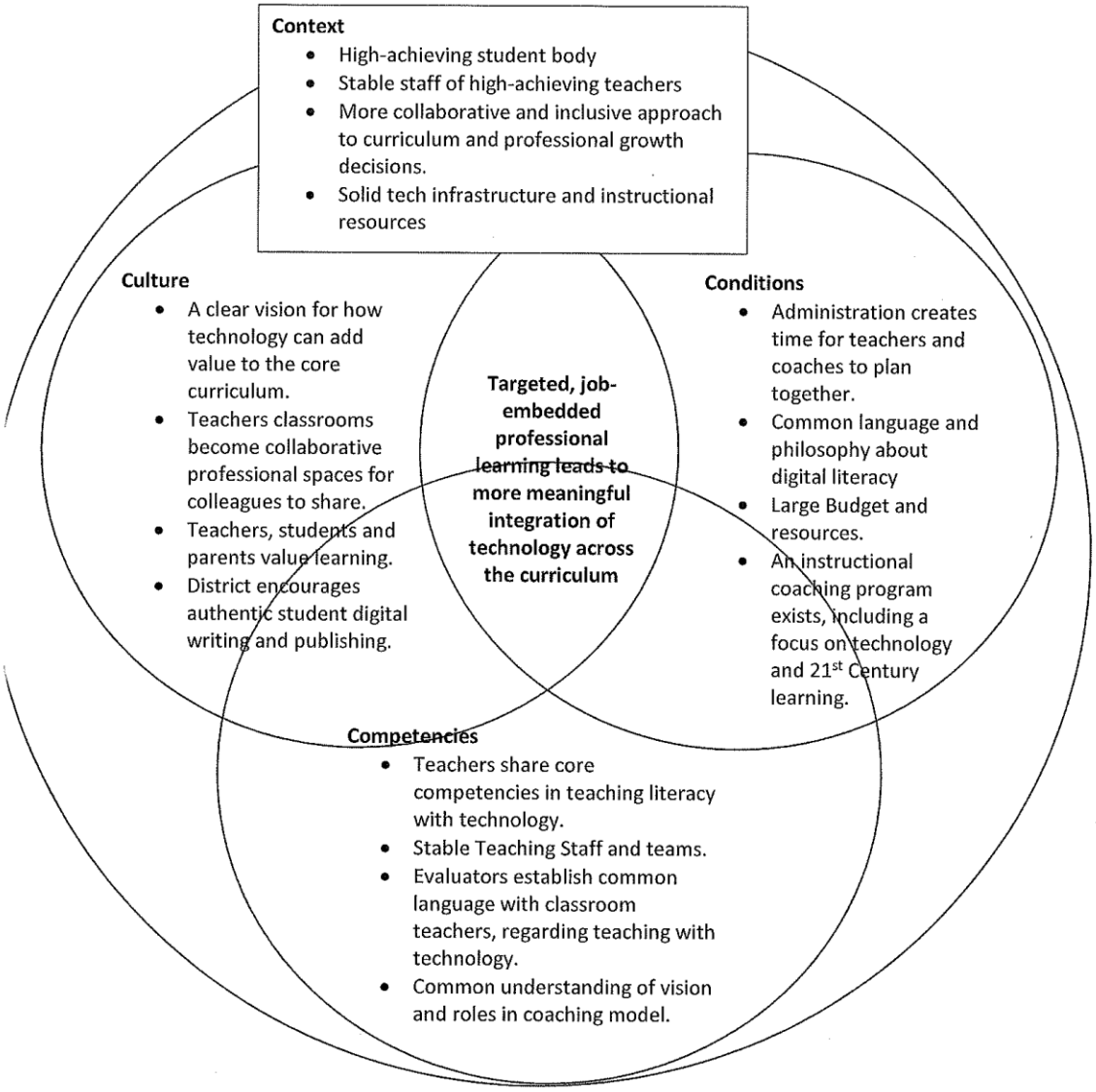
APPENDIX A: AS IS CHART



APPENDIX B: TO BE CHART



APPENDIX C: STRATEGIES AND ACTIONS CHART

Targeted, job-embedded professional learning leads to more meaningful integration of technology across the curriculum

Strategy	Action

Develop a clear technology integration framework, applicable through the core curriculum.	• Share feedback from program evaluation with Administrative Council and Curriculum Team.
	• Work with teachers and leadership to define a vision and common language for technology integration and establish core experiences that realize this vision for students.
	  ○ Identify best practices and areas for focus.
	  ○ Focus conversation on ISTE NETS standards and specific areas for student learning.
	  ○ Develop a system for evaluating the work and its implementation in the classroom (observations, lesson study, review of student work)

Develop greater teacher openness towards collaboration in professional learning.	• Use Drago-Severson's (2008) pillar practices to establish protocols for adult learning and collaboration. • Utilize existing components of the lab classroom program to involve more teachers in collaborative learning opportunities. • Create a recognition system to encourage more teachers to present to one another and open their classrooms for observations. • Involve more teachers in professional development planning. • Utilize existing specialists to introduce components of coaching into teacher professional development.
Collaborate to develop the structure and roles of on instruction coaching	• Determine model components of district coaching cycle.

program from Grove School District.	• Work with instructional leadership and administration to learn the chosen model and the plan for implementation. • Plan professional development for all teachers about the coaching model, using technology integration practices as an introduction. • Establish expectations and success indicators for the program. • Hire staff or evolve existing roles into coaching role.
Strategy	**Action**
Establish a program evaluation standard for monitoring coaching program, as well as the one-to-one program. (Enacting Phase)	Analyze student and teacher data to determine effectiveness of initiatives. • Develop a survey of staff and students to measure different indicators of effectiveness and impact. • Identify academic measures for technology integration. • Conduct focus groups of staff members to collect anecdotal / context data.

Big Assumption: Some teachers may be uncomfortable or threatened by the presence of instructional coaches in their schools. Some administrators will fear relinquishing power to other administrators in making professional development decisions.

Actionable Test: Meet with administrative council and staff development committee to review my timeline for this change program, and determine willingness to participate.

APPENDIX D: THE TECHNOLOGY INTEGRATION MATRIX (TIM) 2018, FLORIDA CENTER FOR INSTRUCTIONAL TECHNOLOGY