Technology-Guided Research-Based Strategies
Changing K-12 Teachers’ Reading Instruction Practices:
A Mixed-Methods Study

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in
Leadership and Education
in the Adrian Dominican School of Education of

Barry University

by

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Barry University

2018

Area of Specialization:

Educational Technology
Technology-Guided Research-Based Strategies
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2018
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Dedication

This dissertation is dedicated to my husband, Sergio Martin, whose encouragement, love, and incredible patience support sustained me in my pursuit.
Abstract

Teachers’ instructional planning is observed as part of their yearly evaluations of standards of competency (FLDOE, n.d.). Teacher pre-service and in-service training instruct teachers in lesson-planning, but the changing makeup of students and legislative amendments leave teachers poorly equipped to design relevant literacy instruction, as demonstrated by low graduation rates (Freiberg, 2002; Lyon & Weiser, 2009; Moats, 2009; USDOE, 2015). This research was a two-phase sequential explanatory mixed-methods design, which examined the concerns of teachers of reading using research-based instructional strategies (RBIS) and a digital instructional planner (DIP). The researcher also examined the changes in lesson-planning that occurred over time owing to the use of RBIS and DIPs. Phase One, the quantitative phase (N = 18), collected data using the Survey of Concerns Questionnaire (SoCQ). The pre-SoCQ stages of concerns stated that the teachers’ group percentile scores were at Stage 0 (Uncorcerned). The post-SoCQ stages of concerns revealed that the teachers’ group percentile scores were at Stage 5 (Refocusing). This data supports the group concerns shifting from what is the innovation to how can I make the innovation better and recommend other teachers to use it. The dependent t-test reported a statistical significance on the group means for the entire SoCQ with a Significance of .0003 at p < .05. Phase Two, the qualitative phase (N = 6), consisted of in-depth interviews based on the Levels of Use (LoU) that explained the quantitative data from Phase One. The themes of changes in planning, time, ease of use, recommended changes in the DIP, recommended the DIP to others, and student changes were identified in the LoU interviews. These themes of changes after using the DIP/RBIS for nine weeks corroborate the changes reported in the teachers’ pre/post-SoCQ teachers’ concerns profiles.
Keywords: change, CBAM, SoCQ, LoU, instructional resources, lesson-planning, RBIS, reading, teachers, technology, ESSA, UDL
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I. THE PROBLEM

Introduction

According to the U.S. Department of Education, 66% of growing occupations require an education above or beyond a high school diploma, prompting K-12 educational reforms to better prepare high school graduates for a changing workforce (USDOE, 2015). The USDOE further reports that the United States has one of the highest student dropout rates in the world. Moreover, approximately 50% of the students who do graduate from high school require remedial courses when they enter college. Former U.S. President Obama’s major educational reform initiative was the Race to the Top (RTTT), comprising many facets, including reforms in the areas of instructional standards, teaching and leadership, as well as technology and data (USDOE, 2015). One major portion of RTTT was in reforming K-12 instructional standards, basing them on students’ career and college readiness. These reforms are commonly known as the Common Core State Standards (CCSS).

With the implementation of the RTTT program, the State of Florida developed a Local Instructional Improvement System (LIIS), identifying minimum standards in ten areas (standards and curriculum, instructional practices, assessment and growth, facilitator profile, learner profile, analysis and reporting, documentation and support, data integration, IT platform, and security) that school districts and school administrators must implement to ensure that K-12 stakeholders have access to and the ability to use data to inform instruction in the classroom, operations in the district, and research (FLDOE, 2011). The LIIS minimum standards for instructional practices focus on instructional materials and/or resources, lesson plans, class data management, and target educators’ abilities to 1) create instructional materials and resources, 2) link aligned instructional
materials to create instructional units, 3) search and view instructional materials, 4) create a lesson plan by selecting a set of activities and assigning them to individuals or groups for a period of time, 5) create a lesson plan from a common template, 6) view rosters and assessment results for all courses sections, 7) view lesson plans by day, week, and month, 8) create differentiated learning groups based on diagnostic data, and 9) assign a student to multiple learning groups (FLDOE, n.d.).

The RTTT and the LIIS have defined the landscape of educational planning for teachers in the United States. Specifically, CCSS defines the educational standards that teachers must employ. Over the past 20 years, Florida’s ever-changing landscape of educational standards has had teachers adjusting their teaching practices with each evolution. In 1996, Florida introduced the Sunshine State Standards in an effort to increase teacher accountability for student performance and to increase the instructional rigor of the standards (Florida Standards, n.d.). During the period from 2007 to 2012, Florida incorporated the Next Generation Sunshine State Standards, which modified the instructional standards to stand alone at each grade level, unlike its predecessor that grouped the instructional standards into multiple grade levels (Florida House of Representatives, 2010; Florida Standards, n.d.). Currently, Florida’s instructional standards are known as the Florida Standards, and except by name, they are identical to the Common Core State Standards (CFEF, 2014).

The Florida Standards were fully implemented in grades K–12 during the 2014–2015 school year (SDIRC, n.d.). These standards are more rigorous, and those that contain the 21st century skills are evidence-based and require other core content areas (i.e., English, science, social studies/history, and technical subjects) in order to instruct
reading. The demand for teachers today requires educators to be equipped with the
ability to teach 21st century skills (related to life and career, learning and innovations,
information and media technology, core subjects, and global awareness,
financial/entrepreneurial activity, civic literacy, health literacy, environmental literacy,
standards and assessment, curriculum and instruction, professional development, and
learning environments) so that students are prepared for work or to engage in further
study upon graduation (Lefever-Davis, 2002; Scheeler, 2008).

The passage of House Bill 7031 (effective May 12, 2014) has changed the high-
school diploma options to four: 1) a standard diploma, 2) a certificate of completion, 3)
Academically Challenging Curriculum to Enhance Learning (ACCEL 18-credit option),
and 4) a Scholar Diploma Designation (FLDOE, 2014). The new high-school diploma
options now do not include the special-diploma option that was offered to Exceptional
Student Education (ESE) students in the past (FLDOE, 2014). ESE students now must
take the same educational courses offered to their same-age peers. The new high-school
diploma options are tied to performance on the Florida Standards Assessment (FSA) end-
of-course exams in Algebra 1 and 2, Geometry, Biology 1, Civics, US History, and FSA
in English Language Arts and Math in grades 3 through 11 (FLDOE, 2014). The new
Florida statute requires that teachers plan instruction for all students, which includes ESE
students. The United States Department of Education Office of Special Education and
Rehabilitation Services on November 16, 2015, provided guidance to all school districts
for all ESE students in general-education classes who must be taught on the grade levels
in the classes which they are attending.
House Bill 7031 has had a major effect on educational planning practices for teachers. With the elimination of the special diploma, all teachers have had an influx of students with special needs as well as English Language Learners who are on track for a standard diploma. Additionally, the new Florida Standards require a depth of knowledge and critical thinking to be included while instructing the new standards. The Florida Standards are a roadmap to the benchmarks that must be taught during the year, but teachers choose how they want to plan to teach the content related to the Florida Standards (FLDOE, 2014).

Lesson-planning, when conducted effectively, prepares the classroom teacher having needed materials at hand, having prepared questions to ask learners, having appropriate content to present, and having smooth and efficient transitions built into activities (Butt, 2003). The purpose for lesson-planning is for the achievement of effective learning (SOURCE). Lesson-planning is important because it allows teachers to draw from instructional strategies, from the learning styles of the students, and from the students’ multiple intelligences and helps ensure that the design of the lesson reaches the students in the class (Kargas-Bone, 2000). There is no single standard lesson-planning template; however, Tyler’s Lesson-Planning Model (1949) is the dominant model, which is a linear plan beginning with the objective and ending with the assessment (John, 2006; Tyler, 1949).

This researcher has designed a Digital Instructional Planner (DIP) using File Maker Pro® that is targeted to the educational planning needs of K–12 teachers of reading (Appendix A). Teachers of reading in this study are defined as any core subject in which reading instruction occurs such as History, Science, Math, Language Arts, and Reading.
The DIP was designed to address the Florida Standards for K–12 teachers in order to meet the rigors of the new instructional literacy standards and the LIIS minimum requirements. The DIP was designed to assist teachers of reading with the selection of the new English Language Arts (ELA) Florida State Standards. The ELA standards are easily selected in a drop-down menu. There are 11 different File Maker Pro® files available to teachers of reading that are organized by the following grade levels: grade K, grade 1, grade 2, grade 3, grade 4, grade 5, grade 6, grade 7, grade 8, grades 9–10, and grades 11–12. These 11 different File Maker Pro® files are directly related to the Florida State Standards.

The DIP was also designed to include researched-based instructional strategies (RBIS), which include Creating Independence through Student-owned Strategies (CRISS), Universal Design for Learning (UDL), and Marzano’s high-yield strategies. The DIP also includes best teaching practices found within English Language Learners (ELL) instructional strategies, ESE accommodations, and the International Society for Technology in Education (ISTE) standards for teachers as well as standards for students. The ELL strategies, ESE accommodations, UDL, Marzano’s high-yield strategies, and CRISS are presented in the DIP as checkbox items. These areas were also easily identified within each checkbox to see which RBIS and best teaching practices are similar to one another. This coding system made a visual connection for teachers to help in the planning of lessons that targeted many instructional strategies at once.

The RBIS resources (Appendix B), in combination with the DIP, brought together lesson-planning strategies that teachers immediately implemented. These two tools work in concert with each other and assist teachers in designing lessons using the Florida State
standards, a lesson-planning skill that is measured by the LIIS. The DIP is also designed to support the Collaborate Plan Align Learn Motivate Share (CPALMS) website (http://www.cpalms.org/Public). CPALMS offers a wide variety of tools for teachers to assist them with lesson-planning using the Florida standards. The tools included in the CPALMS website are resources, lesson plan samples, and Professional Development (PD). CPALMS also allows teachers to collaborate by sharing feedback regarding lesson plans with other teachers in the network. CPALMS allows teachers to use a mapping calendar to organize which Florida standards they addressed, and it has functioned to allow teachers to attach a digital lesson plan to that standard.

**Background of the Problem**

In classrooms today, many teachers are not well equipped with the essential skills to deliver meaningful instruction, particularly those skills relevant to literacy instruction (Freiberg, 2002; Lyon & Weiser, 2009; Moats, 2009). Whether educators earn their teaching certificates through university teacher preparation programs or through alternative certification means that some members of both groups continue to have insufficient knowledge of reading pedagogy and literacy instruction (Lyon & Weiser, 2009; Mather, Bos, & Babur, 2001; Moats, 2009; Tissington & Grow, 2007). While in-service training for current teachers often includes instruction in the use of these important skills and concepts, what is lacking is a system for follow-up activities and continuous support for teachers’ use of these skills (Desimone, Michael, Birman, Porter, & Yoon, 2003; Kretlow, Wood, & Cooke, 2011; OECD, 1998). House Bill 7031 and the Florida Standards compound this situation as they mandate that all ESE students be
instructed with the same fidelity as their same-grade level peers and that all content-area teachers are now teachers of reading.

The instructional requirements for demonstrating proficiency in lesson-planning vary in terms of all the methods of obtaining a teaching certificate. Teachers’ proficiencies in instructional planning are evaluated each year in accordance with their teaching contracts. The FLDOE instructional-design and lesson-planning competency require teachers to align instruction with state-adopted standards at the appropriate level of rigor, sequence lessons and concepts to ensure coherence and required prior knowledge, design instructions for students to achieve mastery, select appropriate formative assessments to monitor learning, and use diagnostic student data to plan lessons. In like manner, planners must develop learning experiences that require students to demonstrate a variety of applicable skills and competencies (FLDOE, 2014). With this intention, teachers are not required to use a formal lesson-plan template; as such, it is left to the teachers’ discretion to choose methods for planning their instruction.

**Statement of the Problem**

According to the most recent data from the National Center for Education Statistics (2017), 68% of ELL students are below basic reading proficiency, 61% of ESE students are below basic reading proficiency, 35% of students eligible for free/reduced-price school lunch are below basic reading proficiency. Effective teachers of reading are able to keep students motivated, know that a clear linear lesson plan is important, know that students learn through various modalities, know how to make complex concepts simple, and know how to sustain students’ interests and attention (Rowland, 2014). Research has shown that lesson-planning is the core of excellent instruction (Nichols,
Young, & Rickelman, 2007; Rowland, 2014). Teachers generally lack a mechanism for lesson-planning for literacy that meets the rigors of the new Florida Standards. By conducting this study, the researcher influenced the instructional and lesson-planning practices of K–12 teachers of reading, by provided support through lesson-planning; the DIP was designed to work in collaboration with RBIS and was available to teachers at the private Wikispaces page.

**Statement of Purpose**

The purpose of this study was to examine the changes over time regarding the planning practices of teachers of reading using the DIP and RBIS. In this study, the researcher addressed the concerns of teachers regarding reading practices using the RBIS and DIPs. An explanatory sequential mixed-methods design was used, which involved first collecting quantitative data in Phase 1, explaining the quantitative results with in-depth qualitative data collected in Phase 2, and then merging the two strands of data. In the first quantitative phase of the study, the Stages of Concerns Questionnaire (SoCQ) data was collected from all participants from two major urban school districts to assess whether the instructional practices of teachers of reading changed after using the innovative tools (RBIS and DIP). Then in Phase 2, the qualitative phase, six in-depth interviews were conducted to help explore and explain the results of the quantitative data analysis. The purpose of collecting both quantitative and qualitative data is to explain the quantitative results with qualitative follow-up data, which is a characteristic of an explanatory mixed-methods study (Creswell, 2014).
Definitions of Terms

CBAM – Concerns Based Adoption Model. Consists of three diagnostic dimensions that gauge staff concerns through a questionnaire, innovation use rating scale, and a semi-structured interview to help leaders provide targeted, support and facilitate the implementation of a new innovation (Hall & Hord, 1987).

CRISS – Creating Independence Through Student-owned Strategies..Researched based strategies for learning that include understanding patterns and structure of the text, discussion, cooperative teamwork, vocabulary, organizing learning, formal writing and informal writing (Santa, Havens, & Maycumber, 1988).

DI – Differentiated Instruction. Instructional planning that is embedded in the process of planning through content, process, and products (Benjamin, 2005).

DIP – Digital Instructional Planner. The researcher with the File Maker Pro software, which included the RBIS as well as the traditional sections of various lesson plan models, created this instructional planning tool.

ESE – Exceptional Student Education. Students with academic or behavioral disabilities that are provided with an individualized education plan to help students master the same educational standards of their same age peers (USDOE, 2015).

ESOL – English Speakers of Other Languages. Students who are identified as English as their secondary language and these students learning is benefited with specialized instructional strategies (Lee & Buxton, 2013; Solari & Gerber, 2008; Xu & Drame, 2008).
ISTE – International Society for Technology in Education. There are two sets of standards one for teachers and another for students that focus on preparing the students for 21st century skills (Farmer, 2010; & ISTE, 2013).

LoU – Levels of Use. Is one of three tools in the CBAM, through a semi-structured interview this tool measures individually and collectively how well the staff is using the innovation (Hall & Hord, 1987).

RBIS – Research-Based Instructional Strategies. A Wikispace created by the researcher that provides professional development videos and links to the researched based instructional strategies that are included in the digital instructional plan book.

SoCQ – Survey of Concerns Questionnaire. Is one of three tools in the CBAM, is a 35-item questionnaire with open-ended questions to identify the stages of concerns that the staff is experiencing with the innovation (Hall & Hord, 1987).

UDL – Universal Design for Learning. Is a framework of three principles: provide multiple means of engagement, provide multiple means of representation, and provide multiple means of action and expression that focus upon the removal of barriers that may be impeding the student’s access to the curriculum (Meyer, Rose, & Gordon, 2014).

Research Questions and Hypotheses

The study is guided by the following research questions:

1. What are the teachers of reading’s identified stages of concerns regarding the use of a Digital Instructional Planner (DIP) and RBIS resources as measured by the SoCQ?
   a. Is there a difference in the participants’ seven stages of concern profile percentile score regarding the use of the DIP and RBIS for the pre-
intervention and post-intervention when grouped by (a) whole group, (b) years of teaching, (c) school-level-teaching, and (d) highest degree held?

b. Is there a statistical difference in the participants’ seven stages of concern profile regarding the use of the DIP and RBIS between the pre-intervention and post-intervention stages of concern profile when grouped by (a) years of teaching, (b) school-level teaching, and (c) highest degree held?

2. How have the instructional planning practices changed for teachers of reading after nine weeks of using the DIP with the RBIS?

3. What factors influenced the teachers of reading to alter their instructional planning practices after nine weeks of using the DIP with the RBIS?

4. In what ways does the interview data reporting the experiences of teachers of reading using a Digital Instructional Planner (DIP) and the related RBIS explain the data presented in the SoCQ profiles of the participants?

**Hypotheses.**

H₀₁: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will not change after nine weeks of using the DIP/RBIS when grouped as a whole.

Hₐ₁: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped as a whole.

H₀₂: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by years of teaching.
Ha2: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by years of teaching.

H03: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by school level teaching.

Ha3: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by school level teaching.

H04: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by highest degree held.

Ha4: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree held.

H05: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by years of teaching.

Ha5: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by years of teaching.

H06: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by school level teaching.

Ha6: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by school level teaching.
H₀7: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by highest degree held.

Hₐ7: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree earned.

**Theoretical Framework**

Change Theory is the theoretical framework upon which this study was based. According to Havelock (1971, 1973), there are three key models to understanding the change theory development: the Social Interaction Model; the Research, Development, and Diffusion Models; and the Problem-Solving Model (Hall & Hord, 1987). After reading the various change theories, one could glean the fact that these change models have been influenced by Havelock’s change theory that includes the four core principals of change (Wheatley, 2005), the Eight-Stage Process of Creating Major Change (Kotter, 1996), and the theory of Change Forces (Fullan, 1999). Also influenced by Havelock (1971, 1973) is the Diffusion of Innovation of Rogers’ Change Model (2003). These change models influenced the design of the DIP and incorporation of RBIS to provide a structured system of change.

The Social Interaction Model’s focus is on the diffusion of innovation, which passes through five stages: awareness of the innovation, increased interest, evaluation, trial, and adoption (Hall & Hord, 1987; Havelock, 1971, 1973). As the innovation passes through the diffusion of the innovation process, the individuals are embedded together in a group that interacts with others during the new change in helping it to be adopted successfully. The social position of the individual can influence the innovation, as the individual may be at best an innovator, or at worst a laggard during the implementation.
Another key feature of the model is the group loyalties that are formed. These groups can move the innovation forward or sabotage the change effort.

The Research, Development, and Diffusion Models (Havelock, 1971, 1973) are guided by five assumptions. The first assumption of the research and development model is that there is a rational sequence through which the research, development, packaging, and dissemination must follow. Secondly, there is a lengthy planning process before the innovation is introduced. The next assumption is that there is a coordination of efforts between inside and outside agents. The fourth assumption is that the consumer of the innovation is passive during the research and development stages, and only becomes active during the diffusion and adoption stages. The final assumption is that the development costs are steep.

The Problem-Solving Model advocates change from the input derived from the group through collaboration with outside consultants (Havelock, 1971, 1973). The focus of this model is to solve a self-identified problem within the system of the organization. The model comprises six stages:

1. initial disturbance
2. the need to change
3. diagnosis of the problem
4. the search for solutions
5. an implement solution
6. the determination of the solution was a success if not go back to the beginning and start the change process again.
A key difference here from the Research, Development, and Diffusion Models is that the individual or group of adopters is seeking a solution to a problem. The next change model from Wheatley (2005) offers more freedom to the individual during the change process.

Wheatley (2005) states that change is ever-present in everything we do as humans and is in constant change. Human beings involved in the implementation of new ways of work do not follow each step exactly as prescribed by the change agent. Wheatley’s (2005) position is that there are four core principles concerning change:

1. participation in a change is an invitation
2. principles, not techniques
3. the use of principles rather than models
4. to conduct experiments.

Participation in a change should be presented as an invitation, as opposed to forced change, which can cause chaos and can lead to failure of the change effort (Wheatley, 2005). Adherence to these principles, not simply implementing techniques, holds the participants accountable for the change to the core principles of the change, but still allows them the freedom to find their own way of work in the new change effort. As models can restrict creativity, rather than models, one should use principles that participants can explore (Wheatley, 2005). So that participants may explore and learn from their results, one should conduct experiments during the change process.

Kotter’s (1996) Change Model is one followed in sequence. However, the eight-stage process of creating a major change in an organization can have multiple steps
occurring simultaneously. Kotter’s (1996) Change Model consists of the following eight stages

1. establishing a sense of urgency
2. creating the guiding coalition
3. developing a vision and strategy
4. communicating in order to change vision
5. empowering broad-based action
6. generating short-term wins
7. consolidating games and producing additional change
8. anchoring new approaches as well as the culture.

The first four steps in this change process are to establish the need for change and to have on board the change participants. Stages five through eight support the change participants through the change effort. The last stage helps to sustain and institute the change as an everyday way of working with the new system. This change model is focused on major transformational modifications.

Michael Fullan has focused his research on educational change by proposing a change process model and lessons for change (Fullan, 1982, 1999, & 2001). The change process consists of four stages: initiation, implementation, continuation, and outcomes (Fullan, 1982). Fullan’s (1999) theory of change forces depicts eight lessons (stages)

1. the moral purpose is complex and problematic
2. theories of change, as well as theories of education, need each other
3. conflict and diversity are our friends
4. to understand the meaning of operating on the edge of chaos and acceptance
5. emotional intelligence is anxiety-provoking and anxiety-containing

6. collaborative cultures are anxiety-provoking and anxiety-containing

7. incoherence (must be) attacked: that connectedness and knowledge creation are critical

8. there is no single solution.

One should craft one’s own theories and actions by being a critical consumer (Fullan, 1999). These eight lessons help guide change through the change model.

Variables Determining the Dependent Variable

<table>
<thead>
<tr>
<th>Rate of Adoption</th>
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<tbody>
<tr>
<td>I. Perceived attributes of innovation</td>
</tr>
<tr>
<td>a. Relative advantage</td>
</tr>
<tr>
<td>b. Compatibility</td>
</tr>
<tr>
<td>c. Trialability</td>
</tr>
<tr>
<td>d. Observability</td>
</tr>
<tr>
<td>II. Type of innovation – Decision</td>
</tr>
<tr>
<td>a. Optional</td>
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<tr>
<td>b. Collective</td>
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<tr>
<td>c. Authority</td>
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<tr>
<td>III. Communication channels (e.g., mass media or interpersonal) Rate of Adoption of Innovation</td>
</tr>
<tr>
<td>IV. Nature of social system (its norms, degree of network interconnectedness, and so on.)</td>
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<tr>
<td>V. Extent of change agents’ promotion efforts</td>
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</table>

Figure 1. Variables that determine the rate of adoption of innovations (Rogers, 2003, p. 222).

The diffusion of innovations model has identified five types of variables that help determine the rate of adoption of an innovation (Rogers, 2003). The variables are (a) perceived attributes of innovation, (b) the type of innovation decision, (c) communication
channels, (d) the nature of the social system, and (e) the extent of change agents promoting change (Rogers, 2003).

Figure 1 above depicts these variables. The perceived attributes of innovation include relative advantage, compatibility, complexity, trialability, and observability. Relative advantage is the degree to which the innovation is seen as being better than the current system that is being utilized (Hall & Hord, 1987; Rogers, 2003). Compatibility is achieved when adopters view the innovation as consistent with their existing values, past experiences, and their current needs (Rogers, 2003). Complexity is achieved when adopters see the innovation as being relatively difficult to use; these changes have slower adoption rates (Rogers, 2003). Trialability is attained when a facet of the innovation may be tested in installments (Rogers, 2003). Observability is accomplished when adopters easily see the results of the innovation (Rogers, 2003).

Teachers of reading in this study utilized the problem-solver model, as they were attracted to join the study because they were seeking a change to lesson-planning using the DIP and RBIS. The participants in the study experienced the research and development phase, as through this study, the experiences of the participants have identified the changes needed in the RBIS and the DIP. Wheatley’s (2005) model was related to this study, as the participants had the freedom to use any or all the options provided in the RBIS and the DIP. The Change Models of Fullan (1982, 1999), Kotter (1996), and Rogers (2003) were employed by the researcher and experienced by the participants in the study. The researcher purposefully designed the PD in an attempt to circumvent any concerns using the DIP or the RBIS. In doing this, the researcher is
assuming the role of the change agent. The change agent’s role is to help facilitate the implementation of the innovation.

**Significance of the Study**

This study will contribute to the field of education regarding the manner in which teachers of reading in K–12 urban school settings change their instructional practices when provided with resources related to RBIS as well as in those that are also included in the lesson-planning instrument (DIP). The innovation tools (RBIS and DIP) will support teachers in lesson-planning using research-based resources that they have learned during their college coursework, alternative certification, or through PD. Educational administrators can use the innovation to implement changes in lesson-planning for their teachers of reading as required in the RTTT and LIIS minimum standards of instructional practices.

**Summary**

In sum, in this study, the researcher examines the instructional planning changes of participants who used the RBIS and DIP following a professional-development intervention and additional PD delivered via YouTube videos. The researcher employed a sequential mixed-methods research design. Data sources included the results from four checkpoints, as a (a) pre-survey instrument (SoCQ), (b) post-survey instrument (SoCQ), (c) Innovation Configuration Map, and (c) interview data collected from a sample of participants. The data gathered from the participants’ points of view helped the researcher understand the factors that have contributed to their changes in instructional planning. Figure 2 depicts the change theories that influence the Concerns-Based Adoption Model (CBAM) and the DIP, as well as the RBIS. The figure also illustrates
the flow of educational research and teacher knowledge that was employed in creating the DIP and RBIS. The relationship to how the CBAM is utilized to measure the changes in teacher’s instructional planning practices and teacher knowledge of RBIS is also depicted. Change Theory is the theoretical underpinning of the CBAM (Hord, Rutherford, Huling-Austin & Hall, 1987). The CBAM is used to study the changes in reading teachers’ lesson-planning using the DIP and RBIS. Both the DIP and RBIS have foundations in educational research.

*Figure 2. Flowchart of research study*

<table>
<thead>
<tr>
<th>Change Theory</th>
<th>Wheatley (2005)</th>
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<tbody>
<tr>
<td>CBAM</td>
<td>Kotter (1996)</td>
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<tr>
<td>Teacher Knowledge</td>
<td>Eight Step Process of</td>
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<tr>
<td></td>
<td>Creating Major Change</td>
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<td></td>
<td>Rogers (2003)</td>
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<tr>
<td>Educational Research</td>
<td>Diffusion of Innovations</td>
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<td></td>
<td>Fullan (1999)</td>
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<td>Change Forces</td>
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<td></td>
<td>Havelock (1973)</td>
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<tr>
<td>DIP</td>
<td>Vygotsky – zone of proximal development</td>
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<td>RBIS</td>
<td>Working Memory</td>
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<td></td>
<td>UDL (Brain Based)</td>
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<td></td>
<td>Digital Instruction Planner</td>
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<td></td>
<td>Marzano’s nine high-yield strategies</td>
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<td>CRISS</td>
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<td></td>
<td>Differentiated instruction</td>
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<td>ELL strategies</td>
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<td>Florida Standards</td>
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<td>Influx of ESE</td>
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<td>Changes in Law</td>
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<td>Teacher Competencies</td>
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<td>Professional Development</td>
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II. LITERATURE REVIEW

The researcher will discuss the literature related to the theories of change and the various models thereof. The creation of the DIP, which was fashioned by the researcher for reading teachers to utilize for their instructional planning, will be further discussed. Additionally, a discussion of the RBIS resources that are incorporated into the DIP will be reviewed. Furthermore, The CBAM and its components of the stages of concern questionnaire, levels of use, and the innovation configuration will also be reviewed. Finally, the literature review will focus on teachers’ knowledge of reading instructional strategies.

Change Theory

Over the past 20 years, education has experienced many changes in curriculum standards, instructional planning changes, new diploma options for students that change the way teachers must prepare students for graduation, and a move toward the 21st century skills needed for today’s global economy (CFEF, 2014, FLDOE 2011; FLDOE 2014; USDOE, 2015). There are many thoughts about change and various theories about how to go about implementing change. The most prominent change theories are from Margaret Wheatley (2005), John Kotter (1996), Everett Rogers (2003), Michael Fullan (1982, 1999, & 2001), and Ronald Havelock (1971 & 1973). The literature review will begin with the most recent change theory and move toward its predecessor theories. Commonalities and differences will be highlighted throughout this section.

Wheatley approach. Wheatley (2005) conducted survey research and reported that the participants listed change as an event involving nine steps: assign the manager, set a goal that is improved, define the direct outcomes, determine the measures, dissect
the problem, redesign the machine, implement the adaptation, test the results, and assign blame. The step that most organizations omit is Step 8, “test the results” (Wheatley, 2005, p. 85). Testing the results would show that the participants involved in a change must have the freedom to create or modify the change to fit their individual ways of working, as not everyone works exactly the same way (Wheatley, 2005). Change agents need to prepare for the chaos of change, as each person will adapt the change to his or her own style of working (Wheatley, 2005, p. 111).

This freedom to create is presently thought of in terms of the four core principles of change (Wheatley, 2005, p. 88):

1. participation is not a choice
2. use principles, not techniques
3. use principles rather than models
4. conduct experiments.

The first principle, which states that participation is not a choice, rather it is about inviting people in the organization to engage in the change process as voluntary active participants. A key element of participation is in allowing participants the freedom to change the innovation to fit their newly found insights and the relationships that they created. This freedom will allow a deeper level of commitment to the innovation, thereby yielding a more rapid and more complete implementation.

The next principle that places principles above techniques is concerned with allowing participants the freedom to interpret the principles of the change as they fit the immediate circumstances of the participants (Wheatley, 2005, p. 93). The principle is non-negotiable, but freedom is allowed for the participants to incorporate the new
principle into their work styles. Participants are allowed the freedom to determine how to apply the new principle. The third tenet, using principles rather than models, is about using the four core principles of change rather than relying on models of change. No two change processes occur exactly the same way each time; hence, allowing for freedom within the four core principles of change is paramount over a change theory (Wheatley, 2005, p. 95). Using the core principles of change, the change agents can create their unique change processes during the implementation of the change. The final principle concerns itself with experimenting with the four principles of change. One should not stop the implementation of the change process, as the change effort consists of a series of experiments using the four core principles:

1. Who else needs to be here (reflecting on system of relationships)?
2. What just happened (learning from the reactions that surfaced)?
3. Can we talk (recognizing different perspectives of others)?
4. In addition, who have we become (monitoring our own evolution)?

(Wheatley, 2005, p. 97)

One should apply these four possible questions to reflect upon the experiment.

**Kotter's eight stages of major change model.** Kotter’s (1996) Change Model is unlike Wheatley’s approach because each stage of Kotter’s Change Model must be incorporated during the change process. Whereas, Wheatley’s approach is focused on the experience of the change and allowing the participants in the change to adapt and modify the innovation to fit their adoption needs. Kotter (1996) outlined his eight-stage process of creating major change as follows: establishing a sense of urgency, creating the guiding coalition, developing a vision and strategy, communicating to change vision, empowering
broad-based action, generating short-term wins, consolidating gains and producing more change, and anchoring new approaches and culture. The first four steps in this transformation change model focus on the status quo. Stages 5 to 7 introduce the change. Stage 8 of this transformation change model is in making the change durable in the culture of the organization. Following these eight stages in the sequence is important; however, one may be in more than one stage at a time (Kotter, 1996, p. 23).

Kotter’s (1996) first four stages of major change address how the organization is lacking change and the problem-solver model process can be identified in these stages. Stage 1 (establishing a sense of urgency) is setting the stage of the needed change in a way that outlines the crisis prompting the needed change and in establishing the notion that this innovation is the answer to solve or ameliorate the crisis (Kotter, 1996, p. 35). Stage 2 (creating the guiding coalition) is finding a team or group to lead the change and to work together (Kotter, 1996, p. 52). Stage 3 (developing a vision and strategy) is creating a vision to direct the change effort and to identify the strategies that will be used to achieve the vision (Kotter, 1996, p. 68). Stage 4 (communicating the change vision) is using every possible method to communicate the needed change, vision, and strategies on a continuous basis (Kotter, 1996, p. 90).

The second set of core stages (5 to 7) introduces the new practices for change (Kotter, 1996). Stage 5 (empowering broad-based action) is the elimination of barriers, changing the system that undermines the change vision and encouraging risk-taking (Kotter, 1996, p. 102). Stage 6 (generating short-term wins) is planning for short-term goals, creating winning situations for the short-term goals, and recognizing those wins when possible (Kotter, 1996, p. 122). Stage 7 (consolidating gains and producing more
change) is reviving the change process with additional new projects and using the increased trustworthiness to change all system structures and policies that do not work together with the new change (Kotter, 1996, p. 143). The final stage is Stage 8 (anchoring new approaches in the culture). This final stage involves identifying the new connections between the new behaviors and new organizational success (Kotter, 1996, p. 149).

**Rogers’ diffusion of innovation.** Another change model is Rogers’ (2003) Diffusion of Innovation. This change model demonstrates the Social Interaction Model, and the Research, Development and Diffusion Model as described by Havelock. The model of the innovation-decision process consists of the following five communication channels (stages): knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003, p.170). These five stages are the innovation-decision processes that an individual or decision-making group undergoes (Rogers, 2003). Stage 1 (knowledge) is when the individual or decision-making group becomes aware of the innovation either by searching for it or by being introduced to the innovation (Rogers, 2003, p. 171). At this point, the individual or decision-making group poses three questions: What is the innovation? How does it work? Why does it work? These questions characterize three types of knowledge concerning the innovation:

1. awareness knowledge (knowing the existence of the innovation, which leads the adopter to the next two knowledge levels)

2. how-to knowledge (the needed information about how to use the innovation appropriately)
3. principles knowledge (knowledge dealing with the principles of the theory within the innovation) (Rogers, 2003, p. 172).

Most change agents focus their attention upon the awareness knowledge when recruiting adopters; however, it is more advantageous to focus upon the how-to knowledge, as this increases the likelihood of the individual or decision-making group moving on to the next stage of the innovation-decision process (Rogers, 2003, p. 173).

The term “adopters” come from the adopter categorization with five adopter categories: innovators, early adopter, early majority, late majority, and laggards (Rogers, 2003, p. 282). During a change effort, innovators comprise 2.5% of the innovation population (Rogers, 2003, p. 281). Innovators are characterized by their desire to be involved in new ideas and are able to cope with a high degree of doubt concerning the innovation. Early adopters typically comprise 13.5% of the innovation population (Rogers, 2003, p. 281). This is the target audience for the change agent, as this category embraces the change and is the role model for the organization to follow. This group’s opinion is respected by the organization, and this group will communicate the effectiveness of an innovation, thereby affecting an expansion of the new idea (Rogers, 2003). Members of the early majority comprise 34% of the innovation population (Rogers, 2003, p. 281). The early majority may deliberate for some time within the interpersonal network at the organization before adopting the innovation, and this communication can apply peer pressure to the late majority for them to adopt the new idea. Late majority members comprise 34% of the innovation population (Rogers, 2003, p. 281). This category of members will adopt the innovation when it is moving towards permanent system change (Rogers, 2003). Laggards comprise 16% of the innovation
population (Rogers, 2003, p. 281). This category of members is composed of the last group people who will adopt the innovation, and they do so only after being convinced that the innovation is permanent (Rogers, 2003).

Rogers’ (2003) second stage (persuasion) occurs after the individuals know about the innovation are now developing their own feelings about the innovation. It is at this stage when the individual forms an opinion about the perceived attributes of the system, which are relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003, p.175). Relative advantage is the way that an individual perceives the innovation to be a superior solution to what they are currently undertaking and any incentives offered may affect the user’s perceptions (Rogers, 2003, p. 229). Compatibility is the way that innovation fits with the individual’s values and beliefs, previous innovations attempted, and his or her current need for change (Rogers, 2003, p.257). Complexity is the level to which the individual believes that the innovation is easy or burdensome to implement. Trialability refers to the innovation being implemented in steps along the way to full adoption (Rogers, 2003, p. 258). Observability is the change (due to the innovation) being seen by others in the organization, which allows the idea underpinning the innovation to be conveyed to others (Rogers, 2003, p.258).

Stage 3 (decision) consists of three types of possible decisions: optional, collective, and authority-based (Rogers, 2003, p. 222). Optional is when the individual has the freedom to choose to accept or reject the innovation, such as in a voluntary study. Collective is when the group chooses to accept or reject the innovation, such as a group
of farmers in the same rural area. Authority is that action that occurs when the choice to accept or reject the innovation is made by someone higher up in the organization.

Stage 4 (implementation) is when the individual or decision-making group applies the innovation. The innovation still carries the unknown regarding what may occur next as the innovation is implemented (Rogers, 2003, p. 179). This circumstance calls for the change agent to provide technical assistance as the innovation begins its implementation (Rogers, 2003). This continued support is the primary focus of the change agent during the implementation stage.

Stage 5 (confirmation) consists of an internal conflict or discontinuation of the innovation. The internal conflict may cause the individual or decision-making group to realize that there is a need to seek more information about the innovation to meet the desired outcomes (Rogers, 2003, p. 189). The internal conflict that caused the individuals or decision-making group not to adopt the innovation may now cause them finally to choose to adopt the innovation. During this stage, the individual or decision-making group will solicit supportive feedback and messages that will help halt or abate the internal conflict. The discontinuation of the innovation may occur if the individual or decision-making group discovers a replacement for the innovation, or if they have developed dissatisfaction with the innovation (Rogers, 2003).

**Fullan’s change forces.** Fullan’s Theory of Change Forces (1999, 2001) depicts eight lessons (stages). They are as follows:

1. moral purpose is complex and problematic
2. theories of change and theories of education need each other
3. conflict and diversity are our friends
4. understand the meaning of operating on the edge of chaos

5. emotional intelligence is anxiety-provoking and anxiety-containing

6. collaborative cultures are anxiety-provoking and anxiety-containing attacking incoherence

7. connectedness and knowledge creation are critical

8. there is no single solution (Fullan, 1999, p. 18).

One should craft his or her own theories and actions by being a critical consumer (Fullan, 1999, p. 29).

Lesson 1 (moral purpose is complex and problematic) highlights the idea that the power struggle for change occurs between motivating students and teachers in the moral purpose of increasing academic gains while including alienated students and parents (Fullan, 1999, p. 19). Lesson 2 (theories of change and theories of education need each other) states that theories of change are not one-size-fits-all for each educational innovation, as not any one single theory of change can be applied in every situation (Fullan, 1999, p. 20). Lesson 3 (conflict and diversity are our friends) states that without conflict, there would not be changes and that people involved in change need to work through the differences with people that they do not know (Fullan, 1999, p. 22). Lesson 4 (understand the meaning of operating on the edge of chaos) reports that without a degree of chaos, change would be unable to evolve. This does not mean total chaos, nor does it mean to maintain a rigid change structure, as that would not allow experimentation by users during the change (Fullan, 1999, p 24).

Lesson 5 (emotional intelligence is anxiety provoking and anxiety containing) posits a certain amount of anxiety, as a byproduct during change, but that there should be
a method to attempt to contain this anxiety (Fullan, 1999, p. 24). Lesson 6 (collaborative cultures are anxiety provoking and anxiety containing) states that when one has a collaboration with differences of opinions, it may result in beneficial anxiety (Fullan, 1999, p. 26). Lesson 7 (attack incoherence: connectedness and knowledge creation are critical) states that there are often multiple initiatives or innovations occurring simultaneously and that this phenomenon should be anticipated in order to help others to understand the meaning of change (Fullan, 1999, p. 27). Lesson 8 (there is no single solution: craft your own theories and actions by being a critical consumer) suggests that the change process is too complex to fit into merely one model of change because each organization has its own set of personalities, unique problems, and possible opportunities (Fullan, 1999, p. 27).

Fullan (2001) further states that to lead change, it requires more than simply implementing change theory during an innovation (Fullan, 2001, p. 5). Thoughtful change involves a fuller understanding of the change process (Fullan, 2001, p. 5). Understanding the change process involves six elements: (1) the goal is not to innovate to excess (2) it is not enough to have the best ideas (3) appreciate the implementation dip (4) redefine resistance (5) reculturing is essential and (6) never to follow a checklist; always allow for complexity (Fullan, 2001, p. 34). These elements highlight various elements found in many educational changes (Fullan, 2001).

Element 1 (the goal is not to innovate the most) refers to school leaders who implement many changes at one time. These leaders foster schools that are referred to as “Christmas tree schools”; they have many shiny lights but little substantive changes
Element 2 (it is not enough to have the best ideas) refers to the type of leadership styles leading the change. There are six types of leadership styles:

1. coercive (demands compliance)
2. authoritative (mobilizes the organization behind a vision)
3. affiliative (creates harmony and builds emotional bonds)
4. democratic (forges consensuses)
5. pacesetting (sets high standards for performance)
6. coaching (develops people within the organization for the future) (Fullan, 2001, p. 38).

Coercive and pacesetting styles of leadership can create a negative effect during change implementation (Fullan, 2001).

Element 3 (appreciate the implementation dip) suggests that change is a process, not an event and that one should expect a dip in performance as the organization learns new skills (Fullan, 2001, p. 40). Element 4 (redefine resistance) identifies the resistors to the change. By trying to understand the resistance in the change may provide an opportunity to have adopters come onboard, or at the very least, limit the sabotage that resistors can bring to a change effort (Fullan, 2001, p. 42). Element 5 (reculturing is the name of the game) concerns the transforming the culture of the organization, which can lead to deepening the moral purpose of the organization during change (Fullan, 2001, p. 43). Element 6 (never a checklist, always complexity) states that following the checklist of a change theory, such as Kotter’s (1996) eight steps, is beneficial for planning change (Fullan, 2001, p. 45). However, having a deep understanding of the five core
components of leadership during the change process will more likely support the change effort than following a change model in lockstep (Fullan, 2001).

There are three schools of research in the models of change: the Social Interaction Model, the Research Development and Diffusion Model, and the Problem-Solver Model (Havelock, 1971). Within all three models, there is a variation of acceptance of innovation related to who initiated the change and the interaction between the change agent and the receiver of the new knowledge. The curves of the innovation and diffusion are present when an innovation is adopted either by an individual or by a group of adopters (Havelock, 1971, Chapter 10, p. 4).

**Social Interaction Model.** The Social Interaction Model contains three stages: a research stage, a development stage, and a diffusion and adoption stage (Havelock, 1971, Chapter 10, p. 28). The receiver of change has no input into the design of the new implementation, and the change only moves through the stages if the receiver is interested (Havelock, 1971). In Stage 1, “researched assumed,” and Stage 2, “development assumed,” the change agent independently creates the innovation without the input of the adopters. If the adopters determine that the innovation has some value, then the diffusion of the innovation will commence (Havelock, 1971). Stage 3, “some diffusion activity assumed,” occurs through awareness, interest, evaluation, trial, and adoption.

**Research Development and Diffusion Model.** This diffusion model contains three stages: a research stage, a development stage, and a diffusion and adoption stage (Havelock, 1971, Chapter 10, p. 28). Stage 1 (research) comprises basic scientific inquiry, a study of the problem, and the collection of data based on the perceived needs of
the adopter. In Stage 2 (development), the change agent designs and creates a solution for the adopter. Stage 3 (diffusion) comprises adoption, which includes awareness and interest building and is followed by a trial and evaluation interval. If successful, then the change would be adopted and institutionalized (Havelock, 1971). The diffusion portion of Stage 3 includes promoting the change employing information, demonstration, and training, followed with support. This model is used when new products are created and then diffused to users in the hopes that they will accept the support.

**Problem-solver Model.** Alternatively, this model contains three stages: a research stage, a development stage, and a diffusion and adoption stage (Havelock, 1971, Chapter 10, p. 28). In this model, the individual or group of adopters who are seeking a solution for an area of concern would initiate the process (Havelock, 1971, Chapter 10, p. 29). Stage 1 (basic research assumed) is the same as the Social Interaction Model in that the body of research is assumed to have been previously collected before implementing a change. Stage 2 (development) consists of searching for solutions, establishing goals and priorities, weighing and evaluating possible solutions, selecting the best solution, and planning for implementation. Stage 3 (diffusion and adoption) consists of diagnosis (embedded in the search for solutions of Stage 2) and installation, evaluation, revision, institutionalization, change relationship termination, and possible diffusion to others (embedded in the planning for implementation in Stage 2) (Havelock, 1971).

However, all innovations that are in the process of implementation (diffusion) have various adoption curves (Havelock, 1971). In the case of individual adoption, the adoption rate may be depicted as an “S” curve (Havelock, 1971, Chapter 10, p. 6). At the bottom of the “S” curve is a slight involvement/beginning awareness of the innovation.
Over time, with involvement in the innovation, there is an increase in moderate involvement, high involvement, decreasing involvement, and routine involvement at the top of the “S” curve. In the case of a group adoption, Havelock (1971) refers to Rogers’ (2003) adopter categories of innovators: innovators, early adopters, early majority, late majority, and laggards. These five adopter categories are the same as previously described in Rogers’ (2003) Diffusion of Innovation Model.

**Havelock’s Model of Change.** Havelock’s (1973) model of change is a six-stage model, which highlights the change agent’s role during the implementation of the innovation. The Social Interaction Model also can be seen through the interaction of the change agent and the clients as well as between the clients. The six stages are:

1. building a relationship between change agent and client
2. diagnosing the problem
3. acquiring relevant resources,
4. choosing the solution
5. gaining acceptance

Not every stage of this change process is required, nor do the stages need to occur in sequential order. The emphasis of the stages is based on the use of problem solving while utilizing the available resources.

Stage 1 (building a relationship between change agent and client) requires knowing the norms of the system and identifying the clients (i.e., community, leaders, other interested parties, or teachers) in the change initiative. The change agent identifies
his or her relationship with the educational organization (Havelock, 1973).

Understanding the norms requires knowledge of the current system in use, understanding any limitations of that system, and the culture and climate of workers within the system (Havelock, 1973, p. 44). Change agents often cannot select the change team with whom they are going to implement the innovation, but if possible, they should seek opinion leaders, members with a vested interest who are interested in change and those with public relation skills and who are deemed credible (Havelock, 1973). The relationship of the change agent could be one of either an inside change agent or an outside change agent.

An inside change agent has the advantages of knowing the system and being familiar with commonly held beliefs and behaviors and may be a familiar member of the organization (Havelock, 1973, p. 50). The disadvantages of an inside change agent are that he or she may lack the perspective to view the problem from a new point of view and may lack the skills and power to enact change. As outsiders, outside change agents have the advantages of viewing the problem more objectively. Outsiders are independent of power struggles and have something that is new to bring into the organization (Havelock, 1973). The disadvantages of outside change agents are that, as strangers, they may be seen as threats, lacking the knowledge of the norms of the system, and may be unable to relate to the pain of changing along with the clients (Havelock, 1973, p. 51).

Stage 2 (diagnosing the problem) can be accomplished in three ways: identifying the problem, identifying the opportunities, and understanding the client system. When change agents are identifying the problem, they make a list of the surface symptoms that are described by the client and the search (though the interview process) for the
underlying causes for those problems (Havelock, 1973, p. 64). When identifying the opportunities, the change agent focuses on the strengths of the client and on any areas that are identified for potential change (Havelock, 1973). During this internal analysis, the change agent also looks for history, where the client had issues in coping with problems in their current system. There are four steps to follow when the change agent is working to understand the client system (Havelock, 1973).

At the outset, the change agent ensures that the goal is clearly defined as it relates to the intended system change (Havelock, 1973). It is hoped that this system change will include the independent person as well as all the interrelated parts of the educational organization. Secondly, the change agent outlines to the client the process of the manner in which change is achieved throughout the learning environment by the administration, teachers, and students. Thirdly, the change agent shows how other systems that have comprised new ideas from the administration, teachers, and students fuel the learning environment. Lastly, the system change suggests the use of diagnostic questions that focus on the boundaries of the system.

Stage 3 (acquiring relevant resources) occurs in three steps that include gathering information that is needed during the change process, devising an acquisition strategy, and building the capacity of the innovation (Havelock, 1973, p. 77). A collection of information during the change process can be summarized using the acronym “DAETEIM”: Diagnosis (resources to understand the client system), Awareness (knowing what new educational changes are available), Evaluation before trial (information about the validity and reliability of the innovation), Trial (demonstrate and explain innovation and implement the change), Evaluation after trial (collect information
from participants concerning the innovation), Installation (list of requirements needed for full implementation of innovation), and Maintenance (long-term cost, and new requirements such as staff or future evaluation needs) (Havelock, 1973, p. 77). An acquisition strategy may consist of one-to-one interviews, group interviews, direct observation, or the use of an outside team to collect data. Building the capacity of the innovation is establishing and maintaining relationships with other school systems, universities, and departments of education.

Stage 4 (choosing the solution) is completed in four sequential steps, which consist of deriving implications from research, generating a range of solution ideas, feasibility testing, and adaptation. This is the most creative stage in the process of change and often is the most difficult for change agents (Havelock, 1973, p. 97). It is indeed difficult, as many times the change agent attempts to choose the solution without input from the client. Deriving implications from research is an activity that should be completed with Stage 1 (diagnostic activities) and with Stage 2 (resource acquisition activities) (Havelock, 1973, p. 98). These are the stages in which research is collected to answer the questions about the specific problem and setting. The change agent then refers back to the data collected from “DAETEIM” in Stage 1.

Generating a range of solution ideas also refers to the data collected from Stage 1 and from Stage 2, focusing particularly on information collected from Stage 2 in which the concept of concentrating upon opportunities and inner strengths of the client were highlighted (Havelock, 1973). The key activity for generating solutions is brainstorming, which can be completed in four steps: preparing, stage setting, establishing ground rules, and summarizing/synthesizing (Havelock, 1973, p105). Preparing clients includes
briefing them about the problem area, reviewing the data collected, and sharing any related research. Stage setting is the act of establishing a specific focus on the problem and the ways to solve the problem. The ground rules include assigning a recorder to note all of the ideas or proposals. No ideas are criticized during this free association of solutions, but comments to build upon ideas are permitted.

Selecting a solution and feasibility testing method includes comparing various solutions through three broad steps: potential benefits, workability, and diffusibility (Havelock, 1973, p. 107). Potential benefits are determined by answering the following questions: How many people will it help? How long will it help? How much will it help? Does it have any negative effects? Workability is determined by answering the following questions: Will the innovation provide the promised results? Will the innovation have reliability? Can the client meet the costs for both money and staff? Are these costs reasonable? Diffusibility is determined by whether the innovation is acceptable (meets the values of clients), can be demonstrated and understood by clients, and can be trialed on a limited basis. Adapting the solution is necessary because not merely one innovation will fit all needs (Havelock, 1973, p. 109). It will be necessary to adapt the innovation to improve workability and to increase diffusibility. Adapting the innovation is simpler when there are many resources at the client’s disposal; assets such as a resource depository at the district, or when a research and development team is available (Havelock, 1973).

Stage 5 (gaining deeper and wider acceptance) is the stage at which all the groundwork that was completed in Stages 1 to 4 is put into action. This stage, as with the others, requires the client to be involved in the decision-making process (Havelock,
Gaining acceptance involves four steps: how individuals accept the innovation, how groups accept the innovation, how to choose a communication strategy, and how to maintain a flexible program (Havelock, 1973, p. 126). How individuals accept change can best be described as what the change agent’s activities are and what the client’s activities are.

The manner in which individuals accept the innovation occurs in six phases, as depicted in Figure 3. There are two sets of the six phases of the adoption process: one for the client’s activities and another set of six phases for the change agent’s activities (Havelock, 1973, p. 130). These two sets of phases work in concert with each other. The client activities are: (Phase 1) awareness (a passive interest, just learning about innovation), (Phase 2) interest (actively seeking information about innovation), (Phase 3) evaluation (a mental trial of the innovation), (Phase 4) trial and test (a small-scale implementation of the innovation), (Phase 5) adoption (decision made to accept or reject the innovation), and (Phase 6) integration (used in the day-to-day work of the teacher’s life). The change agent’s activities are as follows: (Phase 1) promote (initial contact or arouse interest and motivate the client to seek information about the innovation), (Phase 2) inform and tell (encourage the client to seek out and engage in a group discussion about innovation), (Phase 3) demonstrate and show (show the innovation during the clients’ mental trial), (Phase 4) train (maximum support and encouragement), (Phase 5) help and service (help the client adjust to the new situation), and (Phase 6) nurture (practice sessions and follow-up questions).
Figure 3. This figure coordinates the change agent’s adoption activities with those of the client’s adoption activities (Havelock, 1973, p. 130).

How groups accept an innovation relates to how it occurs between the client and change agent (Havelock, 1973). The diffusion of innovation begins with the acceptance of the change by a few members of the group, as well as through word of mouth, contacts with friends, and contact with other members in the community, which can spread the innovation more quickly (Havelock, 1973, p. 119). A group can have three types of
common members; these are the innovators, the resistors, and the leaders. The innovators have qualities of being risk-takers even in the face of ridicule from others; they typically read outside sources of information and are usually receptive to the influence of the change agent (Havelock, 1973, p. 119). Many social systems have resistors who are critics of innovation and who resist change (Havelock, 1973, p. 120). These resistors can slow down or sabotage the innovation process. Some members of the social system are the leaders of the group and may act as legitimators (provide a sense to the group that the innovation is acceptable to try), facilitators (encouraging others to follow, and providing praise), and some act as gatekeepers (controlling access to resources, or funds) (Havelock, 1973, p. 120). The change agent works with group leaders to gain acceptance for the innovation.

The final two steps for Phase 5 are the manner in which a communication strategy is chosen as well as the means to maintain a flexible program. Communication with clients can involve various methods, such as written and oral presentations, films, demonstrations, person-to-person contacts, group discussions, conferences and workshops (Havelock, 1973, p. 124). Being flexible toward an innovation is a key concept in all stages of change (Havelock, 1973, p. 129). Adapting innovation can occur by shifting gears up, shifting gears down, or by reversing gears. Shifting up is accelerating the process, shifting down is slowing the innovation process, and reversing gears is pausing the innovation and concentrating on motivating the resistance (Havelock, 1973, p. 130).

Stage 6 (stabilizing the innovation and generating self-renewal) deals with the problems of ensuring the continuation of a particular innovation, introducing the concept
of system renewal, and including the problems related to the act of disengagement (Havelock, 1973, p. 134). Whenever possible, the change agent should support the problems of ensuring the continuation of an innovation (Havelock, 1973). The change agent can provide support by continuing to provide rewards, supporting practice and routinization, fostering structural integration into the system, continuing evaluation, providing for on-going maintenance, and continuing adoption capability (Havelock, 1973, p. 134). The concept of system renewal relates to the client’s learning to become the change agent for the organization (Havelock, 1973, p. 136). The problems related to the act of disengagement occur when the change agent determines when and how to disengage from the innovation (Havelock, 1973, p. 138). Disengagement can occur when there is evidence of the innovation being internalized or when signs of self-renewal are present (Havelock, 1973, p. 139). The disengagement process should be gradual after the client understands how to continue without the change agent (Havelock, 1973, p. 139).

**Summarizing similarities and differences.** There is a strong correlation to the problem-solving process as described in Havelock’s (1973) model to Fullan’s (1999), Rogers’ (2003), and Wheatley’s (2005) change models, as depicted in Table 1. The problem-solving relationship is as strong in Kotter’s (1996) model, as his model is a top-down approach to system-wide change. Fullan’s (1999), Rogers’ (2003), Kotter’s (1996), and Wheatley’s (2005) change models have additional stages that are not present in Havelock’s (1973) change model. All the change models have two of the same stages, specifically, building the relationship (between change agent and client) and stabilizing the innovation as well as generating self-renewal (accepting or rejecting change). Havelock (1973), Fullan (1999), and Rogers (2003) all diagnose the problem as
an earlier stage in their change models. The gaining of the acceptance stage is not present in Fullan’s change model, as educational change is often implemented from the top down as directed from school and district leadership (Fullan, 1999).

Table 1.

*Comparisons of Change Models*

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<td>Assign the manager</td>
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<td>Establish sense of urgency</td>
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<td>Building the relationship (between</td>
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<td>Diagnosing the problem</td>
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<td>2, 3</td>
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<td>Acquiring relevant resources</td>
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<td>Choosing the solution</td>
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<td>Gaining Acceptance</td>
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<td>Stabilizing the innovation and generating</td>
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<td>self-renewal (accept or reject change)</td>
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<td>Assign blame</td>
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<td>Anchor change in system</td>
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<td>Allow for flexibility during change</td>
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<td>4 &amp; 8</td>
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<td>Multiple innovations at a given time</td>
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Through the study, the researcher will observe changes in the lesson-planning of teachers of reading. The literature concerning change was reviewed to gain a deep understanding of the change process. Various change models were examined through the literature to analyze the commonalities of characteristics among the models. There are five characteristics that are similar in the models: (1) building the relationship, (2) diagnosing the problem, (3) choosing the solution, (4) gaining acceptance, and (5) stabilizing the innovation and generating self-renewal. These five characteristics are all present in the Havelock and Rogers change models, which are the foundation of the change in CBAM. The Concerns-Based Adoption Model (CBAM) was selected for use as it has a strong correlation to Havelock and Rogers and the reviewed change models.

**Concerns-Based Adoption Model.** The CBAM research has a strong foundation in the theory of change, particularly as it relates to the Fullan (2001) change processes, Rogers’ Diffusion of Innovation (2003), and Havelock’s (1973) Change Model (George, Hall, & Stiegelbauer, 2013). The CBAM, as shown in Figure 4, comprises the stages of concern, levels of use, and the innovation configuration, all which can be used independently of one another or together in any combination (Hord, Rutherford, Huling-Austin, & Hall, 1987). The CBAM includes three instruments to measure the stages of concern throughout the entire implementation process of the innovation, and at various times, so that the change agent can provide the needed support, intervention, or PD to help the change effort be successful by reducing the concerns of the teachers. Some studies have involved only the use of the stages of concern (Cheung, Hattie, & NG, 2001; Christou, & Philippou, 2004; Giordano, 2007; Liu & Huang, 2005). Other studies utilize both the stages of concerns and the levels of use (Kapustka & Damore, 2009; Saunders,
Other studies focus on only the innovation configuration (Borrego, Cutler, Prince, Henderson, & Froyd, 2013). A pair of studies that was conducted has included the stages of concern, levels of use, and innovation configuration (Newhouse, 2001; Tunks & Weller, 2009).

Figure 4. Concerns-based adoption model (from Hord, Rutherford, Huling-Austin, & Hall, 1987, p. 10).

**Stages of Concern Questionnaire.** The Stages of Concern Questionnaire (SoCQ), Appendix C, is an eight-point Likert scale with 35 questions in the survey that can be used in any educational setting to determine the SoCQ profile of a person who is undertaking an innovation (Hall & Hord, 1987). This profile makes it possible for the implementer of an innovation to address the concerns of the faculty in an effort to support adoption of the change. There are seven stages of concern into which a respondent can be categorized via the SoCQ. These stages comprise awareness, informational, personal, management, consequence, collaboration, and refocusing. Having the information regarding at which stage the faculty is can be very helpful during the various stages of the implementation process (Hall & Hord, 1987). The change facilitator can identify and customize support to address the concerns of the faculty in order to increase the
successful adoption and integration of the innovation into the faculty’s long-term use of the change. The SoCQ focuses on the teachers’ reactions to the innovation, examining the feelings, perceptions, and attitudes toward the change initiative (Hall & Hord, 1987).

During the introduction of the innovation, the faculty likely will display a higher concern during the awareness, informational, and personal stages. During the implementation phase, as the faculty has begun using the innovation, management concerns are more prevalent. The arousal of impact concerns are noted when the concerns from the early stages are resolved. The SoCQ will be used in this study to assess at which stage of concern the faculty is during the implementation of an innovation (RBIS and DIP).

**Innovation configuration.** During a person-to-person conversation with the teacher, the change facilitator uses the innovation configuration (IC) checklist, which was created to identify any needed assistance during the innovation implementation (Hord, Rutherford, Huling-Austin, & Hall, 1987). The IC helps the change facilitator identify patterns of use when teachers are in the process of implementing an innovation. The change facilitator analyzes the innovation to identify the major components or the operational patterns of the change. Following analyses of the major components, the change facilitator identifies variations of the methods teachers are using the components of the innovation. The change facilitator, based on the data collected from the IC, can provide the immediate support that is needed to assist the teacher during the implementation of the innovation (Hord, Rutherford, Huling-Austin, & Hall, 1987).

The change facilitator analyzes the actual behaviors of the teachers’ use of the innovation as well as the manner in which the innovation is being implemented.
Subsequently, the researcher constructs the IC (Hall, & Loucks, 1978, 1981). The first steps that the change facilitator must consider are the operational patterns that result in system component variations. The change facilitator may identify multiple components and choose to reduce them in number in order to simplify the IC rating checklist. The IC checklist is completed through direct observation to verify the actual use of the system. The IC information eliminates inaccurate inferences about how the innovation is being used, as well as identifying misinformation that can lead to the change facilitator providing follow-up training or support that may or may not be required (Hall, & Loucks, 1978, 1981).

Creating a valid and effective IC checklist requires several important steps (Hall, & George, 2000). The first step involves a review of the research and any materials related to the innovation. The second step is followed by a series of interviews with the developers of the innovation. The third step would be to observe the innovation in actual use in a range of settings. The objective of this step is to determine clusters of components and variations within the innovation (Hall, & George, 2000). When constructing the IC checklist, two questions should be answered: What would I see? What would the teachers be doing? The last step involves verification of field-testing the IC checklist, as the IC checklist is an iterative process (Hall & George, 2000).

*Levels of Use.* The Levels of Use (LoU) is a focused but informal interview protocol that is used by the change facilitator to monitor the implementation of an innovation (Hord, Rutherford, Huling-Austin, & Hall, 1987; Loucks, Newlove, & Hall, 1998). The questions posed in the LoU contain six mandatory questions and may include additional probing questions created by the change facilitator (Loucks, Newlove, & Hall,
1998). The flow of the interview is structured based on the interviewees’ “yes” or “no” responses to the six questions of the LoU (Figure 5). Next to each “yes” or “no” branch, a LoU rating from zero to six is used during scoring (rating) the interview responses.
Figure 5. Levels of use of an innovation (LoU) (adapted from Hord, Rutherford, Huling-Austin, & Hall, 1987, p. 55).

The responses from the interview are rated using a LoU rating sheet to determine at which of the eight LoU stages the teacher is during the implementation of the innovation (Hord, Rutherford, Huling-Austin, & Hall, 1987). The stages of the LoU are listed vertically on the rating sheet: Level 0, Non-Use; Level 1, Orientation; Level 2, Preparation; Level 3, Mechanical Use; Level 4A, Routine; Level 4B, Refinement; Level 5, Integration; and Level 6, Renewal. Horizontally across the rating sheet are eight categories (Knowledge, Acquiring Information, Sharing, Assessing, Planning, Status Reporting, Performing, and Overall LoU). Each horizontal category is vertically rated to best correspond to the LoU categories Level 0 to Level 6.

In this manner, the overall LoU rating is the dimension of use that can be a bridge to the SoCQ to help the change facilitator implement any needed changes to the innovation process in an effort to help ensure a successful implementation (Hord, Rutherford, Huling-Austin, & Hall, 1987). The SoCQ is used to collect information on teachers’ feelings, thoughts, and informational needs concerning the innovation, while the LoU describes the use of the innovation after the teacher has become familiar with the innovation (Loucks, Newlove, & Hall, 1998). The change facilitator can use the SoCQ data and the LoU rating from the interviews to design specific interventions to address the teachers’ concerns and needs to ensure the continuation of the implementation of the innovation (Hord, Rutherford, Huling-Austin, & Hall, 1987).

Design of the Digital Instructional Planner

The researcher tested the DIP for two years in an alternative middle-school program with five teachers who instructed ESE students, ESOL students, and with
students at high-risk for dropout. This action research of the DIP involved a change in the way teachers approached instructional design to increase student engagement. The researcher followed Kotter’s (1996), Rodger’s (2003), and Havelock’s (1973) change theories throughout the implementation of the innovation. The researcher began by creating a sense of urgency to have the team of five teachers adopt the innovation, which is Stage 1 of Kotter’s (1996) Change Theory. During the implementation, the researcher followed Havelock’s (1973) Change Model by building the relationship with the team, diagnosing the problem with the team, acquiring needed resources, and gaining acceptance of the change by modifying the DIP based upon the teachers’ input. Through the use of problem steps embedded in Havelock’s (1973) model, the researcher amended the DIP by reducing the number of drop-down boxes on the instrument, an aspect of the instrument that the teachers found confusing. The DIP was also modified to include UDL principles.

The current version of the DIP (Appendix A) contains instructional sections that include many of the common elements within the research inquiries of various lesson-planning studies. The instructional sections in the DIP that are paired with resources and RBIS in the Wikispaces (http://rbis.wikispaces.com) (Appendix D) are the Florida Standards, Creating Independence Through Student-owned Strategies (CRISS), ESE accommodations, an ESOL instructional strategies matrix, ISTE standards for teachers and students, Marzano’s high-yield strategies, and UDL teaching checkpoints (Butt, 2003; Gagne & Driscoll, 1988; Marzano & Brown, 2009; Rose, Meyer, & Hitchcock, 2006; Santa, Havens, & Maycumber, 1988). To facilitate ease in instructional planning,
the instructional sections (i.e., Florida Standards, CRISS, ESE, ESOL, ISTE, Marzano, and UDL) within the DIP were designed with checkboxes and drop-down lists.

**Florida standards.** The Florida Standards for English Language Arts are provided in the DIP in the form of a drop-down menu in which the teachers can select the ELA standards that they plan to instruct during a lesson. There is an individual DIP File Maker Pro® file for each grade level from Grades K–8, Grades 9–10 in one file, and Grades 11–12 are in another separate file. These Florida Standards were copied from the CPALMS website (http://www.cpalms.org/Public) and were then pasted into the DIP File Maker Pro® by grade levels. As provided for on the DIP, there are three blank text boxes for other curriculum/subject areas provided for teachers to copy and paste into their individual core subject standards. The CPALMS resources website and other related resources are located at the private WIKI site for teacher’s reference during their lesson-planning (http://rbis.wikispaces.com /CPALMS) (Appendix D).

**Creating independence through student-owned strategies.** The CRISS RBIS section is provided in the DIP in the form of checkboxes in which the teachers can check on the CRISS instructional strategies that they are going to instruct during the lesson plan. The CRISS resources Wikispaces page (http://rbis.wikispaces.com /CRISS) (Appendix E) provides links to the CRISS instructional strategies, which are provided for teachers to reference as a tutorial or as a refresher of past Professional Development (PD) courses that they have attended. This Wikispaces page also provides links to the CRISS book and other school district websites containing CRISS resources. The Project CRISS book is a collection of RBIS that were researched in various studies; there are many more recent reading instructional strategies, which can be found in the CRISS instructional
resources Wikispaces site (Hairrell et al., 2011; Kaddoura, 2013; Nicols, Young, & Rickelman, 2007; Santa, Havens, & Maycumber, 1988; Vaughn et al., 2010). All of these studies report the effectiveness of the strategies found within CRISS (1996), and these are included in the DIP.

Focusing upon the research from CRISS, a web search was conducted to find educational sources that would provide educational resources for reading teachers. The six sections of CRISS are:

1. understanding of patterns and structures (charting the author’s style, highlighting, power notes, and pattern puzzles)
2. discussion (think-pair-share, cooperative teams, sticky note discussions, read and say something, authentic questions, seed discussions, question and answer responses, questioning literary elements, and higher levels of thinking)
3. active strategies for learning (KWL chart, pre- and post-reading strategies, graphic organizers, free-form mapping, sequence mapping, comparison mapping, summarizing, read-recall-check-summarize, one-sentence summaries, and reciprocal teaching)
4. organizing learning (two-column notes, main idea notes, opinion/proof notes, hypothesis proof notes, problem solution notes, content frames, and story plans)
5. informal writing (free-response entries, dialog logs, pre- and post-reading response sheets, observation entries, perspective entries, explanation and process entries, as well as literary elements),
6. formal writing (framed paragraph, spool papers, and RAFT), and vocabulary (mapping definitions, semantic feature analysis, capsule vocabulary, sentence and word expansion, and sentence synthesis) (Santa, Havens, & Maycumber, 1988).

Web links (Appendix E) are provided for each of the CRISS strategies include reproducible activities and instructional ideas to include in their lesson instruction.

**Exceptional Student Education accommodations.** The ESE accommodations lesson-planning standard section is provided in the DIP in the form of checkboxes in which the teachers can check on the ESE accommodations that they are planning to use during the lesson plan. The ESE accommodations resources Wikispaces page (http://rbis.wikispaces.com/ESE+Accommodations) (Appendix F) provides teachers Florida Department of Education PDF books concerning ESE accommodations as well as how to meet the needed accommodation for teachers’ reference during their lesson planning. The links include topics related to selecting accommodations for instruction and for testing as well as to identify the differences between accommodations and modifications. As mandated by the Individuals with Disabilities Education Improvement Act IDEA of 2004, accommodations for education and assessments are to be part of any ESE student’s individual education plan (IEP) (OSE, n.d.). This ESE accommodations section is provided to teachers of reading to meet and document the specialized educational accommodations for students with IEPs.

**English Speakers of Other Languages instructional strategies.** The ESOL lesson-planning standard instructional matrix section is provided in the DIP in the form of checkboxes in which the teachers can reference the ESOL instructional matrix section
and in which the teachers can check on the ESOL instructional strategy that they are going to utilize during the lesson. The ESOL instructional resources Wikispaces page (http://rbis.wikispaces.com/ESOL) (Appendix G) provides web links to the ESOL instructional matrix and all the instructional resources from the major school districts of the United States for teachers’ reference during their lesson-planning. There are many studies supporting the use of ESOL instructional strategies (Cardenas-Hagen, Carlson Pollard-Durodola, & Sharolyn, 2007; Good, Masewicz, & Vogel, 2010; Lee & Buxton, 2013; Solari & Gerber, 2008; Xu & Drame, 2008). The ESOL instructional matrix was included in the DIP to provide teachers of reading the ability to document the additional instructional supports within the lesson plan.

**ISTE standards.** Studies that support the integration of technology standards into educational planning thrive in the literature (Barron, Kemker, Harmes, & Kalaydjian, 2003; Kiranli & Yildirim, 2013; Swain & Pearson, 2003). These studies suggest that the teachers’ lack of knowledge skills in planning and building skills into their lesson-planning as found in the International Society for Technology in Education (ISTE) standards for teachers and students. Farmer (2010) reports that the inclusion of digital literacy instruction is a priority found within the 21st century skills as key components required of students for when they enter the workforce of today. These digital-literacy skills can be found in the ISTE standards for teacher, and students.

The ISTE standards for teachers and students were included in the DIP to help teachers plan for the students’ technology literacy skills. The ISTE Standards for teachers and students are provided in the DIP as checkboxes in which the teachers can check/select the ISTE standards that they are including in their lesson plans. The ISTE
standards for teachers’ and students’ resources Wikispaces page (http://rbis.wikispaces.com/ISTE) (Appendix H) provides the ISTE standards for teachers and students for teachers’ reference during their lesson-planning. There are ISTE standards for teachers as well as for students (ISTE, 2013). The ISTE Standards (2013), for teachers are as follows: facilitate and inspire student learning and creativity, design and develop digital-age learning experiences and assessments, model digital age work and learning, promote and model digital citizenship and responsibility, and engage in professional growth and leadership. The ISTE standards (2013) for students are the following: creativity and innovation, communication and collaboration, research and information fluency, critical thinking, problem solving and decision-making, digital citizenship, and technology operations and concepts.

**Marzano’s nine high-yield strategies.** Marzano’s nine high-yield RBIS are provided in the DIP as checkboxes in which teachers can check in the box for the particular high-yield strategy that they are going to use in the lesson plan. The Marzano’s nine high-yield strategies resources Wikispaces page (http://rbis.wikispaces.com/Marzano) (Appendix I) provides the strategies for teachers’ reference during their lesson-planning. Marzano, Pickering, and Pollock’s (2001, p. 9) strategies include similarities and differences, summarizing and note-taking, reinforcing effort, homework and practice, nonlinguistic representations, cooperative learning, setting objectives, generating and testing hypotheses, and advanced organizers. Marzano (2009, p. 8) states that the nine high-yield strategies are broad and should be combined with other instructional strategies. When examining CRISS and the nine high-yield strategies, one can see how they are similar and how they support one another. The strategies are
coded with numbers from one to nine of the CRISS instructional strategies portion of the DIP. This coding connects Marzano’s strategies to the CRISS instructional strategies.

**Universal Design for Learning.** The UDL RBIS teaching methods are provided in the DIP as checkboxes in which teachers can select which UDL checkpoint that is to be employed in the lesson plan. The UDL teaching methods/principles resources Wikispaces page (http://rbis.wikispaces.com/UDL) (Appendix J) provides the UDL teaching methods/principles for teachers’ reference during their lesson-planning. There have been many studies that have been conducted regarding the effectiveness of UDL (Basham, Israel, Graden, Poth, & Winston, 2010; Coyne, Oisha, Dalton, Zeph, & Smith, 2012; Meo, 2008; Spooner, Baker, Harris, Ahlgrim-Delzell, & Browder, 2007).

UDL is based upon brain research that supports the UDL’s three principles: provide multiple means of engagement, provide multiple means of representation, and provide multiple means of action and expression (Meyer, Rose, & Gordon, 2014, p. 90). These three principles focus upon the removal of barriers that may be impeding the student’s access to the curriculum. There are three guidelines for each principle (Meyer, Rose, & Gordon, 2014, p. 99). Within the principle providing multiple means of engagement, there are three guidelines that include options for self-regulation, sustaining effort and persistence, and recruiting interest (Meyer, Rose, & Gordon, 2014, p. 99). Next, the three guidelines under providing multiple means of representation are options for comprehension, options for language/mathematical expressions, and options for perception (Meyer, Rose, & Gordon, 2014, p. 99). Lastly, within the providing multiple means for action and expression, the three guidelines are options for executive functions,
options for expression and communication, as well as options for physical action (Meyer, Rose, & Gordon, 2014, p. 99).

Each guideline of UDL is further defined with checkpoints where UDL lesson-planning can assist teachers in developing UDL lesson plans. The checkpoints for providing options for comprehension are those used to activate or supply background knowledge, highlight patterns, guide information processing, and maximize the transfer of information (Meyer, Rose, & Gordon, 2014, p. 120). The checkpoints for language / mathematical expressions are used to clarify vocabulary and symbols, confirm syntax and structure, support the decoding of text, promote understanding across languages, and illustrate concepts and skills through multiple media (Meyer, Rose, & Gordon, 2014, p. 122). The checkpoints for perception offer methods to customize text, offer alternatives for auditory information, and present alternatives for visual information (Meyer, Rose, & Gordon, 2014, p. 122).

Beneath the guidelines for the principle of multiple means of action and expression are checkpoints for each guideline (Meyer, Rose, & Gordon, 2014). The checkpoints for providing options for physical action are those used to vary the methods for student responses and to optimize access to tools and assistive technology (Meyer, Rose, & Gordon, 2014, p. 124). The checkpoints for providing options for expression and communication are those that use multiple media for communication, those that use multiple tools for composition, and those that build fluencies with graduated levels of support (Meyer, Rose, & Gordon, 2014, p. 124). The checkpoints for providing options for exclusive functions are to guide appropriate goal-setting, support planning for strategy
development, facilitate managing information, and an enhanced capacity for monitoring progress (Meyer, Rose, & Gordon, 2014, p. 124).

Moreover, multiple means of engagement also have checkpoints assigned to each guideline (Meyer, Rose, & Gordon, 2014). The checkpoints for providing options for recruiting interest are employed to optimize individual choice and autonomy, optimize relevance to values, and minimize stress and distractions (Meyer, Rose, & Gordon, 2014, p. 99). The checkpoints for providing options for sustaining effort are devoted to heightening the salience of goals and objectives: and to vary demands and resources to optimize challenges, foster collaboration and communication, and increase mastery-oriented feedback (Meyer, Rose, & Gordon, 2014, p. 99). The checkpoints for providing options for self-regulation are utilized to promote those expectations and beliefs that optimize motivation, to facilitate personal coping skills and to develop self-assessment regulation (Meyer, Rose, & Gordon, 2014, p. 99).

**Differentiated instruction.** The remaining instructional-planning sections of the DIP are fill-in-the-blank text boxes. These instructional planning sections are provided for teachers to elaborate upon and provide roadmaps for their lessons. General information text boxes in the DIP that are tied to proven research include subject area, grade level, prepared by whom, instructional dates, and assessment dates. The foundation of differentiated instruction (DI) is embedded in the process of planning in this section of the DIP via content, process, and products (Benjamin, 2005, p. 8). Text boxes in the DIP that guide/elaborate instructional planning include essential question, learning goal/objectives (content), warm-up activities (process), introduction of lesson (process), guided practice (process), independent practice (process), assessment
(products), closure of lesson, homework, feedback, remediation, and enrichment activities. The DI portion of the resources Wikispaces page (http://rbis.wikispaces.com/DI) (Appendix K) provides information about the definition of DI and includes a free module regarding what is included in DI for teacher’s reference during lesson-planning. Many studies have supported the effectiveness of DI (Firmender, Reis, & Sweeny, 2013; Lawrence-Brown, 2004; Little, McCoach, & Reis, 2014; Tobin, 2008).

**Lesson-Planning Models**

**Tyler’s Lesson-Planning Model.** Tyler’s (1949) model asks the teacher to consider four questions while planning a lesson:

What are the educational objectives of the school? What educational experiences are related to those objectives? What are the organizational methods that will be used in relation to those objectives? How will those purposes be evaluated?

Tyler’s four lesson-planning questions are represented in the following: lesson objective, stimulus/procedure, learner guidance, assessing performance and strategies, media technology, materials, target audience, and methods (Tyler, 1949, p. 1).

All these sections were included in the construction of the researcher’s DIP.

**Gagne’s Lesson Plan Model.** Gagne’s (1977, p 285) Lesson Plan Model includes gaining attention, establishing the lesson objective, stimulating recall of prior learning, presenting the stimulus material, guiding the learner, eliciting the performance, providing feedback, assessing performance, and enhancing retention and feedback. The purpose of the external process of the lesson-planning sequences is to help the students...
engage in the internal process of memory (Gagne, Briggs, & Wager, 1974, p. 13). All of
the steps of Gagne’s lesson-planning model were also included in the construction of the
researcher’s DIP. The processes of learning, especially how the brain stores and retrieves
a memory, were also considered during the creation of the DIP.

The theoretical frameworks for the DIP consist of working memory and
information processing model (Gagne & Medsker, 1996). Atkinson and Shiffrin’s 1968
model of working memory is thought to be at the foundation of the information-
processing model (Matlin, 2002). The structures of this model encompass the following:
(a) environment, (b) effectors, (c) response generator, (d) receptors, (e) sensory register,
(f) working memory, (g) long-term memory, (h) executive control, and (i) expectancies
(Gagne & Medsker, 1996, p. 45). The processes of learning steps are presented in two
categories: structure and process. The structures are as follows: (a) receptors (b) sensory
register, (c) short-term memory, (d) long-term memory, (e) short-term working memory,
(f) response generator, and (g) effectors (Gagne & Medsker, 1996, p. 49). The processes
are (a) reception of patterns of neural impulses, (b) selective perception of features, (c)
short-term storage/rehearsal, (d) semantic encoding, (e) long-term storage, (f) retrieval,
(g) response organization, (h) performance, (i) feedback, and (j) reinforcement (Gagne &

The lesson plan model by Gagne, Briggs, and Wager (1974, p. 244) includes
gaining attention, informing the student about the lesson objective, stimulating recall,
present the instruction, guiding the learner, eliciting the performance, providing feedback,
assessment, enhance learning and retention. These sections are what is today commonly
thought of traditional parts of a lesson plan. All of these sections were also included in the construction of the researcher’s DIP.

**ASSURE Lesson Plan Model.** The ASSURE instructional-design model from Smaldino, Lowther, & Russell (2008) is an acronym for the six steps in their instructional design model. The six steps are the following: analyze the learners, state the standards and objectives, select the teaching strategies and materials, utilize technology, media, and materials, require the learners’ participation, and evaluate and revise the lesson (Smaldino, Lowther, & Russell, 2008, p. 86). Analyzing the learner involves identifying the demographics of the students, describing the expected learning outcomes, and describing the learning styles of the learners (Smaldino, Lowther, & Russell, 2008, p. 87). Stating the standards and objectives involves listing the curriculum and technology standards (ISTE), as well as describing the learning outcomes (Smaldino, Lowther, & Russell, 2008, p. 91). Selecting the strategies, technology, media, and materials include a description of how each of these items will be incorporated into the lesson (Smaldino, Lowther, & Russell, 2008, p. 96). Utilizing technology, media, and materials state how the learner will preview these items and how their use will progress through the lesson (Smaldino, Lowther, & Russell, 2008, p. 101). Requiring the learner’s participation focuses on the student engagement features (practice and feedback) in the lesson (Smaldino, Lowther, & Russell, 2008, p. 103). Evaluating and revising the lesson is similar to the problem-solver model described earlier, in which through evaluation, the teacher identifies problems in the lesson and revises the lesson to plan for areas of concerns (Smaldino, Lowther, & Russell, 2008, p. 108). According to Smaldino, Lowther, & Russell (2008, p. 85) using the ASSURE model for instructional planning is
directly aligned to the ISTE standards for teachers and students. All of these steps were also included in the construction of the DIP that was designed by this researcher, with the exception of “analyze learner.”

**FLDOE Lesson Plan Model.** The FLDOE model and the UDL lesson-planning template offer additional specific instructional planning checkpoints. The FLDOE lesson plan for diverse classrooms includes write lesson objective based on a standard, introduce the lesson (gain attention of learner, explain the objective, recall prior knowledge), present the content (teach the skills, teacher and student activities, mini-lecture), practice and feedback (guided practice, independent practice, review of lesson), summarize the lesson, assessment of learning (Houston & Beech, 2002, p. 99). These sections were also included in the construction of the researchers’ DIP, along with the reference and title of the lesson. The UDL planning template includes lesson objective, performance assessment strategies, media, technology, materials, state standards, lesson description for the day, as well as wrap-up and methods (Rose, Meyer, & Hitchcock, 2006). All of these sections were included in the construction of the researcher’s DIP. The lesson-planning models of Tyler (1949), Gagne (1977), Smaldino, Lowther, and Russell (2008), Houston and Beech (2002) and Rose, Meyer, and Hitchcock (2006) have several similarities, as depicted in Table 2. The DIP has captured all the components of the variety of lesson-planning models, as seen in Table 2.
Table 2

Comparisons of Lesson Plan Formats

<table>
<thead>
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63
Teachers’ knowledge. In their latest report, the National Center for Education Information’s commentary, Profile of Teachers in the U.S. (2011), notes that teachers’ demographics are rapidly changing, as the proportion of teachers with fewer than five years of teaching experience has risen from 18% in 2005 to 26% in 2011 (Feistritzer, 2011). At the opposite end of the teaching experience, those with more than 25 years of teaching experience have fallen from 27% to 17% (Feistritzer, 2011). Feistritzer (2011) also reports that seasoned master teachers are rapidly being replaced with new teachers in their 20s and 30s. One-third of newly hired teachers enter the teaching profession through an alternative program, meaning one other than a traditional college-based teacher education program. Teachers ranked the PD opportunities they received with a 26% high satisfaction, and the same teachers ranked the quality of PD at 22% high satisfaction.

Today, most teachers are more than likely to find that they are in a paradox in terms of what the methodology of teaching is and as to into what it is potentially evolving (Walling, 1994, p.73). How this change occurs relates directly to teacher pre-service, clinical training and assessment, as well as to professional development (Walling, 1994, p. 73). Pre-service is where teachers gain their academic pedagogy to begin their teaching careers (Walling, 1994, p. 73). Clinical training typically occurs during the first year of teaching, in which the teacher has a mentor to assist him or her during the development of their teaching repertoire (Walling, 1994, p. 73). Professional development occurs throughout the careers of teachers to help them stay current about changes and to improve their professional growth (Walling, 1994, p. 133).
Many studies have been conducted to ascertain teachers’ beliefs in terms of how poorly pre-service and in-service instruction prepares them for the instructional planning skills required in the classroom (Copeland, Keefe, Calhoon, & Tanner, 2011; Lyon & Weiser, 2009; Washburn, Joshi, & Cantrell, 2011; Mather, Bos, & Babur, 2001). According to Cohen and Ball (1999), when teachers are offered PD, it is often unrelated to the curriculum. Additionally, teachers need instructional support with lesson-planning (Moats, & Lyon, 1996; Scheeler, 2008). Teacher development should occur with a connected ongoing series of events that fuse pre-service training with lifelong professional development (Walling, 1994, p. 133).

Furthermore, teacher improvement through PD or in-service training is a component of almost every modern proposal for improvement in education (Guskey, 2002). It is also well known that single-shot PD has little to no effect concerning teacher change in their classroom practices (Dingle, Brownell, Leko, Boardman, & Haager, 2011; Guskey, & Yoon, 2009). Teachers want to take PD courses to improve their knowledge and skills so they can advance their effectiveness with student progress (Guskey, 2002). There are two main reasons that teachers’ professional development efforts fail: what is offered does not motivate teachers and lacks follow-up support for the new skills (Guskey, 2002, 2014). Teacher professional development is intended to initiate change in the teachers’ attitudes or beliefs in particular curricula or aspects of teaching, but teachers want professional development that is directly related to the day-to-day operations of their classrooms (Guskey, 2002).

It is evident that the current educational system supports PD for their teachers, as the school districts in the United States are estimated to spend one billion to four billion
dollars per year on PD (Whitworth, & Chiu, 2015). There are two reasons why PD is lacking positive effects on school improvement, which includes teachers of reading (Cohen & Ball, 1999). For the innovation to have a positive change in school, change requires a continuous relationship with the change agent and the social environment of the school. A second reason change is not successful is due to a lack of PD opportunities for teachers to learn methods of changing their instructional practices. Teachers are rarely offered opportunities to deepen their subject knowledge that they are teaching. Furthermore, PD lacks the follow-up that focuses on implementing the new teaching practices into their classroom instruction (Cohen & Ball, 1999). Successful PD that leads to teacher change requires teachers to be actively engaged in their own learning, to practice what was learned, to receive feedback concerning the change, to be supported through the change, and to be provided opportunities for collaborating, and for applying new skills (Whitworth & Chiu, 2015).

Guskey (2010) hypothesizes that professional development is designed based upon the premise that attitudes, beliefs, commitment, and enthusiasm change first, and then teachers and administrators may then implement the new practices. This model of teacher change is different, in that professional development is followed by change in teachers’ beliefs and attitudes, change in teachers’ classroom practices, and change in student learning outcomes (Guskey, 2010, p. 386). This model has three guiding principles. The first principle recognizes that change is a gradual and difficult process for teachers (Guskey, 2010, p. 386). The second principle suggests that teachers should receive regular feedback regarding the student-learning progress, and the third principle
states that follow-up, support, and pressure should continue throughout the change effort (Guskey, 2010, p. 387).

Concerning the first principle, change that involves increasing competencies and student learning is likely to take a great amount of time, particularly at the onset of an innovation. A by-product of change is anxiety; therefore, teachers need to feel that the anxiety experienced will result in adding new and effective practices that they can implement. The second principle suggests that regular feedback during change is valuable; however, feedback in the form of increased student gains is primarily an intrinsic reward that teachers will use to perceive that the change is beneficial. Feedback during the change process is also present in Havelock’s model (1973). Most change efforts fail to sustain change by neglecting the third principle. Continued follow-up support keeps teachers engaged in change, and pressure encourages those who are hesitant about change to initiate the change effort.

This follow-up support is built into the CBAM through the data collection points of the pre-survey using the SoCQ and the IC. The researcher (change agent) selected these instruments, as the data collected is used to design and deliver targeted support (PD) needed to help the innovation become successful. The RBIS Wikispaces page provides continuous support to the participants throughout the anonymously posted discussion threads. The researcher (change agent) can monitor any concerns from the participants and immediately provide needed support to ameliorate teachers’ concerns during the implementation process.

**Summary**

This chapter has presented a review of the literature concerned with change
theories, the Concerns-Based Adoption Model, and the design of the DIP and RBIS. A review of existing RBIS has also been addressed, focusing on inclusion into the DIP. Various lesson-planning models were also reviewed in order to determine which sections of lesson-planning were to be included in the DIP. The following chapter will present the methodology for the study, including a description of the setting, participants, instrumentation, research design, procedures, and data analysis.
III. METHODOLOGY

Research Design

There are three types of research paradigms: qualitative, quantitative, and mixed-methods research designs (Creswell, 2014; Kerlinger & Lee, 2000). Qualitative research design seeks to understand the personal experiences of participants, while quantitative research seeks to make sense of variables (independent/dependent) with the analysis of numbers and statistical data (Kerlinger & Lee, 2000). More specifically, qualitative research is used when a problem or issue needs to be explored while seeking a detailed understanding of an issue, when there is a desire to share the stories of individuals, or when one needs to understand the contexts or settings in which the participants live (Creswell, 2009). Qualitative research utilizes one of five approaches: narrative research, phenomenological research, grounded-theory research, ethnographic research, or case study research (Creswell, 2009).

Conversely, quantitative research utilizes one of four approaches: descriptive correlational research, development designs, observation studies, and survey research (Leedy & Ormrod, 2001). A descriptive design examines a situation without the introduction of independent variables. Correlational research examines the extent of change when a variable is introduced, a fact which may cause another variable to increase or decrease its predictive value. A development approach is a correlational approach, which studies variables over a long period (months or years) through a cross-sectional study (people from several groups are sampled), or a longitudinal study. Observational studies are similar to qualitative research in that they observe a phenomenon; however, in a quantitative design, a particular behavior is quantified in some manner. Survey
research is designed to utilize interviews, questionnaires, or rating scales to capture a moment in time.

A mixed-methods study is defined as collecting, analyzing, and mixing both quantitative and qualitative data (Creswell & Plano Clark, 2011). Its central foundation is that both quantitative and qualitative approaches are used in combination, which allows for a greater understanding of the research problem than using either approach in isolation. A mixed-methods research design offsets the weaknesses of both quantitative (closed-ended data, does not give voice to participants) and qualitative (open-ended data, a limited number of participants) research. This researcher utilized a sequential explanatory mixed-method study, which involved a diverse data set (quantitative and qualitative) (Creswell, 2009; Creswell, 2014; Creswell & Plano Clark, 2011). The quantitative data consisted of survey forms and planning samples from teachers’ use of the DIP. Qualitative data consisted of one-to-one interviews.

The researcher began this sequential explanatory mixed-methods design by collecting quantitative data that was furthered explained with in-depth qualitative data (Creswell & Plano Clark, 2011). This research study was modeled after other sequential explanatory mixed-methods studies that involved the use of the SoCQ (Giordano, 2007; Gokcek & Baki, 2013; Kapustka & Damore, 2009; Saunders, 2012; Saunders, 2013; Smith, 2013). Figure 6 below depicts the sequence used in this mixed study.
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<thead>
<tr>
<th>Phase</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative Data Collection</td>
<td>Web-Based pre-survey SoCQ (N = Self-selected)</td>
<td>Numeric data</td>
</tr>
<tr>
<td></td>
<td>Innovation introduced with PD</td>
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<tr>
<td></td>
<td>Web-Based pre-survey SoCQ (N = 18) end of nine weeks with innovation (DIP and RBIS)</td>
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<tr>
<td>Quantitative Data Analysis</td>
<td>Concerns profile analyzed (individually/grouped)</td>
<td>Frequency and Percentile scores</td>
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<td>LoU</td>
<td>ANOVA &amp; post hoc test</td>
</tr>
<tr>
<td>Case Selection</td>
<td>Self-selected/purposeful selection from volunteers</td>
<td>Cases (N=6)</td>
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<tr>
<td>Interview Protocol</td>
<td>LoU Individual interviews (in person, or telephone) with 6 participants, member checking</td>
<td>Text Data</td>
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<td></td>
<td>Documents from Wiki discussions and SoCQ open-ended statements</td>
<td>(Interview transcripts, documents from Wiki discussions, open-ended question in SoCQ)</td>
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<td>Qualitative Data Collection</td>
<td>Coding and thematic analysis</td>
<td>Visual model of multiple case analysis</td>
</tr>
<tr>
<td></td>
<td>Within case and across case theme development</td>
<td>Codes and themes</td>
</tr>
<tr>
<td>Qualitative Data Analysis</td>
<td>Cross-thematic analysis</td>
<td>Similar and different themes and categories Cross-thematic matrix</td>
</tr>
<tr>
<td>Integration of the</td>
<td>Interpretation and explanation of the quantitative and qualitative</td>
<td>Discussion</td>
</tr>
<tr>
<td>Quantitative and Qualitative</td>
<td>results</td>
<td>Recommendations</td>
</tr>
<tr>
<td>Results</td>
<td></td>
<td>Implications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limitations</td>
</tr>
</tbody>
</table>

**Figure 6.** Sequential explanatory mixed-methods research design.
Research Questions and Hypotheses

The study is guided by the following research questions:

1. What are the teachers of reading’s identified stages of concerns regarding the use of a Digital Instructional Planner (DIP) and RBIS resources as measured by the SoCQ?
   a. Is there a difference in the participants’ seven stages of concern profile percentile score regarding the use of the DIP and RBIS for the pre-intervention and post-intervention when grouped by (a) whole group, (b) years of teaching, (c) school-level-teaching, and (d) highest degree held?
   b. Is there a statistical difference in the participants’ seven stages of concern profile regarding the use of the DIP and RBIS between the pre-intervention and post-intervention stages of concern profile when grouped by (a) years of teaching, (b) school-level teaching, and (c) highest degree held?

2. How have the instructional planning practices changed for teachers of reading after nine weeks of using the DIP with the RBIS?

3. What factors influenced the teachers of reading to alter their instructional planning practices after nine weeks of using the DIP with the RBIS?

4. In what ways does the interview data reporting the experiences of teachers of reading using a Digital Instructional Planner (DIP) and the related RBIS explain the data presented in the SoCQ profiles of the participants?

Hypotheses.

H0:1: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will not change after nine weeks of using the DIP/RBIS when grouped as a whole.
Hₐ1: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped as a whole.

H₀2: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by years of teaching.

Hₐ2: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by years of teaching.

H₀3: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by school level teaching.

Hₐ3: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by school level teaching.

H₀4: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by highest degree held.

Hₐ4: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree held.

H₀5: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by years of teaching.

Hₐ5: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by years of teaching.
H₀6: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by school level teaching.

Hₐ6: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by school level.

H₀7: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by highest degree held.

Hₐ7: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree earned.

**Participants and Sampling**

The school districts in which this study takes place has 334 schools with 14,457 instructional staff (BCPS, 2015) and 392 schools with 20,836 teachers. The participants were self-selected through a convenience sampling of respondents from the recruitment flyer (Creswell, 2005; Gay, 1996; Leedy & Ormrod, 2001). The researcher anticipated that 150 participants would respond to the recruitment flyer. A participant sample of 150 was preferred, as it would have allowed for an attrition rate of approximately 30% of the participants. A total of 100 participants (i.e., teachers of reading) was the preferred minimum for this study.

**Instrumentation and/or Materials**

The instruments and materials used in this study were from the CBAM, which included the SoCQ, IC, and LoU (Hall & Hord, 1987). The first instrument used during the research was the SoCQ. Appendix C presents the 35 items of the SoCQ. In addition to the SoCQ introductory page, the elements of the SoCQ instrument were divided into
three parts: the 35 items, open-ended questions, and a demographics page. Both the pre- and post-intervention set of open-ended questions included the following:

1. What are your greatest concerns when creating lesson plans for your current classes?
2. Do you feel you have adequate resources for lesson-planning?
3. If yes, which type(s) do you use?
4. If no, which one or what kind of resources would you prefer?

The post-intervention open-ended questions will also include the following questions:

1. What about the DIP was beneficial to your lesson-planning practices?
2. What about the DIP was not beneficial to your lesson-planning practices?
3. What about the RBIS was beneficial to your lesson-planning practices?
4. What about the RBIS was not beneficial to your lesson-planning practices?
5. Are you interested in being interviewed?

The manual of the SoCQ described how the data are converted to percentiles, how to create the pivot tables as well as the instrument’s reliability and validity. The test/retest correlations completed by the SoCQ development team in 1979 on the seven scales ranged from 0.65 to 0.86 (stages zero to six respectively are: 0.65, 0.86, 0.82, 0.81, 0.76, 0.84, and 0.71) (George, Hall, & Stiegelbauer, 2013). Coefficients of internal reliability range from 0.64 to 0.83 (stages zero to six respectively are: 0.64, 0.78, 0.83, 0.75, 0.76, 0.82, and 0.71) (George, Hall, & Stiegelbauer, 2013). These results indicated a high internal reliability of the SoCQ.

The second instrument used was the LoU. The questions are listed in Appendix L. These questions followed the protocols outlined in the LoU (Loucks, Newlove, &
Hall, 1998). A rigorous investigation was conducted in 1976, in which 28 participants were randomly selected from a sample involved in a two-year study. The ratings of both the high and highest concerns showed that group reliabilities between 0.42 and 0.8583 (stages zero to six respectively are as follows: 0.59, 0.85, 0.60, 0.42, 0.71, 0.73, and 0.67) (George, Hall, & Stiegelbauer, 2013). Six of the seven stages of concern had reliability ratings above 0.58 (p< 0.01) (George, Hall, & Stiegelbauer, 2013). There are two branches of that stemmed from the initial question: Are you using the innovation? (Loucks, Newlove, & Hall, 1998). The responses provided by the teacher determined the follow-up questions posed from this focused but informal interview. There were six mandatory questions that branch out in one of two directions depending upon the responses from the participants. The researcher added additional questions that were specific to the innovation for this study that were permitted according to the CBAM administration instructions.

**Procedures**

K–12 teachers of reading were recruited to participate in the study through a Research Study Flyer (Appendix M), which included an attachment that included a link to a SurveyMonkey™ Interest/Consent Form (Appendix N). Only one teacher of reading responded to the Research Study Flyer. This was far from the 100 expected participants. At this point, the researcher placed a follow-up phone call two weeks after the email was sent to administrators of schools from which no responses have been received. The script for the follow-up phone call to the administrator was followed as outlined in Appendix O.

Not having received any return phone calls from the administrators, the researcher submitted a Change Request Form to IRB that would allow additional Florida school
districts to join the study. Concurrently, the recruitment flyer was updated to reduce the time requirement of the participants as well as the changes in the consent form. Specifically, the PD videos on how to use the DIP the RIBS were modified from one 90-minute YouTube video to individual PD YouTube videos on various topics ranging from two to 12 minutes in length. This reduced the initial time impact on the participants and at the same time allowed the participants to customize their PD by choosing which videos they deemed necessary. The second change in the flyer identified that the DIP will be distributed as a blinded file, which eliminated the need of the File Maker Pro® software to be on the participant’s computer. Both of these changes were reflected in the new Consent Forms as well as in the new IRB approval form. With these changes, an additional large school district in South Florida granted approval for this research study to be conducted within their district. Hence, the research study took place in two large school districts in South Florida. This change allowed for 17 additional teachers of reading to volunteer their participation in the study. Thus, the total number of teachers of reading in this study became 18.

These self-selected volunteers who have completed an Interest Form were emailed the Informed Consent Form (Appendix P). They were instructed to sign, scan and email the consent form to the researcher or use the US postal service to return the Informed Consent Form. Demographic data collected was compiled by the researcher and was coded so that all participants’ identities remained confidential.

**Stages of Concern Questionnaire**

After sending the email with the Informed Consent Form (Appendix P) and they were received back by email, the teachers of reading interested in joining the study were
directed via SurveyMonkey™ to complete the SoCQ survey. It was anticipated that no more than 150 teachers of reading would respond to the flyers. The study group was anticipated to be a quota sample consisting of equal numbers, as allowed by the total sample of initial respondents. However, only 18 teachers of reading responded, so the sample, therefore, the sample group was not equally distributed in any of the sub-groups. The pre- and post-SoCQ surveys were completed by all 18 participants.

**Levels of use.** In Week Nine, the second qualitative phase of the research study, the six participants who indicated their willingness to be interviewed were selected to participate in the 30-to-60-minute interview. As the desired amount of 10 teachers did not volunteer to participate in the interview, each of the remaining participants who completed the post-SoCQ was sent an e-mail, (Appendix Q) asking if they wish to be interviewed. Attached to the email was an Informed Consent Interview Form (Appendix R).

**Data Collection/Procedure**

During the study, there were two data collection points: SoCQ and LoU. The SoCQ and teacher concerns about innovation were examined prior to their involvement with the DIP and again while using the DIP. The SoCQ was entered into SurveyMonkey™, in the same format as in the paper version. The SoCQ was used as a pre/post survey, to be followed by LoU interviews to examine further the change phenomenon in lesson-planning for the teachers of reading. Figure 7 depicts the assessment schedule of instrumentation.
The Research Study Flyer (Appendix M), describing the study and possible benefits of the changes in lesson-planning practices following the use of the RBIS and DIP, was attached to an email sent to the principals’ school email addresses. The school principal was asked to post the research study flyer. The teachers of reading that replied...
were directed to another link to complete a digital informed consent form, and then they were directed to complete the pre-survey SoCQ. Eighteen teachers of reading responded to the recruitment flyer.

The SoCQ was administered to the teachers prior to using the RBIS and the DIP via a SurveyMonkey™ link to complete the survey. Then, teachers used the RBIS, Wikispaces site, and the DIP for a period of nine weeks. At the end of the nine weeks, the post-intervention survey link to a SurveyMonkey™ document containing the SoCQ was emailed to 18 teachers of reading. This form contained a 7-point Likert scale that was estimated to take the participants 20-25 minutes to complete (Hall & Hord, 1987). SurveyMonkey™ offered an option to export the data extracted from the responses from the participants into an Excel spreadsheet. The data collected in the Excel spreadsheet was utilized to complete the concern profiles of the teachers. All 18 participants completed the pre- and post-SoCQ.

Both the pre- and post-intervention SoCQ surveys had a set of open-ended questions that included the following:

1. What are your greatest concerns when creating lesson plans for your current classes?
2. Do you feel you have adequate resources for lesson-planning?
3. If yes, which type(s) do you use?
4. If no, which one or what kind of resources would you like?

The post-intervention open-ended questions will also include the following questions:

1. What about the DIP was beneficial to your lesson-planning practices?
2. What about the DIP was not beneficial to your lesson-planning practices?
3. What about the RBIS was beneficial to your lesson-planning practices?

4. What about the RBIS was not beneficial to your lesson-planning practices?

5. Are you interested in being interviewed?

The teachers’ responses were coded and classified into categories. The researcher studied the categories and identified patterns and/or themes that emerged. Following the post-intervention survey, six willing participants were interviewed. The interview sessions were recorded using a digital recording device and an iPhone. The recordings were transcribed verbatim into digital text. This digital text was sent to each of the interviewed participants for member checking of the transcription. The teachers’ responses were coded and classified into categories. The researcher then studied the categories and identified patterns and/or themes that emerged. This emic approach uses the worldview of the informants to classify any patterns (Patton, 2002).

The researcher reviewed the Levels of Use instrument (Appendix L) prior to conducting the semi-structured interviews. The interviews were scheduled at a time chosen by the participant and were conducted over the telephone, as requested by the participants. Interview questions began with inquiries to put the participant at ease and were designed using open-ended questions (Patton, 2002). The questions concentrated on what the teacher is presently doing and how those practices have changed in light of their experiences. The focus remained on what they, as individuals, are doing and not what the group or other teachers are doing. The list of questions is located in Appendix L. All the interviews were recorded using a digital recorder and an iPhone. The researcher transcribed the interviews verbatim.
Process to Ensure Valid/Dependable and Reliable/Credible Results

Several methods were utilized to ensure the internal validity of the data. Foremost, any researcher bias was overtly stated in the research findings. This researcher has used the DIP in the past with other teachers, and the DIP has been modified because of their feedback. Triangulation of data was collected via SoCQ, open-ended statements, and interviews. Member checking was used for interviews to verify that the coding and identified themes accurately reflect what was stated during the interviews.

Data Analysis, Interpretation

The data collected comprised both quantitative data as well as qualitative data. The quantitative data was collected through the pre/post SoCQ survey responses, a rating of the DIP lessons that were submitted, and a rating of the LoU interview responses. There were two raters who rated and compared the results. The qualitative data was collected from the LoU one-to-one interviews.

The Excel scoring program and scoring sheets with the SoCQ were utilized to analyze the quantitative data. Additionally, the researcher utilized SPSS software to analyze the data. The raw score was entered the software as follows:

1. data (input of scores), SoCQ Groups (raw scores and percentiles)
2. profile graphing (macro-based program that produces the SOCQ profiles graph for individual and selected groups)
3. SoCQ Codes (table used to convert raw scores to percentile
4. an item-to-item assignment table)
5. Pivot Table Report and Charts (SoCQ graph for each individual and group as a whole
This allowed for profile interpretation of the teachers pre/post stage of concerns that were identified through the SoCQ survey. When the post-survey data was correlated with the pre-survey data, it was expected that the pre/post results of the SoCQ will echo the fact that the stages of concern individually and grouped indicate a decreased level of concerns.

Analysis of Variance (ANOVA) or independent t-test testing is not part of the SoCQ scoring protocol. The researcher has chosen the inclusion of an ANOVA and an independent t-test to establish any statistical significance through the analysis between levels of concerns reported in the pre-post SoCQ scores among various groups and the entire SoCQ administration. It was expected that the both ANOVA and independent t-test would yield statistical significance to support the results of the SoCQ teacher self-reported stages of concerns.

The qualitative data consisted of the participants’ open-ended questions from the SoCQ, and the 6 one-to-one interviews, which were coded and analyzed for patterns (Patton, 2002). The interviews followed the protocols of the Level of Use (LoU). The responses were rated following the protocols of the LoU. Based on the participants’ responses, additional probing questions were asked to fully secure and understand the changes experienced using the RBIS and DIP. A researcher transcribed the recorded LoU interviews. Additionally, member checking of the transcripts was conducted via email to ensure the validity and reliability of the transcripts as well as the comments made by the participants. There were two raters who rated and compared the results. The raters will be the researcher and an expert in the field of educational technology who specializes in instruction and curriculum. The second rater will sign a research release
form. In the event that both raters have different rating results, they will meet and compare ratings and come to a consensus about the rating of any particular interview.

To identify themes, the researcher used Tesch’s eight-step coding process as outlined by Creswell (2014). The first step was to read all the interview transcripts. Then the shortest interview was selected to reread and jot down margin notes. This process of writing margin notes followed with two randomly selected interviews. Several themes began to be identified in the margin notes and then were color-coded using different colored highlighters. The remaining three interviews were reread to include margin notes and the same color-coded highlighters. The margin notes were reviewed in all the interviews to identify any additional themes, and these were color-coded using highlighters.
IV. RESULTS

Overview

In this study, the researcher examined changes in the K-12 reading teachers’ instructional planning practices using a Digital Instructional Planner (DIP) and Research-Based Strategies (RBIS). The examination of these changes occurred through a sequential explanatory mixed-methods study approach. This sequential explanatory mixed-methods design began by collecting quantitative data that will be explained further with in-depth qualitative data (Creswell, 2009; Creswell, 2014; Creswell & Plano Clarke, 2011). The sequential explanatory mixed-methods study transpired in two phases. Phase One consisted of pre/post-quantitative data collection that focused on the levels of concerns the K-12 reading teachers self-reported through the Survey of Concerns Questionnaire. Phase Two consisted of qualitative data collection with the Level of Use (LoU) interviews. The results from this mixed-methods study provided in this chapter include: (a) participant demographics, (b) findings from the quantitative data (SoCQ), (c) qualitative data (LoU, Innovation Configuration, and open-ended post SoCQ questions), (d) a summary of findings, and (e) a chapter summary.

Research Questions and Hypotheses

The study was guided by the following research questions:

1. What are the teachers of reading’s identified stages of concerns regarding the use of a Digital Instructional Planner (DIP) and RBIS resources as measured by the SoCQ?
   a. Is there a difference in the participants’ seven stages of concern profile percentile score regarding the use of the DIP and RBIS for the pre-
intervention and post-intervention when grouped by (a) whole group, (b) years of teaching, (c) school-level teaching, and (d) highest degree held?

b. Is there a statistical difference in the participants’ seven stages of concern profile regarding the use of the DIP and RBIS between the pre-intervention and post-intervention stages of concern profile when grouped by (a) years of teaching, (b) school-level teaching, and (c) highest degree held?

2. How have the instructional planning practices changed for teachers of reading after nine weeks of using the DIP with the RBIS?

3. What factors influenced the teachers of reading to alter their instructional planning practices after nine weeks of using the DIP with the RBIS?

4. In what ways does the interview data reporting the experiences of teachers of reading using a Digital Instructional Planner (DIP) and the related RBIS explain the data presented in the SoCQ profiles of the participants?

**Hypotheses.**

H₀₁: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will not change after nine weeks of using the DIP/RBIS when grouped as a whole.

Hₐ₁: The percentile SoCQ scores of the teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped as a whole.

H₀₂: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by years of teaching.
$H_{a2}$: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by years of teaching.

$H_{o3}$: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by school level teaching.

$H_{a3}$: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by school level teaching.

$H_{o4}$: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by highest degree held.

$H_{a4}$: The percentile SoCQ scores of the teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree held.

$H_{o5}$: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by years of teaching.

$H_{a5}$: The teachers of reading’s stages of concern levels will significantly after nine weeks of using the DIP/RBIS when grouped by years of teaching.

$H_{o6}$: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will not change after nine weeks of using the DIP/RBIS when grouped by school level teaching.

$H_{a6}$: The percentile SoCQ scores of teachers of reading’s stages of concerns levels will increase after nine weeks of using the DIP/RBIS when grouped by school level teaching.
H₀₇: The teachers of reading’s stages of concern levels will not differ significantly after nine weeks of using the DIP/RBIS when grouped by highest degree held.

Hₐ₇: The teachers of reading’s stages of concern levels will increase after nine weeks of using the DIP/RBIS when grouped by highest degree earned.

Participants’ Demographics

To learn more about the personal and professional attributes of the participants, they were asked to respond to demographic questions (Table 3). The demographic questions included the name of school and school district at which they were employed at, the school-level they instructed, their years of teaching experience, the educational degree they held, and any certifications or endorsements they acquired. Specific to technology, they were asked what type of computer they have access to for lesson-planning (Mac or Windows). The respondents also provided their name and email address, but those will not be reported here. Instead, each participant was randomly assigned a 5-digit number. When participants are identified, they will only be done so by this unique 5-digit number.

Table 3

<table>
<thead>
<tr>
<th>Grade level</th>
<th>Study Participants (n = 18)</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK – 5</td>
<td>11</td>
<td>61%</td>
</tr>
<tr>
<td>Middle</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>Secondary</td>
<td>4</td>
<td>22%</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 1 Year</td>
<td>8</td>
<td>45%</td>
</tr>
<tr>
<td>2 – 10 Years</td>
<td>6</td>
<td>33%</td>
</tr>
<tr>
<td>11+ Year</td>
<td>4</td>
<td>22%</td>
</tr>
</tbody>
</table>
Table 3 continued

**Self-Reported Demographics**

<table>
<thead>
<tr>
<th>Highest Degree Earned</th>
<th>Study Participants (n = 18)</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA</td>
<td>13</td>
<td>72%</td>
</tr>
<tr>
<td>MS</td>
<td>5</td>
<td>28%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certifications and Endorsements</th>
<th>Study Participants (n = 18)</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading (endorsement)</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>ESOL (endorsement)</td>
<td>11</td>
<td>61%</td>
</tr>
<tr>
<td>ESE</td>
<td>8</td>
<td>44%</td>
</tr>
<tr>
<td>Gifted</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>Language Arts</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Business Education</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>Middle-school Math</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Gen Ed Elementary</td>
<td>5</td>
<td>18%</td>
</tr>
<tr>
<td>Middle grades</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>Spanish</td>
<td>3</td>
<td>17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology</th>
<th>Study Participants (n = 18)</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to a Computer</td>
<td>18</td>
<td>100%</td>
</tr>
<tr>
<td>Mac Computer</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>Windows Computer</td>
<td>13</td>
<td>72%</td>
</tr>
<tr>
<td>Both Mac and Windows</td>
<td>4</td>
<td>22%</td>
</tr>
</tbody>
</table>

**School-level teaching.** As shown in Table 3, 18 kindergarten through 12th grade teachers of reading working in two large districts in South Florida participated in the study. Teachers of reading are defined as an elementary teacher and content area teachers of science, social studies, language arts (i.e., English), or reading. Of the 18 participants, 96% were from Miami Dade County Schools and 4% were from Broward County Schools. The kindergarten through 5th grade teachers of reading comprised 61% of the group of participants. The remaining participants comprised 17% who taught in a middle school, and 22% were teachers of reading in high schools.

**Teaching experience.** Represented in Table 3, the range of teaching experience spanned from three months to 26 years. A little less than half (45%) self-reported having
one or fewer years of teaching experience. One-third (33%) self-reported having between two and 10 years of teaching experience. The remaining group (22%) self-reported having over 11 years of teaching experience. The mean number of years of teaching experience was 6.26 years. The median years of teaching experience were two and the mode years of teaching experience was self-reported as one year.

**University degrees, certificates, and endorsements.** Of the 18 participants, 72% self-reported a bachelor’s degree to be their highest degree earned and 28% self-reported a master’s degree to be their highest degree earned. In the area of adding teaching endorsements, 17% self-reported a reading endorsement and 61% self-reported an English Speakers of Other Languages (ESOL) endorsement. Moreover, 44% of teachers of reading self-reported holding an Exceptional Student Education (ESE) certificate. Additionally, 18% self-reported holding a General Education Elementary degree, 16% self-reported holding a middle grades degree and 17% self-reported holding a Spanish degree. The remaining teachers (27%) self-reported teaching degrees held in Gifted, Language Arts, and Business Education.

**Technology.** The entire group of participants, 100% had access to either a Mac or Windows computer. Among the participants, 72% self-reported having access to a Windows computer and 11% self-reported having access to a Mac computer. Of the remaining participants, 22% self-reported having access to both Windows and Mac computers.

Table 4 represents the participants’ responses on a 7-point Likert-type scale that asked participants to report if they received in-service/professional development completion or have knowledge in Creating Independence through Student-Owned
Strategies (CRISS), Universal Design for Learning (UDL), Differentiated Instruction (DI), International Society for Technology Education (ISTE), Collaborate Plan Align Learn Motivate Share (CPALMS), and FileMaker Pro. The participants identified their responses to be irrelevant (0), not true of me (1), somewhat true of me (2,3,4,5), and very true of me (6,7). The percentage of responses reported for CRISS was about even with 29% indicating not true of me and 32% reporting very true of me. The responses that reported higher percentages in very true of me (6,7) were UDL (50%), DI (75%), and CPALMS (54%). The responses that reported higher percentages in irrelevant were ISTE (43%) and FileMaker Pro (50%).

Table 4

**Self-Reported In-service/PD**

<table>
<thead>
<tr>
<th>Percent on Likert Scale</th>
<th>CRISS</th>
<th>UDL</th>
<th>DI</th>
<th>ISTE</th>
<th>CPALMS</th>
<th>FileMaker Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>1</td>
<td>28.6²</td>
<td>7.1</td>
<td>3.6</td>
<td>42.9¹</td>
<td>10.7</td>
<td>50.1¹</td>
</tr>
<tr>
<td>2</td>
<td>3.6</td>
<td>7.1</td>
<td>0</td>
<td>14.3</td>
<td>10.7</td>
<td>14.3²</td>
</tr>
<tr>
<td>3</td>
<td>7.1</td>
<td>10.7</td>
<td>0</td>
<td>3.6</td>
<td>7.1</td>
<td>3.6</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>7.1</td>
<td>10.7</td>
<td>3.6</td>
<td>10.7</td>
<td>3.6</td>
</tr>
<tr>
<td>5</td>
<td>10.7</td>
<td>17.9²</td>
<td>10.7</td>
<td>0</td>
<td>7.1</td>
<td>3.6</td>
</tr>
<tr>
<td>7</td>
<td>32.1¹</td>
<td>32.1¹</td>
<td>46.4¹</td>
<td>14.3</td>
<td>32.1¹</td>
<td>14.3²</td>
</tr>
</tbody>
</table>

Mean 4.42  5.03  5.96  3.25  4.85  2.85
Median 5.5  5.5  6  2  6  1.5
Mode 7 7 7 1 7 1
Std Deviation 2.55 1.97 1.40 2.50 2.17 2.39

**Note.** ¹The highest percent score. ²The second highest percent score.

**Quantitative Findings**

The focus of this study was to examine the changes over time regarding the planning practices of teachers using the Digital Instructional Planner (DIP) and the
Research-Based Instructional Strategies (RBIS). The Concerns-Based Adoption Model (CBAM) includes two quantitative instruments. The first is the SoCQ, and the second is the Innovation Configuration. Baseline data regarding teachers concerns using the innovation were collected prior to their involvement in using the DIP and RBIS. The same instrument was administered to the participants of the study at the end of the nine weeks of using the DIP and RBIS. The SoCQ consisted of 35 statements with five statements focusing on each of the seven scales. These scores from the pre/post administrations became the seven raw scores for each administration. Using the Stages of Concern Raw Score-Percentile Conversion Chart for the SoCQ as recommended by the instrument authors (George, Hall, & Stiegelbauer, 2013); the entire group percentile scores were analyzed for the pre/post administrations of the SoCQ.

The complete pre/post data concerns profiles were plotted using pivot tables produced by the Excel software. The group percentile scores were visually examined using the interpretation schema provided in the SoCQ manual. Figure 8 reports the group pre/post percentile scores of the SoCQ stages of concern. The SoCQ profiles of percentile scores for Stage 0 (Unconcerned), Stage1 (Informational), Stage 2 (Personal), Stage 3 (Management), Stage 4 (Consequences) and Stage 6 (Refocusing) reported a decrease in the relative intensity of concerns. While Stage 5 (Collaboration) reported a relative intensity increase of concern; the data indicates that as teachers as the whole group learned about the innovation their concerns in Stages 0, 1, 2, and 3 decreased. As the teachers as a whole group became familiar with how to use the DIP and RBIS their concerns in Stages 5 and 6 increased.
Figure 8. SoCQ for group profiles.

The group percentile scores for the pretest and posttest group administrations of the SoCQ are shown in Table 5. This is the same data as reported in Figure 8 so the data trends are the same. This table represents the specific group pre/post percentile score for each level of concern as reported by the SoCQ. The highest stage of concern in the pre-survey was reported to be in Stage 0 (Unconcerned), and the second highest stage of concern was Stage 1 (Informational). The post-survey reports the highest level of relative intensity to be in Stage 5 (Collaboration) with the second highest relative intensity to be in Stage 6 (Refocusing). The highest level of concern from the pre/post SoCQ has changed from Stage 0 (Unconcerned) to Stage 5 (Collaboration) indicating the group as a whole shifted their concerns from a personal level to a concern on a collaboration level.
Table 5

<table>
<thead>
<tr>
<th>Administration of SoCQ</th>
<th>Stage of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Pretest</td>
<td>91¹</td>
</tr>
<tr>
<td>Posttest</td>
<td>48</td>
</tr>
</tbody>
</table>

*Note.¹ The highest stage score.² The second highest stage score*

Next, the group profiles were analyzed into three subgroups of varying years of teaching experience. The three subgroups are teachers with teaching experience of 0-1 years, 2-10 years, and 11 plus years. The individual profiles were visually examined using the interpretation schema provided in the SoCQ manual (George, Hall, & Stiegelbauer, 2013). Figure 9 displays the frequency of highest concerns stage by years of teaching experience by 0-1 years, 2-10 years, and eleven plus years. All three subgroups show a decrease in the level of concerns in the post-survey across all seven stages of concerns. Again, the data indicates that as teachers grouped by years of teaching learned about the innovation their concerns in all the stages of concerns decreased. However, Table 6 reports that after nine weeks of using the DIP and RBIS there was an overall increase in the frequency of responses in Stage 5 in the post SoCQ data. The pre-SoCQ highest frequencies of responses were indicated in Stage 0 and 1. The post-SoCQ highest frequencies of responses were indicated in Stage 5. This change over time is attributed to the teachers grouped by years of teaching becoming familiar over the nine weeks on how to use the DIP and RBIS.
The seven percentile scores for the group were included in a matrix containing all the participants’ seven pre/post-sub-scale scores. Each of the individual’s highest scores was noted in the larger matrix and visually examined with the other participants’ highest scale scores. Table 6 shows the frequency of the highest scaled score for the pre/post SoCQ survey administrations by varying years of teaching experience 0-1 years, 2-10 years, and 11+ years.

Figure 9. SoCQ participant groups’ profile by years of teaching experience
years, and 11 plus years. Note the superscript identifies the highest stage of concern for each subgroup.

Table 6

*Frequency of Highest Concerns Stage by Years of Teaching Experience*

<table>
<thead>
<tr>
<th>Stage of Concern</th>
<th>Administration of SoCQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>All Teachers</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>9(^1)</td>
</tr>
<tr>
<td>Posttest</td>
<td>1</td>
</tr>
<tr>
<td>Teachers 0-1 Years</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>4(^1)</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
</tr>
<tr>
<td>Teachers 2-10 Years</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>2</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
</tr>
<tr>
<td>Teachers 11+ Years</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>3(^1)</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* \(^1\)The highest group stage score.

The group profiles of school-level teaching were divided into three subgroups and analyzed. The three subgroups were elementary school teachers, middle school teachers and high school teachers. The individual profiles were visually examined using the interpretation schema provided in the SoCQ manual (George, Hall, & Stiegelbauer, 2013). Figure 10 displays the frequency of highest concerns stage by elementary schools, middle schools, and high schools. All three subgroups show a decrease in the level of concerns in the post-survey across Stage 0 (Unconcerned), Stage 1 (Informational), Stage 2 (Personal), and Stage 3 (Management). The stages of concern that show little change with elementary school teachers are Stage 4 (Consequences), Stage 5 (Collaboration),
and Stage 6 (Refocusing). Middle school teachers show a decrease of level of concerns in Stage 4 (Consequences), and Stage 6 (Refocusing). Little change was noted in Stage 5 (Collaboration). High school teachers showed an increase of level of concerns in Stage 5 (Collaboration) and Stage 6 (Refocusing) with little change noted in Stage 4 (Consequences). This mirrors the analyses of the results from the SoCQ profiles of the subgroup years of teaching experience. The data indicates that as teachers learned about the innovation their concerns in all the stages of concerns decreased. However, Table 7 reports that after nine weeks of using the DIP and RBIS there was an overall increase in the frequency of responses in Stage 5 in the post-SoCQ data. The pre-SoCQ highest frequencies of responses were indicated in Stage 0 and 1. The post-SoCQ highest frequencies of responses were indicated in Stage 5. Again, this change over time is attributed to the teachers becoming familiar over the nine weeks on how to use the DIP and RBIS.
Figure 10. SoCQ participant groups’ profile elementary schools.

The seven percentile scores for the group were included in a matrix containing all the participants’ seven pre/post scale scores. Each of the individual’s highest scores each was noted in the larger matrix and visually examined with the other participants’ highest percentile scores. Table 7 shows the frequency of the highest scaled score for the pre/post SoCQ survey administrations by school-level teaching elementary school
teachers, middle school teachers, and high school teachers. Note the superscript identifies the highest stage of concern for each subgroup.

Table 7

*Frequency of Highest Concerns Stage by School-level Teaching*

<table>
<thead>
<tr>
<th>Stage of Concern</th>
<th>Administration of SoCQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>All Teachers</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>9¹</td>
</tr>
<tr>
<td>Posttest</td>
<td>1</td>
</tr>
<tr>
<td>Elementary-schools</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>5¹</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
</tr>
<tr>
<td>Middle-schools</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>2¹</td>
</tr>
<tr>
<td>Posttest</td>
<td>1</td>
</tr>
<tr>
<td>High-schools</td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>2¹</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note. n = 18*

The group profiles percentile scores of educational degrees received were analyzed into two subgroups. The two subgroups are teachers with a bachelor’s degree or a master’s degree. Figure 11 displays the percentile scores of highest concerns stage by educational degree held. Teachers with a bachelor’s degree showed a decreased level of concerns in Stage 0 (Unconcerned), Stage 1 (Informational), Stage 2 (Personal), Stage 3 (Management), and Stage 4 (Consequences). This same group of teachers an increased level of concern in Stage 5 (Collaboration) and no change in Stage 6 (Refocusing). Alternatively, teachers with a master’s degree showed a decreased level of concerns in Stage 0 (Unconcerned), Stage 2 (Personal), and Stage 3 (Management). There was no
change reported in Stage 1 (Informational) and Stage 4 (Consequences), and an increase of concerns was shown in Stage 5 (Collaboration), and Stage 6 (Refocusing). As reported in the years of teaching and school level teaching the same results similar results in Table 6 and Table 7 are also represented in Table 8. The pre-SoCQ highest frequencies of responses were indicated from Table 8 are in Stage 0 and 1. The post-SoCQ highest frequencies of responses were indicated in Stage 5. This change over time is attributed to the teachers becoming familiar over the nine weeks on how to use the DIP and RBIS.

![SoCQ Participant Profiles By Master's Degree](image1)

![SoCQ Participant Profiles By Bachelor's Degree](image2)

*Figure 11. SoCQ participant groups’ bachelor’s and master’s degrees.*

The seven-scaled scores for the group percentiles were included in a matrix containing all the participants’ seven pre/post scale scores. Each of the individual’s highest scores was noted in the larger matrix and visually examined with the other participants’ highest scale scores. Table 8 shows the frequency of the highest scaled score for the pre/post SoCQ survey administrations by educational degree held, which were either a bachelor’s degree or a master’s degree. Note the superscript identifies the highest stage of concern for each subgroup.
Table 8

*Frequency of Highest Concerns Stage by Educational Level*

<table>
<thead>
<tr>
<th>Administration of SoCQ</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>9¹</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Posttest</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>8¹</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>5</td>
<td>6¹</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Posttest</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>6¹</td>
<td>1</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>4¹</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Posttest</td>
<td>0</td>
<td>2¹</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2¹</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* n = 18

A total mean score for the entire SoCQ was performed by adding all the pre/post-scaled scores for each participant’s SoCQ responses. The SoCQ manual warned against using percentile scores, hence the scaled score was used in the statistical analysis (George, Hall, & Stiegelbauer, 2013). The total scaled pre/post scores for all of the 18 participants were added. These total pre/post SoCQ scores were used in a dependent samples t-test to evaluate the differences in the raw scores on the entire SoCQ between the pre/post administrations of the SoCQ. As shown in Table 9, the test was significant with a *p* < .0003 at a *p* value of <.05.

Table 9

*Group Mean Scores for the Entire SoCQ Dependent t-test*

<table>
<thead>
<tr>
<th>Entire SoCQ</th>
<th><em>P</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.0003</td>
</tr>
</tbody>
</table>
A One-Way Analysis of Variance (ANOVA) was conducted to analyze the differences between and within the three groups (years of teaching, school-level teaching, and degree held). The ANOVA was conducted two times once for the pre-survey and again for the post-survey. There were six ANOVA statistical tests conducted. Two each for years teaching, school-level teaching, and educational degree held. The test was analyzing the differences between and within the groups for concern level.

Table 10 depicts the ANOVA results in Stage of Concern scores for SoCQ Pre-Survey relating to three groups (zero to one year, two to 10 years, and 11 plus years) of years teaching. The between-groups and within-groups concerns data reported a $p = .297$. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ pre-survey years teaching is within the normal sampling error and is not significant.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2104.111</td>
<td>2</td>
<td>916.000</td>
<td>1.218</td>
<td>.297</td>
</tr>
<tr>
<td>Within Groups</td>
<td>13812.833</td>
<td>15</td>
<td>694.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15916.944</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 depicts the ANOVA results in Stage of Concern scores for SoCQ Post-Survey relating to three groups (zero to one year, two to 10 years, and 11 plus years) of years teaching. The between-groups and within-groups concerns data reported a $p = .345$. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ post-survey years teaching is within the normal sampling error and is not significant. Therefore, the
researcher failed to reject the null hypothesis $H_0:5$ because the $p$-value was greater than .05.

Table 51

*ANOVA of Concern Scores for SoCQ Post-Survey Years Teaching*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1832.000</td>
<td>2</td>
<td>1052.056</td>
<td>1.142</td>
<td>.345</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10422.000</td>
<td>15</td>
<td>920.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12254.000</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12 depicts the ANOVA results in Stage of Concern scores for SoCQ Pre-Survey relating to three groups (i.e., elementary school, middle school, and high school) of instructional placements. The between-groups and within-groups concerns data reported a $p$ .873. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ pre-survey school-level teaching is within the normal sampling error and is not significant.

Table 6

*ANOVA of Concern Scores for SoCQ Pre-Survey School-Level Teaching*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>285.278</td>
<td>2</td>
<td>142.639</td>
<td>.137</td>
<td>.873</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15631.667</td>
<td>17</td>
<td>1042.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15916.944</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

103
Table 13 depicts the ANOVA results in Stage of Concern scores for SoCQ Post-Survey relating to three groups (i.e., elementary school, middle school, and high school) of instructional placements. The between-groups and within-groups concerns data reported a $p = .458$. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ post-survey school-level teaching is within the normal sampling error and is not significant. Therefore, the researcher failed to reject the null hypothesis $H_0$ because the level of significance concern scores was greater than .05.

Table 7

*ANOVA of Concern Scores for SoCQ Post-Survey School-level Teaching*

<table>
<thead>
<tr>
<th></th>
<th>$SS$</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1212.424</td>
<td>2</td>
<td>606.212</td>
<td>.824</td>
<td>.458</td>
</tr>
<tr>
<td>Within Groups</td>
<td>11041.576</td>
<td>17</td>
<td>736.105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12254.000</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14 depicts the ANOVA results in Stage of Concern scores for SoCQ Pre-Survey relating to the educational level of two subgroups—bachelor’s and master’s degrees. The between-groups and within-groups concerns data reported a significance level of .245. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ pre-survey educational degree is within the normal sampling error and is not significant.
Table 8

ANOVA of Concern Scores for SoCQ Pre-Survey Educational Degree

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1329.068</td>
<td>1</td>
<td>1329.068</td>
<td>1.458</td>
<td>.245</td>
</tr>
<tr>
<td>Within Groups</td>
<td>14587.877</td>
<td>16</td>
<td>911.742</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15916.944</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15 depicts the ANOVA results in Stage of Concern scores for SoCQ Post-Survey relating to the educational level of two subgroups—bachelor’s and master’s degrees. The between-groups and within-groups concerns data reported a significance level of .607. There is no statistical significance at the alpha level .05. This $p$-value result indicates that the ANOVA of Concern Scores for SoCQ post-survey educational degree is within the normal sampling error and is not significant. Therefore, the researcher failed to reject the null hypothesis $H_0$ because the level of significance c

Table 9

ANOVA of Concern Scores for SoCQ Post-Survey Educational Degree

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>206.892</td>
<td>1</td>
<td>206.892</td>
<td>.275</td>
<td>.607</td>
</tr>
<tr>
<td>Within Groups</td>
<td>12047.108</td>
<td>16</td>
<td>752.944</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12254.000</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Qualitative Findings

Levels of Use (LoU). The researcher designed a Digital Instructional Planner (DIP) using File Maker Pro® that was targeted to the educational planning needs of K–12 teachers of reading. Paired with the DIP was a Wikispaces website that included the Researched-Based Instructional Strategies (RBIS), Collaborate Plan Align Learn Motivate Share (CPALMS), Creating Independence through Student-owned Strategies (CRISS), Universal Design for Learning (UDL), Marzano’s High-yield Strategies, English Language Learners (ELL) and ESE accommodations, Differentiated Instruction (DI), and the International Society for Technology in Education (ISTE) standards for both teachers and students. The research participants incorporated the use of the DIP and the RBIS for nine weeks. The LoU interview protocol was used to identify the implementation levels of the innovation (DIP and RBIS) through rating scales and to identify any common themes.

There were 18 participants in the study, of which six volunteered to take part in the semi-structured interviews. The interviews were scheduled during participants’ selected time and were conducted over the telephone. The interviews ranged in time from 25 minutes to 40 minutes. The researcher transcribed the audio-taped interviews verbatim. Copies of the transcript were emailed to the participants for review (member checking) to check for the accuracy of their interviews. Participants were given the opportunity to provide any clarifications of their comments in their interview transcription. None of the transcribed interviews were returned with edits.

The transcribed interviews were rated by the researcher and a third party following the LoU protocols outlined by Loucks, Newlove, and Hall (1998). The
responses from the interview were rated using a LoU rating sheet to determine at which of the eight LoU stages the teacher was during the implementation of the innovation (Hord, Rutherford, Huling-Austin, & Hall, 1987). The stages of the LoU are listed vertically on the rating sheet: Level 0, Non-Use; Level 1, Orientation; Level 2, Preparation; Level 3, Mechanical Use; Level 4A, Routine; Level 4B, Refinement; Level 5, Integration; and Level 6, Renewal. Horizontally across the rating sheet are eight categories (Knowledge, Acquiring Information, Sharing, Assessing, Planning, Status Reporting, Performing, and Overall LoU). Each horizontal category is vertically rated to best correspond to the LoU categories Level 0 to Level 6. Table 16 depicts the rating assigned by each of the two raters. The ratings of Refinement 4B and Routine 4A concurs with Stage 5 (Collaboration) with the post SoCQ data reported by the participants. The Refinement 4B rating corresponds with Stage 6 (Refocusing) with the post SoCQ data.

Table 10

<table>
<thead>
<tr>
<th>Interview Participant</th>
<th>Rater 1</th>
<th>Rater</th>
<th>100% similar ratings between two raters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>Refinement 4B</td>
<td>Refinement 4B</td>
<td></td>
</tr>
<tr>
<td>Shelby</td>
<td>Renewal 6</td>
<td>Renewal 6</td>
<td></td>
</tr>
<tr>
<td>Janet</td>
<td>Routine 4A</td>
<td>Routine 4A</td>
<td></td>
</tr>
<tr>
<td>Pamela</td>
<td>Routine 4A</td>
<td>Routine 4A</td>
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</tr>
<tr>
<td>Greg</td>
<td>Refinement 4B</td>
<td>Refinement 4B</td>
<td></td>
</tr>
<tr>
<td>Tara</td>
<td>Routine 4A</td>
<td>Routine 4A</td>
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</tr>
</tbody>
</table>
Again, the focus of the study was to examine the changes over time regarding the planning practices of teachers using the DIP and the RBIS. This was an explanatory sequential mixed-methods design that occurred in two phases. Phase 1 explored how the levels of concerns changed over time with the use of the DIP and RBIS and what were the factors of these changes in instructional planning. During Phase 2, the two strands of data merged. The qualitative data was collected through the LoU interviews and the open-ended questions from the post SoCQ.

**Stages of Concerns Questionnaire (open-ended questions).** During the pre/post-SoCQ the participants were asked to respond to two open-ended questions that were focused on their concerns related to lesson-planning and planning resources. These questions were 1) What are your greatest concerns when creating lesson plans for your current classes? and 2) Do you feel you have adequate resources for lesson-planning?

The post-SoCQ included eight additional open-ended questions that were related to their likes/dislikes of the DIP and RBIS. The four post questions related to the DIP were 1) What did you like about the DIP? 2) Why did you like it? 3) What did you not like about the DIP? and 4) Why did you not like it? The four post questions related to the RBIS were 1) What did you like about the RBIS? 2) Why did you like it? 3) What did you not like about the RBIS? and 4) Why did you not like it? The final question was asking if they were willing to participate in an interview. The participants’ responses were exported directly into an excel spreadsheet, and the responses were read, and as themes began to emerge, they were color-coded using highlighters. Use of an excel sheet allowed the responses to be sorted into themes and allowed further interpretation of
responses as related to their years of teaching, the school-level they are teaching, and their highest degree held. The participants responses are presented in Appendix S (Pre SoCQ Lesson-planning Concerns), Appendix T (Post SoCQ Lesson-planning Concerns), Appendix U (Pre SoCQ Lesson-planning Resources Concerns), Appendix V (Post SoCQ Lesson-planning Resources Concerns), Appendix W (Post SoCQ DIP Concerns), and Appendix X (Post SoCQ RBIS Concerns).

**Interview themes.** There were six themes identified through the coding of the LoU interviews and the pre/post-open-ended SoCQ questions. The themes identified were changes in planning, time, ease of use, recommended changes in DIP, recommended DIP to other teachers/educational professionals, and student changes. To protect the anonymity of the participants, pseudonyms were used when citing responses. Several of the cited responses were edited for clarity.

**Changes in planning.** The first theme identified was changes in planning. This theme was defined as any identified changes that were related to the components of the DIP or RBIS. The DIP was created by the researcher and included a checkbox, fill-in-the-blank, and menu dropdown sections. The checkbox sections of the DIP were the Florida Standards, CRISS, ESE, ESOL, ISTE, Marzano, and UDL. The fill-in-the-blank boxes of the DIP were the subject area, grade level, prepared by whom, instructional dates, assessment dates, DI, closure of lesson, homework, specific feedback, remediation activity, and enrichment activity. The components of the RBIS were CPALMS, CRISS, UDL, Marzano’s high-yield strategies, ELL and ESE accommodations, DI, and the ISTE standards for both teachers and students. There were 44 total statements made in the LoU
by the interviewees concerning their changes in how they plan lessons. Appendix Y displays several of these statements.

The researcher selected three statements from the LoU interviews to highlight how the DIP design affected the teachers’ changes in planning. In the first statement, the participant Shelby describes the influence that several of the planning sections of the DIP (CRISS, UDL, and Marzano high yield instructional strategies) had when writing her lesson plans. Additionally, Shelby felt that the DIP brought all the components of lesson-planning together.

Universal Design of Learning actual includes Marzano’s strategies and CRISS strategies. And to me, I don’t think I connected the three together in my head.

When you presented them in the DIP and RBIS it connected the strategies for me. The second comment, Pamela demonstrates how the CRISS checkboxes in the DIP and the resources available in the RBIS served as a reminder of past instructional knowledge that they she had and was not using during her lesson-planning. “It was a reminder of the CRISS strategies. The RBIS allowed me to easily access the strategies that I have forgotten,” Pamela said. The last quote refers to sections of the DIP (checkbox, fill-in-the-blank, and menu dropdown sections) working together when writing lesson plans. Shelby commented, “I liked this tool also because it is almost a one-stop shop that includes all the components of an effective lesson.”

The theme of changes in planning was also represented through the pre/post-open-ended SoCQ questions. The researcher selected two statements from the pre/post-SoCQ open-ended questions that represent how the DIP design advanced the teachers change in planning. A pre-SoCQ statement by Dan in Appendix S was “I do not write
Dan’s post-SoCQ opinion of the DIP in Appendix W was “I now have a standard lesson-planning layout in the DIP.” After nine weeks use of the DIP/RBIS, Dan’s viewpoint on writing instructional lessons changed from not writing lesson plans to currently writing lesson plans with the DIP. The second pre-SoCQ statement was selected from Appendix U where Vicki stated, “Sometimes I have the resources needed for lesson-planning.” Her post-SoCQ response from Appendix W was “The DIP now allowed me [to] breakdown what I wanted to teach. The DIP/RBIS provided instructional resources for Vicki to utilize while planning her lessons.

**Time.** The second theme the researcher identified is the change in the amount of time needed to create instructional plans. Specifically, how the use of the DIP and RBIS reduced the time spent needed to write a lesson plan. During all six of the interviews, the interviewees described how their planning time was influenced when using the DIP/RBIS. There were 24 total statements referring to time and several of the sample statements are shared in Appendix Z.

Three statements were chosen from the LoU interviews to highlight how lesson-planning was reduced. In the first comment, Sam reports the time needed to create a lesson was greatly reduced. He remarked, “It used to take me a couple of hours to write a lesson a lesson plan, and now with the DIP, I am down to 45 minutes.” Additionally, Greg also reported that over the nine weeks of time spent planning with the DIP/RBIS, lesson-planning was reduced. He commented, “Before it would take me probably about an hour. Now I would say it takes me about a half an hour.” Lastly, Pamela mentioned how using the DIP took less time after using the DIP/RBIS for nine weeks to create lesson plans. She said, “At first I completed a lesson plan between 30 to 45 minutes, and
as I picked up the method it took me 15 to 30 minutes to finish a lesson plan.” All the
above statements indicated that use of the DIP/RBIS accounted for reducing lesson-
planning time.

The theme of time was also represented through the pre-open-ended SoCQ
questions. Two statements were chosen from the pre-open-ended SoCQ questions to
highlight the time needed for lesson-planning. The first comment selected is from
Appendix S where Allie stated, “Writing lesson plans are very time consuming.” She did
not make any post-SoCQ statements about time in relation to lesson-planning. This is an
indicator that after use of the DIP/RBIS she no longer had concerns related to the time
needed to plan for lessons. The second pre-SoCQ statement was selected from Appendix
S where Vicki stated, “Writing lesson plans is a time constraint for me.” She also did not
make any post-SoCQ statements about time related to lesson-planning. This is an
indicator that after the use of the DIP/RBIS her concerns where no longer focused on the
need for time to plan lessons.

**Ease of use.** The third theme identified was ease of use. Ease of use is defined as
a task or action that is perceived to be easy to use, combines many steps into one place, or
made simple to use. The “ease of use” code was used for statements from participants
that referred to the technology being easy to use, the DIP being a life saver, and lastly if
the word easy was used by participants in connection to the DIP and RBIS. The
participants made 29 statements concerning how simple and easy it was to use the
DIP/RBIS. Appendix AA depicts the nine sample statements of ease of use as reported
from the participants’ interviews.
Of the nine statements, two comments were reported by the interviewees saying that the DIP was like a one-stop shop for creating lesson plans as it had all the components for effective lesson-planning combined in one place. Greg reported, “It was like a one-stop shop,” and Shelby stated, “I liked this tool also because it is almost a one-stop shop.” Having everything that one needs for lesson-planning in one place made it easier to use, as reflected in the interviewees’ comments. Similarly, another interviewee reported how the DIP and RBIS simplified the process of writing a lesson. “It simplifies it for me in the sense that you have all the strategies already stated in the lesson,” Janet said. To make something simple is to make it easy to use. Having all the instructional strategies available in the DIP made it easy for this user. The researcher selected these two comments as they highlighted the word “easy” in relation to innovation (DIP/RBIS). Sam commented, “This innovation was very easy to use with my existing materials.” Additionally, Greg felt, “The technology is easy and it’s friendly.” Both statements support that the participants reported that the technology used in the DIP was easy to use.

The theme of ease of use was also represented through the post-open-ended SoCQ questions. Three statements were chosen from the post-open-ended SoCQ questions to highlight ease of use. The first comment is from Appendix X made by Nona she stated, “I liked having the RBIS and the FL Standards right there for me in a drop-down menu.” The second comment is from Appendix W where Dan stated, “The sections in the DIP had simple to follow sections.” The third statement is also from Appendix W where Jessica stated, “It made my lesson-planning extremely easy. I was also able to easily duplicate lessons.” All three of these statements from the post-SOCQ open-ended questions reflect how easy the DIP/RBIS was to use for lesson-planning.
**Recommended changes in the DIP.** The fourth theme identified was recommended changes in the DIP. These were recommended changes that the teachers reported during the interview that they would like to see in the DIP. There were nine statements made recommending changes to the DIP. Four of the sample statements are listed in Appendix BB.

These changes recommended to DIP/RBIS were made to improve the functionality of the lesson plan. One of the interviewee comments was related to the formatting of the printing of the DIP. It was desired that when printing the lesson, it would only print the sections of the DIP that were used. Currently, the DIP prints every section regardless of whether the teacher filled in the blank or checked any items.

Sam remarked:

> It didn’t print in a very nice format. So, if there were things that I did not check I would love it if those would disappear when I printed. So, it would become a smaller document. Instead of showing how many things I did not check for this lesson.

Shelby desired that the RBIS instructional links be embedded as hot links in the DIP. She, in particular, would like to see the Marzano’s high-yield strategies have hyperlinks directly embedded in the DIP. During the study, the participants were required to go to the RBIS to get more information on instructional strategies. Shelby stated, “I would like the DIP to have hyperlinks to the Marzano strategies and to the CRISS strategies.” In this last quote, the interviewee is requesting hyperlinks to the ESE instructional access points (i.e., expectations written for students with significant cognitive disabilities) to the Florida Standards. Tara mentioned, “I would like for the access points standards to be
added.” Access points are used for students with significant cognitive disabilities. This was not addressed in the DIP.

The theme of recommended changes in the DIP was also represented through the post-open-ended SoCQ questions. Two statements were chosen from the post-open-ended SoCQ questions to highlight recommended changes in the DIP. The first comment is from Appendix V made by Nona she stated, “I wish my version of the DIP had the links to the resources.” The second comment is from Appendix W made by Allie she stated, “I had to go to another site for the RBIS, I wish they were in the DIP.” Both of these recommended changes would increase the ease of use of the DIP.

**Recommended the DIP to others.** The fifth theme that the researcher identified was that the participants would (or did) recommend the DIP to others. The participants identified teachers, department chairs, or administrators as the “others” that they recommended the DIP to or were planning to make a recommendation to others to use the DIP. Appendix CC highlights five of the 12 total statements regarding recommendations to others for the use of the DIP/RBIS.

Three interviewees had already shared or are planning to share the DIP with others, as seen in the following comments. Greg shared the DIP with a teacher with whom he works at school stating, “I shared the DIP with my other colleague.” Another interviewee, Pamela, shared the DIP with a department chair at school in the hopes that it may be used by other English teachers. “Yes, I’m planning on sharing the DIP with my English department.” This quote reflects that it was shared with a teacher and someone on the leadership team. Shelby reported, “Actually, the people that I shared the DIP with are
my colleagues and my direct supervisors.” All three interviewees were excited during this portion of the interview as they wanted to see other teachers using the DIP.

The theme of recommended DIP to others was also represented through the post-open-ended SoCQ questions. One statement was chosen from the post-open-ended SoCQ questions to highlight recommended DIP to others. The selected comment came from a comment from Appendix W. The comment was made by Jessica she stated, “I like that the DIP was Digital, I was able to share it with other teachers.” These four participants within nine weeks learned a new innovation and through this limited time they felt that the DIP was worth sharing with other teachers and educational leaders.

**Student changes.** The sixth and final theme identified was student changes. The researcher selected these statements as they attributed the student changes to improve instruction as related to the teachers increased abilities to create superior lessons. There were nine statements related to student changes. Appendix DD displays four of these comments. The first quote supports student change. Specifically, Sam reported that, “I got further with their thought process.” However, there was not a follow-up question to this comment. Greg indicated that the teacher had all the materials needed when planning the lesson, as supported in the DIP and RBIS instructional videos. The effective lesson preparation made him feel like an improved teacher and that in turn had a positive effect on the students.

Greg stated:

The fact I was able to access the everything I needed on there. As far as the resources, the graphic organizers, the handouts. The research for myself impacts
the students because now I know how to better teach based on the videos that were there and accessible to me.

The second set of comments highlights how using the DIP created a lesson that flowed more easily, allowing the student to understand the concepts. Through effective lesson-planning, Pamela was able to conduct a coherent lesson that influenced the students’ learning. “The instruction moved more smoothly allowing the students to more easily understand the lesson because I was clearer,” Pamela said. Lastly, Tara believed that she able to increase the rigor of the lessons by increasing the discussion around the literature. She commented, “I was able to get further in conversation reviewing literature and different things in our classroom.”

The theme of student changes was also represented through the post-open-ended SoCQ questions. One statement was chosen from the post-open-ended SoCQ questions to highlight student changes. The first comment is from Appendix X made by Nona she stated, “Using the DIP/RBIS has motivated my students to learn.” This statement represents how the DIP has positively affected her ability to lesson plan.

**Summary**

In this chapter, the researcher has presented the quantitative data of the pre/post-SoCQ in the group and three subgroups (years of teaching, school-level teaching, and degree held). The quantitative data of the pre/post-SoCQ instrument was presented in the percentile scores, t-test, and ANOVA. Additional quantitative data was presented in the two ratings of six LoU interviews. As measured in the pre/post-SoCQ survey, the participants reported a change in their levels of concerns with the DIP and RBIS. The dependent t-test and ANOVA corroborated that the several changes in the participant’s
levels of concern were statistically significant at \( p < .05 \). The open-ended SoCQ and LoU interviews revealed several specific change themes that arose using the DIP and RBIS.

The quantitative data were presented using the participant’s responses to the SoCQ pre/post-survey. The first step was visually to examine the participant’s pre/post-stages of concern as shown in the frequency tables and pivot tables. As a whole group, there was a difference in highest percentile score of 91 in Stage 0 (Unconcerned) of the SoCQ to the highest percentile score of 68 in Stage 5 (Collaboration) of the SoCQ. The researcher also examined the data in subgroups of years of teaching experience, school-level teaching, and highest degree held. Visual examination of the frequency tables and pivot tables confirm a difference in all of the stages of concerns for the subgroup’s years of teaching experience and school-level teaching. Specifically, the highest pre SoCQ frequency of stage of concern was reported by the participants to be at Stage 0 (Unconcerned) and Stage 1 Informational). The post-SoCQ highest frequency of stage of concern was reported at Stage 5 (Collaboration).

The researcher performed various statistical tests to corroborate the visual inspections of the frequency tables and pivot tables. Foremost, a dependent t-test was performed. The t-test was performed on the entire pre/post-SoCQ responses of the participants and revealed that there was a statistical significance of .0003. Additionally, one-way ANOVA was conducted for the pre/post-SoCQ data for each of the three subgroups: years of teaching experience, school level teaching and highest degree held. There was no statistical significance found at \( p < .05 \) for any of the subgroups. Lastly, the researcher and an additional rater rated the LoU responses. Both raters were unanimous, rating one interview at Renewal Level 6, two interviews at Refinement Level 4B, and
three interviews at Routine Level 4A. These interview rating corroborated the data from the post SoCQ data. The rating levels Refinement Level 4B and Routine Level 4A coincide with Stage 5 (Collaboration) of the SoCQ while the Renewal Level 6 coincides with Stage 6 (Refocusing) of the SoCQ.

The qualitative data was presented from the six one-on-one LoU interviews. The interviews were coded, and six themes were identified (i.e., changes in planning, time, ease of use, recommended changes in DIP, recommend DIP to others, and changes in students). The quantitative data was furthered explained by the themes identified through the LoU interviews. Additionally, the qualitative data from the pre/post-open-ended questions were coded and identified. When analyzing the pre/post-open-ended questions, the researcher identified four themes related to lesson-planning concerns (i.e., time, multiple lesson plans, concerns for student instruction, and strategies/resources). During the post-open-ended DIP questions, the participants identified that they liked the dropdown menu, the planning checkboxes, and the fill in the boxes. While the post open-ended DIP questions regarding what they had no major concerns with the DIP and RBIS. From the post-SoCQ open-ended RBIS questions, two teachers identified that they enjoyed the PD videos that were part of the RBIS and the research-based resources.
V. CONCLUSION

In this chapter, the researcher will provide a discussion of the findings, recommendations, implications, and limitations of the study. Recent changes in Florida state law has changed the diploma options for students with special needs and these special needs students are now included in general education classes whenever possible (FLDOE, 2014). Teachers are not fully equipped to deliver meaningful instruction as related to skills relevant to literacy instruction (Freiberg, 2002; Lyon & Weiser, 2009; Moats, 2009). Additionally, the State of Florida developed a Local Instructional Improvement System (LIIS), which included minimum standards for instructional practices focused on instructional materials and/or resources and lesson planning (FLDOE 2011). However, the LIIS did not provide a lesson planning template for teachers.

To address this problem the researcher designed a Digital Instructional Planner (DIP). The DIP design incorporated the lesson planning formats from Tyler (1949), Gagne (1977), Lowther & Russell (2008), Houston & Beech (2002), and Myer & Hitchcock (2006). Included in the DIP was Research-Based Instructional Strategies (RBIS) that included Creating Independence Through Student Owned Strategies (Hairrell et al., 2011; Kaddoura, 2013; Santa, Havens, & Maycumber, 1988), English Speakers of Other Languages (ESOL) instructional strategies (Good, Masewicz, & Vogel, 2010; Lee & Buxton, 2013; Solari & Gerber, 2008), International Society for Technology in Education (ISTE) standards (Barron, Kemker, Harmes, & Kalaydjian, 2003; Kiranli & Yildirim, 2013), Marzano’s nine high-yield strategies (Marzano, Pickering, & Pollock,
Differentiated Instruction (DI) strategies (Benjamin, 2005), and Universal Design for Learning (UDL) strategies (Meyer, Rose, & Gordon, 2014).

Through this study the researcher examined changes in lesson-planning practices of teachers of reading using the DIP and the RBIS. To assist teachers with the change the researcher designed competency-based PD that was provided asynchronously via YouTube videos. Each video was about two minutes in length that focused on a RBIS and how to plan for that strategy in the DIP. The participants reported that these videos helped them learn how to use the DIP and RBIS. The self-selected PD that was provided in the study is a type of self-directed PD that Guskey (2002) recommends that teachers be offered. Additionally, the participants overwhelmingly reported that the DIP and RBIS reduced their lesson planning time in half. There was a learning curve reported, at first it took longer to use the DIP but with practice it became very easy to use. This learning curve was expected as it was described in Rogers Diffusion of Innovations Theory (2003). Lastly, the participants reported that the DIP and RBIS allowed them to create better lessons and they felt that it in turn helped their students learn more.

**Quantitative Findings**

**Research question 1a.** Is there a difference in the participants’ seven stages of concern profile percentile score regarding the use of the DIP and RBIS for the pre-intervention and post-intervention when grouped by (a) whole group, (b) years of teaching, (c) school-level teaching, and (d) highest degree held?

Analyzing the pre-survey data, the researcher found that the frequency of the highest stage of concern profiles to be in Stage 0 (Unconcerned) at 91, and Stage 1 (Informational) at 84. These high stages of concerns informed the researcher that the
participants wanted more information about the innovation and did not present any pressing concerns that needed to be addressed prior to use of the DIP/RBIS. This data indicated to the researcher that the PD YouTube videos were needed to explain what the DIP and RBIS were and how to use this innovation in creating lesson plans. At the end of the nine-week implementation of the innovation, the post-survey SoCQ data reports the highest-frequency percentile-score stage of concern to be at Stage 5 (Collaboration) at 68 and the second-highest frequency at the percentile score of 58 for Stage 6 (Refocusing). Stage 5 (Collaboration) implies that these teachers’ concerns are now revolving around how to coordinate use of the DIP and RBIS with other teachers. Stage 6 (Refocusing) indicates that these teachers are actively exploring ways to improve the DIP and RBIS in order to reap more of the benefits of lesson-planning.

Additional supports could be also provided with quality sample lessons presented with the PD. This data leaves open for the researcher to identify what specific types of changes are needed to improve the DIP and RBIS. These types of changes needed were identified through the LoU, which will be discussed later in this chapter in the qualitative findings.

**Research question 1b.** Is there a statistical difference in the participants’ seven stages of concern profile regarding the use of the DIP and RBIS between the pre-intervention and post-intervention stages of concern profile when grouped by (a) years of teaching, (b) school-level teaching, and (c) highest degree held? To evaluate the differences on the entire SoCQ, the researcher conducted a dependent sample t-test and an Analysis of Variance (ANOVA). The scaled scores were used, George, Hall, and
Stiegelbauer (2013) warned against using percentile scores in statistical analysis as the reported results would not be valid.

**Dependent t-test.** The t-test confirms that after administration of the SoCQ, participants’ stages of concerns changed over the nine weeks of using the innovation and was statistically significant. The t-test does validate the findings of the SoCQ; however, as the sample size of this study (n=18) was very low and not representative of the two urban school districts teachers of reading, there is a probability of a Type I error. To remedy the Type I error, future research will need to be comprised of a larger sample size of participants that more closely resemble that of the general population.

**Analysis of variance.** An Analysis of Variance (ANOVA) was chosen by the researcher to establish any statistical significance between and within the subgroups concerns that were reported in the pre/post-SoCQ among the various groups. The subgroups were years of teaching experience, school-level teaching, and highest degree held. Years of teaching experience was analyzed in three groups of 0 - 1 year, 2 – 10 years, and 11+ years. The school-level teaching was evaluated by elementary, middle, and high school-level. Lastly, the highest degree held by the participants in the study was either a bachelor’s or master’s degree. There was no statistical significance at the alpha level 0.05 for any of the pre-post SoCQ among any of the various groups. The lack of statistical support could be related to the fact that none of the subgroups were comprised an equal distribution and that the last subgroup of highest degree held was comprised of only two groups.
Qualitative Findings

Levels of use. At the end of the nine-week implementation of the innovation the LoU interviews were conducted and then were rated by two raters that assigned three interviews at a Routine Level 4A, two interviews at a Refinement Level 4B, and one interview at a Renewal Level 6. This rating of the LoU interviews is the first data set to explain some of the data found in the SoCQ post data. The Routine Level 4A is defined as the user that has established a routine for using the innovation (Loucks, Newlove, & Hall, 1998). This routine includes full knowledge of the innovation, its use, no desires to change the innovation, and reports that innovation has no issues with its design (Loucks, Newlove, & Hall, 1998). This Routine Level 4A corresponds to Stage 3 (Management) of the post-SoCQ results. The Refinement Level 4B is defined as the user has varied the use of the innovation with a focus on the client impact (Loucks, Newlove, & Hall, 1998). Refinement Level 4B corresponds to Stage 4 (Consequence) of the post-SoCQ results. The pre-post SoCQ data shows that most of the teachers moved past Stages 0, 1, 2, 3, and 4. These teachers are still in need for additional support to transition to Stages 5 and 6. This could be accomplished by addressing the efficiency, organization, managing, and scheduling of how to use the DIP and RBIS. Additional specific PD through YouTube videos in each area could be provided. The Renewal Level 6 is defined as the user seeking major changes in the innovation and sharing the innovation with others (Loucks, Newlove, & Hall, 1998). Renewal Level 6 corresponds to Stage 5 (Collaboration) and Stage 6 (Refocusing) and corroborates of the post-SoCQ results.

Research question 2. How have the instructional planning practices changed for teachers of reading after nine weeks of using the DIP with the RBIS?
The pre-SoCQ open-ended questions provided insight to the researcher that the participants did not know what the DIP/RBIS was nor were they able to identify specific instructional strategies. Additionally, teachers self-identified a very limited amount of resources provided to them. The open-ended post-survey SoCQ results showed that the teachers now mentioned using CPALMS, CRISS, and Marzano’s teaching strategies into their lesson-planning. This change suggests that the RBIS exposed teachers to instructional strategies that they felt were useful when using the DIP for their lesson-planning. The teachers’ concerns about planning were also asked during the pre-post open-ended questions in the pre-post administrations of the SoCQ. The pre-SoCQ open-ended theme on time indicated that teachers spent much time looking for resources and time writing lesson plans. The post themes that emerged were reduced time needed for planning lessons and ease of use of the DIP.

The post only SoCQ open-ended responses were asked concerning the teachers views on the DIP and RBIS. The teachers informed the researcher of design changes needed to the DIP/RBIS for future implementation. These suggested changes would make the DIP and RBIS even easier to use. Teachers reported the design flaws within the DIP and RBIS that need to be addressed. Such as eliminating the need to go to a web site to retrieve the RBIS. Teachers want the RBIS embedded into the DIP. Another important change wanted in the DIP is the inclusion of the Florida Standards for all subjects.

**Research question 3.** What factors influenced the teachers of reading to alter their instructional planning practices after nine weeks of using the DIP with the RBIS?
The LoU interview data connected the themes to the SoCQ profiles of the participants and to the DIP and RBIS. The researcher identified six themes in the interviews, which were changes in planning, reduced time spent planning, ease of use, recommended changes in the DIP, recommended DIP to others, and changes in student performance. Specifically, the teachers of reading reported decreased time in writing lessons with the use of the DIP. In fact, all teachers reported reduced time planning when using the DIP. Additionally, the teachers reported that the DIP and RBIS were easy to use. They also recommended changes to the DIP and RBIS, and they recommended the use of the DIP and RBIS to other teachers and district staff. Lastly, the teachers of reading noted that positive changes occurred in their students’ performances due to their changes in how they planned for instruction. Figure 12 depicts the six identified themes in the teachers of reading that occurred due to the implementation of the DIP and RBIS. Each of the six themes is organized within the LoU ratings Routine, Renewal, and Refinement. LoU ratings corresponds to one or more stages of concern that were identified through the post-SoCQ survey and is included in Figure 12.

The Routine Level 4A is defined as having full knowledge of the innovation and no concerns with its use (Loucks, Newlove, & Hall, 1998). Stage 3 (Management) focuses on the procedures of using the innovation and the efficiency of the innovation (George, Hall & Stiegelbauer, 2006). The themes of “changes in planning”, “time” and “ease of use” convey the concerns identified by the teachers. The Refinement Level 4B is defined as having user has varied the use of the innovation with a focus on the client impact (Loucks, Newlove, & Hall, 1998). Stage 4 (Consequence) focuses on the impact
of the innovation to the student (George, Hall & Stiegelbauer, 2006). The theme of “student changes” reported by the teachers are directly related to this stage of concern. Lastly, the Renewal Level 6 is defined as the participant’s modifications and changes they would like to see in the innovation and how they are collaborating with others. (Loucks, Newlove, & Hall, 1998). Stage 5 (Collaboration) and Stage 6 (Refocusing) related to the teachers reporting how they have shared the innovations with others and the recommendations of how to improve the DIP and RBIS.

Figure 12. LoU Interview Themes.
**Research question 4.** In what ways do the interview data reporting the experiences of teachers of reading using a digital instructional planner (DIP) and the related RBIS explain the data presented in the SoCQ profiles of the participants?

The DIP created by the researcher has been supported through this study to have a great effect on the participants. The participants commented strongly that the DIP has changed in how they now view lesson-planning. They also have reported that the DIP has reduced the time required to write lesson plans by having all the tools (DIP/RBIS) in one place, which makes planning easy. The participants noted that the DIP and RBIS needed some changes. They indicated that parts of the DIP were not needed and recommended additional items. These changes need to be incorporated into a design of the innovation and further research needs to be conducted on the revised innovation. Moreover, these changes in teachers’ concerns show that by the end of the study teachers did not have anxiety using the DIP or RBIS. The new Florida Standards are required to be instructed by teachers; however, teachers can choose the methods of how to teach the content related to the Florida Standards (FLDOE, 2014). Research has shown that teachers are not well prepared to teach skills relevant to literacy instruction (Freiberg, 2002; Lyon & Weiser, 2009; Moats, 2009). The researcher designed the DIP and RBIS to assist teachers in building their instructional repertoire and change their instructional practices.

**Recommendations**

As reported in the qualitative findings, the recommended changes desired by the participants to the DIP and the RBIS Wikispaces should be implemented in future lesson planning that incorporate the DIP and RBIS. It would also be advisable to increase the
use if the DIP and RBIS to include all teachers and not limited to teachers of reading. Additionally, moving the DIP from FileMaker Pro to a web-based or an even a smart app platform could also be another change incorporated into future implementation. This would allow for more advanced features in the DIP, such as a selection tab for teachers to choose a course and then all the Florida Standards for that course would be populated. None of the teachers that were interviewed liked the RBIS on a separate site. They thought that these resources should be embedded into the DIP as hotlinks. Lastly, the sense of urgency discussed by Kotter (1996) is the first and crucial step to make a major change. In the case of the study, the sense of urgency could be explained to administration that this new DIP will not only save time in lesson-planning, but their students would also learn better due to better planning. This sense of urgency could also be established by the district gatekeepers (e.g. the principals and district leaders) thereby increasing future participation with the DIP and RBIS.

The passage of the Every Student Succeeds Act (ESSA) in December 2015 provided states and school districts with an 18-month transition period before it was required to be fully implemented (Dennis, 2016). ESSA included the terminology Universal Design for Learning (UDL). This marked the first time the term UDL was included in a federal law. ESSA also called for comprehensive literacy instruction with a focus on professional development for teachers to build their instructional skills around literacy (Dennis, 2016). ESSA established that all students including the needs of students with disabilities and English Language Learners have an equitable education in all subject areas. These recent changes in education law have affected all teachers’
lessons planning with all students being required to meet the minimum standards for graduation.

With the addition of the term UDL in ESSA, expansion of competency-based PD in UDL is recommended. The PD could be followed up with research specific to how teachers use UDL in the DIP and which RBIS they choose. Specifically, Spencer and Whittaker (2017) highlight key issues when implementing UDL. Such as identifying barriers to students on how students receive information, selecting solutions to address the barriers, and evaluating the efficacy of the solutions. These issues could be addressed as teachers of all content subjects implement the revised DIP and RBIS.

**Implications**

The results of the present study examining the changes of K-12 teachers have implications for the implementation of the DIP and RBIS that was supported through the CBAM model. The CBAM model in this study included the SoCQ, IC, and the LoU. Both quantitative and qualitative data were collected through a sequential mixed-methods design. Information gathered through this study may encourage the assumption that the DIP and RBIS can affect and change the ways in which teachers plan for reading instruction. Traditional lesson-planning found in Tyler’s Model (1949), Gagnes’s Model (1977), and the ASSURE Model (2008) all include: the lesson objective, stimulus of prior knowledge, instruction (i.e., the teacher models the learning, all learners do the activity together, and each learner practices the new knowledge individually), and assess and provide feedback. The DIP included all the parts of the traditional lesson-planning and included RBIS. The researcher posits that the DIP and RBIS provided teachers with a more complete instructional tool to create lessons that would help instruct all learners as a
need described by Kargas-Bone (2000) and Myer and Hitchcock (2006). The findings in this study support the inclusion of the DIP and RBIS into a teacher’s regime for planning instructional lessons. Furthermore, the DIP and RBIS provided teachers with a more complete instructional tool to create lessons that would help instruct all learners.

Additionally, those responsible for implementing the staff development must ensure that PD be made available to the teacher asynchronously and to allow teachers to select the specific topics that are of interest to them. In fact, Guskey (2002) reports that teachers want PD that is related to the day-to-day operations of their classroom, such as lesson-planning. This supports the asynchronous design of YouTube PD videos for the teachers as they learned and developed their skills using the DIP and RBIS. The final implication was that the participants decided to share the innovation because they have found the value of innovation as related to lesson-planning. The recommendation of any innovation is found to be a process in all of these change models from Havelock (1973), Kotter (1996), Fullan (1999), Rogers (2003), and Wheatley (2005).

**Limitations**

The study was conducted with a small number of teachers of reading from two school districts in a confined geographical area of South Florida. The desired sample size for this study was 96 teachers of reading; however, with this convenience sample, the researcher was only able to recruit 18 participants. The pool of teachers was limited to teachers of reading (in various content areas), but all teachers performed lesson-planning. Another limitation was that the IC was not conducted in direct observation of implementation of the DIP and RBIS. As such, this study cannot be generalized to the rest of the educational K–12 schools in the United States. The DIP was created using a
bined file using the FileMaker Pro software. As such, the researcher was limited to
design features offered by the software. The most prevalent restrictions were the inability
to include all the FL Standards and ESE Access Points in dropdown feature and the
inclusion of unneeded checkboxes for (ISTE) NETS for teachers and students.

Another limitation of the study was in the LoU interviews. It was anticipated to
have ten participants volunteer for the one-to-one semi-structured interviews. With only
18 participants in the study, having only six LoU interviews limited the qualitative
findings. As a result, further studies and additional interviews are recommended to
validate the themes. Lastly, the only four participants out of the 18 in the study
submitted one DIP lesson plan each. The purpose of the IC was to check in with the
participants and analyze through a rating the way the participants were using the DIP and
RBIS. This data would have informed the researcher of any possible concerns involving
the DIP and RBIS. At which point, the researcher could have provided targeted PD in an
attempt to alleviate concerns and make any needed changes to the DIP and RBIS that
would help the innovation through its adoption process.

Summary

The research study showed through both the quantitative data of the SoCQ and
the qualitative data of the LoU interviews that with the use of the DIP and RBIS the
teachers of reading all changed their instructional practices. All six of the teachers
interviewed reported that their instructional planning time was reduced by 50%.
Teachers also reported that the DIP and RBIS were instrumental in helping them create a
rich lesson that includes RBIS. Creating effective lessons that are rich in the reading
pedagogy and literacy instruction was reported in research to be lacking through
university programs or alternative certification (Lyon & Weiser, 2009; Mather, Bos, & Babur, 2001; Moats, 2009; Tissington & Grow, 2007). The researcher created the DIP and RBIS specifically to address this need by bringing together effective lesson-planning practices with high-quality RBIS.

Teachers also reported that not only did they create better lessons; several students demonstrated an increase in engagement during the instruction. Specifically, the teachers cited CRISS, Marzano’s high-yield strategies, UDL, ESE accommodations, and differentiated instruction. Increased engagement in the lesson has a positive effect on the students’ learning of the content (Rose, Meyer, & Hitchcock, 2006). The State of Florida has implemented the Local Instructional Improvement System (LIIS) to address minimal lesson-planning standards (FLDOE, 2011). Moving to the district, state, and national rollout of the DIP and RBIS could possibly not only change the way teachers plan rich lessons but also improve student outcomes.
REFERENCES


Marzano, R. J. (2009), Setting the record straight on high yield strategies. Phi Delta Kappan, September 30-27.


http://www.relevantinsights.com/tag/convenience-sample#sthash.k1TGLeWg.dpbs


https://www.nationsreportcard.gov/reading_2017/files/2017_Results_Appendix_Reading_State.pdf


# Digital Instructional Planner

**Subject Area**

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<th>Prepared By</th>
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<th>Instructional Dates</th>
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**ELA Standards**

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**ELA Reading Standards**

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**Other R Standards**

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**Required Technology**

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**CROSS Strategies**

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**Marzano High Yield Strategies**

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<th>Description</th>
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<tr>
<td>Guideline 2. Provide options for language, mathematical expressions, and symbols</td>
<td>Guideline 6. Provide options for executive functions</td>
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<tr>
<td>2.1 Clarify vocabulary and symbols</td>
<td>6.1 Guide appropriate goal-setting</td>
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<tr>
<td>2.2 Clarify syntax and structure</td>
<td>6.2 Support planning and strategy development</td>
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<tr>
<td>2.3 Support decoding text, mathematical notation, and symbols</td>
<td>6.3 Facilitate managing information and resources</td>
</tr>
<tr>
<td>2.4 Promote understanding across languages</td>
<td>6.4 Enhance capacity for monitoring progress</td>
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<td>3.6 Illustrate through multiple media</td>
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<tr>
<td>Multiple Means of Action and Expression</td>
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<td>Guideline 4. Provide options for physical action</td>
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<tr>
<td>4.1 Vary the methods for response and navigation</td>
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<td>4.2 Use multiple tools for construction and composition</td>
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<tr>
<td>4.3 Build fluencies with graduated levels of support for practice and performance</td>
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<tr>
<td>Guideline 5. Provide options for expression and communication</td>
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<tr>
<td>5.1 Use multiple media for communication</td>
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<tr>
<td>5.2 Use multiple tools for construction and composition</td>
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<tr>
<td>5.3 Build fluencies with graduated levels of support for practice and performance</td>
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<tr>
<td>Multiple Means of Engagement</td>
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<td>Guideline 7. Provide options for recruiting interest</td>
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<tr>
<td>7.1 Optimize individual choice and autonomy</td>
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<tr>
<td>7.2 Optimize relevance, value, and authenticity</td>
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<tr>
<td>7.3 Minimize threats and distractions</td>
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<tr>
<td>Guideline 9. Provide options for self-regulation</td>
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<tr>
<td>9.1 Promote expectations and beliefs that optimize motivation</td>
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<td>9.2 Facilitate personal coping skills and strategies</td>
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<td>9.3 Develop self-assessment and reflection</td>
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<td>Guideline 8. Provide options for sustaining effort and persistence</td>
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<tr>
<td>8.1 Heighten salience of goals and objectives</td>
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<td>8.2 Vary demands and resources to optimize challenge</td>
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<td>8.3 Foster collaboration and communication</td>
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<td>8.4 Increase mastery-oriented feedback</td>
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<tr>
<td>NETS Students</td>
<td></td>
</tr>
<tr>
<td>1. Creativity and Innovation</td>
<td></td>
</tr>
<tr>
<td>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</td>
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<tr>
<td>2. Communication and Collaboration</td>
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<tr>
<td>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</td>
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<tr>
<td>3. Research and Information Fluency</td>
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<tr>
<td>Students apply digital tools to gather, evaluate, and use information.</td>
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<tr>
<td>4. Critical Thinking, Problem-Solving &amp; Decision-Making</td>
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<tr>
<td>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</td>
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<tr>
<td>5. Digital Citizenship</td>
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<tr>
<td>Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</td>
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<td>6. Technology Operations and Concepts</td>
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<tr>
<td>Students demonstrate a sound understanding of technology concepts, systems and operations.</td>
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<tr>
<td>NETS Teacher</td>
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<tr>
<td>1. Facilitate and Inspire Student Learning and Creativity</td>
<td></td>
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<tr>
<td>Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation.</td>
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<tr>
<td>2. Design and Develop Digital-Age Learning Experiences and Assessments</td>
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<tr>
<td>Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS-S.</td>
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<td>3. Model Digital-Age Work and Learning</td>
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<tr>
<td>Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.</td>
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<tr>
<td>4. Promote and Model Digital Citizenship and Responsibility</td>
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<tr>
<td>Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.</td>
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<td>5. Engage in Professional Growth and Leadership</td>
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<tr>
<td>Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting universal design for learning and universal access to instruction.</td>
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<tr>
<td>Use Universal Design for Learning</td>
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<tr>
<td>Essential Question</td>
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Appendix B Wikispaces Home Page of DIP Resources
Appendix C Survey of Concerns Questionnaire (SoCQ)

Your numeric code __________

CHOOSE ONLY ONE RESPONSE PER QUESTION.
The purpose of this questionnaire is to determine what people who are using, or are thinking about using, various programs, or practices they are concerned about at different times during the innovation adoption process. A large portion/number of the items on this questionnaire may appear to be of little relevance or contain irrelevant items, therefore, please circle “0” on your scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For Example:

This statement is very true of me at this time. 0 1 2 3 4 5 6 7
This statement is somewhat true of me now. 0 1 2 3 4 5 6 7
This statement is not at all true of me at this time. 0 1 2 3 4 5 6 7
This statement seems irrelevant to me. 0 1 2 3 4 5 6 7

Please respond to the items in terms of your present concerns or how you feel about your involvement or potential involvement with the Research-Based Instructional Strategies (RBIS) and a Digital Instructional Planner (DIP). We do not hold to any one definition of this innovation, so please think of it in terms of your own perception of what it involves. Please respond to each item in terms of your present concerns about your involvement or potential involvement with the RBIS, and the DIP.

Your response in crucial to this study! Thank you for taking time to complete this task.
Stages of Concern in Implementing the RBIS, and DIP

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<tr>
<th></th>
<th>Irrelevant</th>
<th>Not True of me</th>
<th>Somewhat true of me now</th>
<th>Very true of me now</th>
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<td>1</td>
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<td></td>
<td>Irrelevant</td>
<td>Not True of me</td>
<td>Somewhat true of me now</td>
<td>Very true of me now</td>
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<td>16.</td>
<td>I am concerned about my inability to manage all that the innovation requires.</td>
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<td>17.</td>
<td>I would like to know how my teaching or administration is supposed to change.</td>
<td>0 1 2 3 4 5 6 7</td>
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<td>18.</td>
<td>I would like to familiarize other departments or persons with the progress of this new approach.</td>
<td>0 1 2 3 4 5 6 7</td>
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<td>19.</td>
<td>I am concerned about evaluating my impact on students.</td>
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<td>20.</td>
<td>I would like to revise the innovation’s approach.</td>
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<td>21.</td>
<td>I am preoccupied with things other than the innovation.</td>
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<td>22.</td>
<td>I would like to modify our use of the innovation based on the experiences of our students.</td>
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<td>23.</td>
<td>I spend little time thinking about the innovation.</td>
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<td>24.</td>
<td>I would like to excite my students about their part in this approach.</td>
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<td>25.</td>
<td>I am concerned about time spent working with nonacademic problems related to the innovation.</td>
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<td>26.</td>
<td>I would like to know what the use of the innovation will require in the immediate future.</td>
<td>0 1 2 3 4 5 6 7</td>
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<td>27.</td>
<td>I would like to coordinate my efforts with others to maximize the innovations’ effects.</td>
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<td>28.</td>
<td>I would like to have more information on time and energy commitments required by the innovation.</td>
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<td>29.</td>
<td>I would like to know what other faculty are doing in this area.</td>
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<td>30.</td>
<td>Currently, other priorities prevent me from focusing my attention on the innovation.</td>
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<td>31.</td>
<td>I would like to determine how to supplement, enhance, or replace the innovation.</td>
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<td>32.</td>
<td>I would like to use feedback from students to change the program.</td>
<td>0 1 2 3 4 5 6 7</td>
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</table>
33. I would like to know how my role will change when I am using the innovation.

34. Coordination of tasks and people is taking too much of my time.

35. I would like to know how the innovation is better than what we have now.

Please complete the following:

Both the pre- and post-intervention set of open-ended questions will be:

1. What are your greatest concerns when creating lesson plans for your current classes?

2. Do you feel you have adequate resources for lesson-planning?

3. If yes, which type(s) do you use?

4. If no, which one or what kind of resources would you prefer?

The post-intervention open-ended questions will also include the following questions:

1. What did you like about the DIP?
   - Why did you like it?

2. What did you not like about the DIP?
   - Why did you not like it?

3. What did you like about the RBIS?
   - Why did you like it?

4. What did you not like about the RBIS?
   - Why did you not like it?

5. Are you interested in participating in an interview on this subject?

Thank you for your help!
Appendix D Wikispaces Page of CPALMS DIP Resources

CPALMS is an online toolbox of information, vetted resources, and interactive tools that helps educators effectively implement teaching standards. It is the State of Florida's official source for standards information and course descriptions. [http://www.cpalms.org/Public/]

- Collaborate
    - Lesson Study is a peer-to-peer, job-embedded, collaborative form of professional development that engages small teams of teachers in:
      - Setting long and short term learning goals for their students
      - Researching problem areas in the content and pedagogy related to their subjects
      - Planning an instructional unit and research lesson related to the chosen content focus
      - Teaching the research lesson to students and collecting student data on their interactions with the lesson
      - Discussing the data on student learning and improving the lesson, and
      - Reflecting on their professional learning within the context of the lesson study cycle.

- Plan

- Align
  - Browse and search Florida Standards [http://www.cpalms.org/Public/search/Standard]

- Learn
  - Self-paced PD online [http://www.cpalms.org/Public/search/ProfessionalDevelopment]

- Motivate
  - Social Media [http://www.cpalms.org/Homepage/social_media.aspx]

- Share

Add Discussion
Appendix E  Wikispaces Page of CRISS DIP Resources

I. Understanding Patterns and Structures
1. Charting the authors style http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (CRISS Resource)
2. Highlighting http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (CRISS Resources)
4. Pattern puzzles (http://www.readingquest.org/strat/patternpuzzles.html) (*Reading Quest)

II. Discussion:
1. Think Pair Share http://literacy.purduecal.edu/student/ammessme/ThinkPairShare.html (CRISS Resources)
2. Cooperative teams http://literacy.purduecal.edu/student/ammessme/Roles.html (CRISS Resources)
4. Read-and-say something http://literacy.purduecal.edu/student/ammessme/ReadSay.html (CRISS Resources)
5. Authentic questions http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (CRISS Resource)
6. Seed discussions http://literacy.purduecal.edu/student/ammessme/Seed.html (CRISS Resources)
7. QAR http://www.adlit.org/strategies/19802/ (Adolescent Literacy)
V. Informal Writing: Learning Logs
5. Observation entries http://www.adlit.org/strategies/22355

VI. Formal Writing
1. Framed paragraph http://www.palmbeachschools.org/multicultural/documents/FramedParagraphs.pdf (Palm Beach Schools)
3. RAFT http://www.readingrockets.org/strategies/raft (Reading Rocket)

VII. Vocabulary
1. Mapping definitions http://www.readingquest.org/strat/cdmap.html (Reading Quest)
2. Semantic feature analysis http://www.readingrockets.org/strategies/semantic_feature_analysis (Reading Rockets)
4. Sentence and word expansion http://teachers.net/lessons/posts/3279.html (Teacher.net)
5. Sentence synthesis http://www.englishgrammar.org/synthesis-sentences/

💬 Add Discussion
III. Active Strategies for Learning

1. KWL: http://www.nea.org/tools/k-w-l-know-want-to-know-learned.html (National Education Association)
2. Pre & Post reading Journals
   http://www.readwritethink.org/classroom-resources/student-interactives/graphic-3039.html (Read Think Write)
6. Sequence mapping http://www.readingrockets.org/strategies/story_sequence (Reading Rockets)
7. Character mapping http://www.readwritethink.org/classroom-resources/printouts/character-30199.html (Reading Quest)
8. Comparison maps http://www.readingquest.org/strat/compare.html (Reading Quest)
12. Reciprocal Teaching http://www.readingrockets.org/strategies/reciprocal_teaching (Reading Rockets)

IV. Organizing Learning

1. Two column notes http://www.adlit.org/article/12855 (Adolescent Literacy)
2. Main idea notes http://www.readingquest.org/strat/summarize.html (Reading Quest)
4. Hypothesis–proof notes http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (Reading Quest)
5. Problem solution notes http://www.readingquest.org/strat/problem.html (Reading Quest)
6. Process notes http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (Reading Quest)
7. Content frames http://www.mvrhs.org/eel/caruthers/linkforallteachers/ (Reading Quest)
8. Story plans http://www.readingquest.org/strat/storymaps.html (Reading Quest)
Appendix F Wikispaces Page of ESE Accommodations DIP Resources

- **Selecting Accommodations: Guidance for Individual Educational Plan Teams** (PDF) (2013) - A brief explanation of the process the IEP team should follow to determine which accommodations a student with a disability may need.
  - **Selecting Accommodations: Guidance for Individual Educational Plan Teams** (RTF) (2013) - A brief explanation of the process the IEP team should follow to determine which accommodations a student with a disability may need.

- **Guide to Accommodations for Computer-Based FCAT, FCAT 2.0, and EOC Assessments** (PDF) (Revised, Spring 2012) - Assists school district personnel and parents when making decisions about the use of accommodations for students with disabilities on statewide computer-based assessments.


- **Accommodations and Modifications for Students with Disabilities in Career Education and Adult General Education** (PDF) Brochure (Revised 2011) - Identifies accommodations and modifications that students with disabilities in secondary and postsecondary career education and adult general education programs may need.

- **Accommodations and Modifications for Students with Disabilities in Career Education and Adult General Education** (PDF) Guide (Revised 2011) - Assists school district personnel when making decisions about the use of accommodations and modifications for students with disabilities.

- **Accommodations: Assisting Students with Disabilities (2010)** (PDF) Guide to instructional accommodations to assist school district personnel and parents when making decisions about the use of accommodations for students with disabilities.

- **Accommodations and Modifications for Students with Disabilities** (PDF) What Parents Need to Know (2003) - Helps parents understand accommodations and modifications. Included are examples as well as information about how decisions are made.
  - **Acomodaciones y modificaciones: Lo que los padres tienen que saber** (PDF) (Revisado en 2003). (Spanish)
Appendix G Wikispaces Page of ESOL DIP Resources

English Language Learners Strategies

Resources below were copied from Broward County Schools ESOL web page http://esol.browardschools.com/index.php?option=com_content&view=article&id=29713&Itemid=44567&activeMenu=44567

Best Practices
Best Practices (Curriculum and Instruction)

K-12 ESOL Program Plan
Suggested Supplemental Instructional Materials
Description of Supplemental Learning Materials
Reading Activities for Parents
ESOL Instructional Strategies
ELL Language Descriptors (Elementary)
ELL Language Descriptors (Secondary)
Bilingual Dictionaries List
Developmental Language Arts Through ESOL Instructional Frameworks
Middle School: First Nine Weeks
Second Nine Weeks
Third Nine Weeks
Fourth Nine Weeks
High School: First Nine Weeks
Second Nine Weeks
Third Nine Weeks
Fourth Nine Weeks

Instructional Considerations for English Language Learners in the Five Areas of Reading

Table of Contents
Introduction
Effective Reading Instruction

Phonemic Awareness
Phonics
Vocabulary
Fluency
Comprehension

Potential Impact of Syntax and Phonology on English Language Learners Brochures
(Click on the language title link below)

Potential Impact of Spanish Syntax and Phonology on English Language Learners
Potential Impact of Haitian-Creole Syntax and Phonology on English Language Learners
Potential Impact of Portuguese Syntax and Phonology on English Language Learners
Supplemental Materials PowerPoints
Derivatifying ESOL Strategies for Practical Classroom Use (Elementary)
Literature Circles in the Elementary Grades
Non-Invasive Vocabulary
Scaffolding Instruction for Limited English Proficient (LEP) Students
Strategies for teaching ELLs
Supporting the Needs of LEP Students
The Importance of Vocabulary in Content Area Classes
Making the Grade-ELL Subgroup
Math CAVS
Science CAVS
Let’s Go
Newcomer Kits
Reading Basics
Rigby in-Step
ESE/ELL Guidelines

Add Discussion
Appendix H Wikispaces Page of ISTE DIP Resources
**Appendix I Wikispaces Page of Marzano DIP Resources**

### Marzano's 9 High Yield Strategies

<table>
<thead>
<tr>
<th>Marzano strategies</th>
<th>Project CRESS strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying similarities and differences</td>
<td>Van Diagram, Content Frames, Semantic Feature Analysis</td>
</tr>
<tr>
<td>Summarizing</td>
<td>Deep-Sentence Summarization, Learning Logs, Free-Form Mapping, Selective Underlining, Read-Read-Check-Summarize, Reciprocal Teaching</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>Discussion Techniques, Think-Pair-Share, Anticipation Guide, Question Answer Relationships (QARs)</td>
</tr>
<tr>
<td>Notetaking</td>
<td>Two-Column Notes, Content Frames, Van Diagram, Opinions-Proof Notes, Problem-Solution Notes, Selective Underlining, mapping, KWL, Main Ideas - Detail Notes, Story Plans</td>
</tr>
<tr>
<td>Generating and testing hypotheses</td>
<td>QARs, Hypothesis-Proof Notes, Problem-Solution Notes, Power Thinking, Pattern Puzzles, metacognition</td>
</tr>
<tr>
<td>Case, questions, and relationships</td>
<td>KWL, Author's Craft, Story Hass, Authentic Questions, Concept of Definition Map</td>
</tr>
<tr>
<td>Non-linguistic representations</td>
<td>Graphic Organizers, Free-Form Mapping, Learning Logs, pictures</td>
</tr>
<tr>
<td>Advance organizers</td>
<td>KWL, Author's Craft, Van Diagram, Content Frames, Pattern Puzzles, Anticipation Guide, Think-Pair-Share</td>
</tr>
<tr>
<td>Marzano does more with:</td>
<td></td>
</tr>
<tr>
<td>Teacher behavior Effortworth Vocabulary theory</td>
<td>Student responsibility Ownership of strategies Vocabulary Learning Writing</td>
</tr>
<tr>
<td>Homework issues Teacher questioning</td>
<td>Student self-questioning Metacognition</td>
</tr>
</tbody>
</table>

Table above from [http://www.stjohns.k12.fl.us/deptta/staff/Marzano%20and%20CRESS%20Comparison.pdf](http://www.stjohns.k12.fl.us/deptta/staff/Marzano%20and%20CRESS%20Comparison.pdf)

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### Add Discussion
Appendix J Wikispaces Page of UDL DIP Resources
Appendix K Wikispaces Page of DI DIP Resources
Appendix L Levels of Use (LoU) Interview Questions

Questions in bold print are mandatory questions.

1. Are you using the innovation?
   If “no,” answer the following questions: if “yes,” go to question 22:

2. Can you give a brief overview of the experience that caused you not to use the innovation (setting, circumstances, people involved hardware, software, content, methods, materials, timing, outcome)?

3. Had you tried to learn the concepts or skills in designing effective lesson plans?
   a. (If yes), how was this time different?
   b. (If not), why not?

2. Has your lesson-planning changed?
   a. (If yes) In what ways has it changed?
   b. (If not) Why do you think there was no change?

3. Did the use of the RBIS/DIP influence your teacher planning?
   a. (If yes) In what way was your planning influenced?
      i. What areas of planning were influenced?
      ii. Can you explain this further?
   b. (If not) Why do you think there was no influence?

4. How long did it take you to write a lesson plan before using the RBIS/DIP?

5. How long does it take you to write a RBIS/DIP now?

6. What background do you think you needed to understand using the RBIS/DIP?
   a. How do you think you acquired this background?

7. What technology were you using for lesson-planning?
   a. Were there any glitches?
8. Will you continue to Use the RBIS/DIP?
   a. Why?
   b. Why not?
9. Would you recommend the RBIS/DIP to others?
10. Were there any barriers to using the RBIS/DIP (time, knowledge, team use, support)?
11. What kind of support do you think would have been beneficial in using the RBIS/DIP?
12. Did you use any of the recommended resources?
   a. Which one(s) did you use?
   b. Which did you like? Why?
   c. Which one(s) did you not find useful? Why?
13. Were there any negative or positive effects in using the RBIS/DIP? If yes, please explain what they were.
14. How do you think you applied this RBIS/DIP into your lesson-planning skill to enhance student learning?
15. Was there any impact for students using the RBIS/DIP? (Were there any effects to students from using the RBIS/DIP?)
16. Have you decided on a date to use it and set a date to begin using it?
17. Are you currently seeking information about the innovation?
18. Did you think the way that you understood this during this experience would be beneficial for you when you actually want to use this process with your students?
19. What are the key elements that made this learning experience effective?
20. Now I would like to ask about an important experience that you may have had this fall while implementing an innovation related to using advanced technologies for
instructional-design/planning/delivery, and/or as a tool supporting students’ ability to research, organize, visualize, manage, evaluate, and to communicate information.

21. Do you have another important learning experience you would like to share?
(If so, then repeat the questions above. Continue to ask about other important learning experiences until there are no more.)

22. What kinds of changes are you making in your use of the innovation?

23. Can you provide a brief overview of the experience that caused you to use the innovation (setting, circumstances, people involved hardware, software, content, methods, materials, timing, outcome)?

24. Had you tried to learn the concepts or skills in designing effective lesson plans?
   c. (If yes), how was this time different?
   d. (If not), why not?

25. Has your lesson-planning changed?
   c. (If yes) In what way has it changed?
   d. (If not) Why do you think there was no change?

26. Did the use of the RBIS/DIP influence your teacher planning?
   c. (If yes) In what way was your planning influenced?
      i. What areas were influenced?
      ii. Can you elaborate?
   d. (If not) Why do you think there was no influence?

27. How long did it take you to write a lesson plan before using the RBIS/DIP?

28. How long does it take you to write a RBIS/DIP now?

29. What background do you think you required to understand the use of the RBIS/DIP?
   b. How do you think you acquired this background?
30. What technology were you using?
   b. Were there any glitches?
31. Will you continue to Use the RBIS/DIP?
   c. Why?
   d. Why not?
32. Will you recommend the RBIS/DIP to others?
33. Were there any barriers to using the RBIS/DIP (time, knowledge, team use, support)?
34. What kind of support do you think would have been beneficial in using the RBIS/DIP?
35. Did you use any of the resources?
   d. Which one(s) did you use?
   e. Which did you like?
   f. Which one(s) did you not find useful?
36. Were there any effects noted from using the RBIS/DIP?
37. How do you think you applied this RBIS/DIP into your lesson-planning skill to enhance student learning?
38. Was there any impact to students from using the RBIS/DIP? (Were there any effects to students from the use of the RBIS/DIP?)
39. Are you coordinating your use of the innovation with other users, including someone not in your original group of users?
40. How are you coordinating with others?
41. Have you been using the discussion board in the wiki of the RBIS?
   a. (If yes) How?
   b. (If not) Why did you choose not to use it?
42. Are you planning or exploring making major changes modifications or replacing the innovation?

43. Did you think that the way that you understood the RBIS/DIP during this experience would be beneficial for when you actually wanted to use the RBIS/DIP with your students?

44. What are the key elements that made this learning experience effective?

45. Now I would like to ask about an important experience that you may have had this fall while implementing an innovation related to using advanced technologies for instructional-design/planning/delivery, and/or as a tool supporting students’ ability to research, organize, visualize, manage, evaluate, and communicate information.

46. Do you have another important learning experience you would like to share?

(If so, then repeat the questions above. Please continue to ask about other important learning experiences until there are no more.)

Close with “Thank you.”
Appendix M RESEARCH STUDY: Volunteers Needed

WHO: K-12 Teachers of Reading

WHAT: The aims of the research are to identify the stages of concern using a new Digital Instructional Planner (DIP), with Research-Based Instructional Strategies (RBIS)

- Watch a 15-minute orientation session on how to use the DIP and RBIS via YouTube
- Additional 5 - 10 minute videos - PD's will be made available on RBIS Sections (CPALMS, CRSS, Marzano, ESE accommodations, ELI strategies, Universal Design For Learning, and Differentiated Instruction).
- Join the RBIS Wikispaces by creating an account using non self-identifying username – 10 minutes
- Incorporate the use of the DIP and RBIS for nine weeks –90 - 120 minutes per week
- Some participants may be selected to email the DIP to researcher at week three/four – 10 minutes
- Additional 5 - 10 minute videos - PD's will be made available via YouTube – less than 1 hour
- Complete pre- and post-survey of stages of concerns questionnaire 20 – 25 minutes
- Volunteers, if selected, participate in a 60-minute interview
- Verify the transcription of interview 30 – 40 minutes
- Total of 10 weeks participation in study for 17-22 hours
- Keep the DIP and access to all resources after the study, participants will also get update DIP files based on research findings.

BENEFITS: There are no known benefits for participation in this study.

CONTACT: Tony Dutra 954-993-7757 or tony.dutra@mymail.barry.edu

If interested, please complete the Interest Form / Consent (Appendix XX) located at the following SurveyMonkey-link: https://www.surveymonkey.com/r/6DSY66H

If you decide to participate in this research, you will be asked to do the following: use the DIP and RBIS for writing your lesson plans, and follow the procedures listed above.

Your consent to be a research participant is strictly voluntary, and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your employment.

There are no known risks or known benefits for participation in this study. As a research participant, the information you provide will be held in strict confidence to the extent permitted by law.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Tony Dutra, at (954) 993-7757, or by email tony.dutra@mymail.barry.edu; my Dissertation Chair, Dr. Victoria Giordano, at (305) 899-3613, or by email at vgiordano@barry.edu; or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or by email at bcook@barry.edu.
Appendix N Interest Form / Consent (on SurveyMonkey™)

Your participation is requested in a research project. The title of the study is Technology-Guided Research-Based Strategies Changing K-12 Teachers’ Reading Instruction Practices: A Mixed-Methods Study. The research is being conducted by Mr. Tony Dutra, a doctoral student in the Educational Leadership Department at Barry University. Mr. Dutra is seeking information that will be useful in the field of Educational Technology. The aim of the research is to study the changes in lesson-planning for teachers of reading using the Digital Instructional Planner (DIP) and using research-based instructional strategies (RBIS) resources located on a WikiSpaces website. In accordance with these aim, the participants (approximately 150) will be asked to: complete a pre- Survey of Concerns Questionnaire 35 items, completion time is 20–25 minutes; view a 2 minute video on how to download the binded DIP file and download the file 2 minutes; view a 15 minute orientation video (with optional additional PD videos covering CPALMS, CRISS, Marzano’s Instructional Strategies, ESE accommodations, ELL strategies, Universal Design For Learning, and Differentiated Instruction) on how to use the DIP and RBIS; watch a 2 minute YouTube video on how to join the RBIS Wikispaces by creating an account; incorporate the use of the RBIS and DIP in your instructional planning for reading for nine weeks; email your DIP to the researcher; view additional PD via YouTube; and complete a post- Survey of Concerns Questionnaire (35 items, completion time is 20–25 minutes). Total of 10 weeks participation in study for 17-22 hours.

Your consent to be a research participant is strictly voluntary, and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects.

There are no known risks or know benefits for participation in this study.

As a research participant, the information you provide will be kept anonymous. SurveyMonkey.com allows researchers to suppress the delivery of IP addresses during the downloading of data, and in this study, no IP address will be delivered to the researcher. However, SurveyMonkey.com does collect IP addresses for its own purposes. If you have concerns about this, you should review the privacy policy of SurveyMonkey.com before you begin.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Tony Dutra, at (954) 993-7757, or by email tony.dutra@mymail.barry.edu; my Dissertation Chair, Dr. Victoria Giordano, at (305) 899-3613, or by email at vgiordano@barry.edu; or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or by email at bcook@barry.edu.

If you are interested in continuing, please click “I Agree” to provide demographic and instructional planning information. 1c). By clicking on the “I Agree” button below and by submitting a completed survey, you are giving permission to use your data in this study. Participants must click on either the “I agree” button or “I Do Not Agree” button to confirm consent or refusal. Once the “I Agree” button is clicked, the participant will be linked directly to the survey. If you click on the “I Do Not Agree” button, you will immediately exit this site.
Participants must click on either the “I agree” button or “I Do Not Agree” button to confirm consent or refusal. Once the “I Agree” button is clicked, the participant will be linked directly to the survey. If you click on the “I Do Not Agree” button, you will immediately exit this site.

I Agree  

I Do Not Agree

- Demographic information
  Please fill in blank for the following:
  - years of teaching experience
  - teacher name
  - email address
  - name of school
  - name of school district
  - degree field received
  - certifications and endorsements held
  - level taught

Please respond yes /no to the following questions:
- access to a computer for lesson-planning
- Mac computer
- Windows computer

Please respond to the following statements using this scale.

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This statement is true of me now

I have received in-service/professional development completion or have knowledge of Creating Independent Student-Owned Strategies (CRISS)

I have received in-service/professional development completion or have knowledge of Universal Design for Learning (UDL)

I have received in-service/professional development completion or have knowledge of Differentiated Instruction (DI)

I have received in-service/professional development completion or have knowledge of International Society for Technology in Education Standards (ISTE) for teachers and students

I have received in-service/professional development completion or have knowledge of Collaborate Plan Align Learn Motivate Share (CPALMS)

I have received in-service/professional development completion or have knowledge of using File Maker Pro® software
Appendix O Script For Follow-up Phone Call to Administrator

Good morning/afternoon. My name is Tony Dutra and I am a doctoral candidate at Barry University. I am calling to speak with <administrator name> regarding a research study. I recently invited him/her to disseminate Research Study flyers to teachers of reading at your school site. May I speak with him/her or make an appointment to call back at a better time?

Hello <administrator name>. Thank you for taking time to speak with me today. My name is Tony Dutra and I am a doctoral candidate at Barry University. I recently sent you a email regarding a research study entitled Technology-Guided Research-Based Strategies Changing K-12 Teachers’ Reading Instruction Practices: A Mixed-Methods Study. The reason that you have received the email is I am requesting participation of teachers of reading from your school site in this research study.

Have you had a chance to look at the email regarding the details of participating in the study? (Respond accordingly) Are there any questions that I may answer regarding your school’s participation? (Respond accordingly)

I am requesting that you advertise the attached Research Study flyer to teachers of reading at your school.

Thank you for your time and participation.
Appendix P Barry University Informed Consent Form - Study

Your participation is requested in a research project. The title of the study is Technology-Guided Research-Based Strategies Changing K-12 Teachers’ Reading Instruction Practices: A Mixed-Methods Study. The research is being conducted by Mr. Tony Dutra, a doctoral student in the Educational Leadership Department at Barry University. Mr. Dutra is seeking information that will be useful in the field of Educational Technology. The aim of the research is to study the changes in lesson-planning for teachers of reading using the Digital Instructional Planner (DIP) and using research-based instructional strategies (RBIS) resources located on a WikiSpaces web site. In accordance with these aims, the participants (approximately 150) will be asked to: complete a pre- Survey of Concerns Questionnaire 35 items, completion time is 20–25 minutes; view a 2-minute video on how to download the binded DIP file and download the file 2 minutes; view a 15-minute orientation video (with optional additional PD videos covering CPALMS, CRISS, Marzano’s Instructional Strategies, ESE accommodations, ELL strategies, Universal Design for Learning, and Differentiated Instruction) on how to use the DIP and RBIS; watch a 2 minute YouTube video on how to join the RBIS Wikispaces by creating an account; incorporate the use of the RBIS and DIP in your instructional planning for reading for nine weeks; email your DIP to the researcher; view additional PD via YouTube; and complete a post- Survey of Concerns Questionnaire (35 items, completion time is 20–25 minutes). Total of 10 weeks participation in study for 17-22 hours.

Your consent to be a research participant is strictly voluntary, and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects.

There are no known risks or known benefits for participation in this study.

As a research participant, the information you provide will be held in strict confidence to the extent permitted by law. Any published results of the research will refer to group averages only, and no names will be used in the study. Data will be kept in a locked file in the researcher's office for five years. Your signed consent form will be kept separate from other documents in a locked cabinet. All data will be kept secure on a password-protected computer.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Tony Dutra, at (954) 993-7757, or by email tony.dutra@mymail.barry.edu; my Dissertation Chair, Dr. Victoria Giordano, at (305) 899-3613, or by email vgiordano@barry.edu; or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or by email bcook@barry.edu. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent
I acknowledge that I have been informed of the nature and purposes of this study by Tony Dutra, that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this study.

Signature of Participant Date

Researcher Date Witness Date

(Witness signature is required only if research involves pregnant women, children, other vulnerable populations, or if more than minimal risk is present.)

Please sign, scan and email the consent form to the researcher (tony.dutra@mymail.barry.edu) or use US postal service to return the Informed Consent Form to Tony Dutra 2310 NE 7th Street Hallandale Beach FL 33009
Appendix Q Interview E-Mail

Dear [Teacher Name]:

Thank you so much for your interest and willingness to participate in my dissertation research study, Technology-Guided Research-Based Strategies Changing K-12 Teachers’ Reading Instruction Practices: A Mixed-Methods Study.

I have attached a copy of the Informed Consent (interview) form for your review. After you review the Informed Consent form, I would like to meet with you in person so that I can conduct the semi-structured interview using the Level of Use interview questions. Please let me know a date, time and location at your school within the next week that we may meet to review the Informed Consent (interview) form. You will be presented with an original Informed Consent form for execution at our meeting, after which time we will commence the interview. If you prefer to have a telephone interview please sign and return the Informed Consent (interview) form to me via e-mail of US postal service at 2310 NE 7th street Hallandale Beach FL 33009.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Tony Dutra, at (954) 993-7757, or by email tony.dutra@mymail.barry.edu; my Dissertation Chair, Dr. Victoria Giordano, at (305) 899-3613, or by email at vgiordano@barry.edu; or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or by email at bcook@barry.edu.

Thank you so much again,

Sincerely,

Tony Dutra
954-993-7757
tony.dutra@mymail.barry.edu
Appendix R Barry University Informed Consent Form - Interview

Your participation is requested in a semi-structured interview using the Level of Use interview questions. The title of the study is Technology-Guided Research-Based Strategies Changing K-12 Teachers’ Reading Instruction Practices: A Mixed-Methods Study. The research is being conducted by Mr. Tony Dutra, a doctoral student in the Educational Leadership Department at Barry University. Mr. Dutra is seeking information that will be useful in the field of Educational Technology. The aim of the research is to study the changes in lesson-planning for teachers of reading using the Digital Instructional Planner (DIP) and using research-based instructional strategies (RBIS) resources located on a WikiSpaces web site. In accordance with this aim, your participation in a 60-minute interview and verify/return e-mail of the transcript of your interview (30 - 40 minutes) will contribute to the study.

If you decide participate in this semi-structured interview, you can expect to spend approximately 60 minutes in the interview with the researcher and less than 60 minutes to verify the accuracy of the transcript. The interviews of the 10 interviewees in the study will each be digitally recorded and transcribed by a qualified expert who will sign a third-party confidentiality agreement.

There are no known risks or known benefits for participation in this study.

As a research participant, the information you provide will be held in strict confidence to the extent permitted by law. Any published results of the research will refer to common themes found within the interviews, and no names will be used in the study. Data will be kept in a locked file in the researcher's office for five years. Your signed consent form will be kept separate from other documents in a locked cabinet. All data will be kept secure on a password-protected computer.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Tony Dutra, at (954) 993-7757, or by email tony.dutra@mymail.barry.edu; my Dissertation Chair, Dr. Victoria Giordano, at (305) 899-3613, or by email at vgiordano@barry.edu; or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or by email at bcook@barry.edu. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent
I acknowledge that I have been informed of the nature and purposes of this study by Tony Dutra, that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this study.

____________________  __________
Signature of Participant              Date

____________________  __________
Researcher                      Date                                Witness                        Date

(Witness signature is required only if research involves pregnant women, children, other vulnerable populations, or if more than minimal risk is present.)
Appendix S Pre SoCQ Lesson-planning Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>What are your greatest concerns when creating lesson plans for your current classes?</th>
<th>Time</th>
<th>Multiple Plans</th>
<th>Concern for Students Instruction</th>
<th>Resources</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Time constraints</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Time - I do not have a planning period so everything is done at night.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>They are very time consuming</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>The time</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>The time taken to write them up and making sure all applicable standards are covered.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>Master's</td>
<td>How much time it takes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>It takes too long to finish my lesson plans.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Time required to create lesson plans</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Master's</td>
<td>Lack of time for planning</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>Time spent planning</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Bachelor's</td>
<td>Multiple academic levels</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>My greatest concern is about how I am going to be able to teach everything that I have planned when I teach two different grade levels simultaneously.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>How students are going to receive the information.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Ensure that I am creating lessons that meet the needs of my students</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>I do not create lesson plans.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>Making sure that I am adequately completing proper lesson plans.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>My greatest concerns are the strategies and resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>----------</td>
<td>------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>No Reply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix T Post SoCQ Lesson-planning Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>What are your greatest concerns when creating lesson plans for your current classes?</th>
<th>Time</th>
<th>Multiple Plans</th>
<th>Concern for Students Instruction</th>
<th>Resources</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Time required to create flexible lessons that meet my students' needs as well as the demands of the district.</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>There are various different concerns I have when creating lesson Plans as follows: 1) Meeting the needs of all learners in my classroom, 2) Student engagement, 3) Student comprehension of the lesson, 4) Time allotted for lesson</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Time needed to plan</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Time management</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Time management</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>The time that I spent doing lesson plans</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Master's</td>
<td>Lack of planning time during the workday. Must to planning at home.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Time management</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>Time needed to get all resources and materials prepared for each daily lesson.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>Master's</td>
<td>I have 8 different grade levels</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>My greatest concerns include being able to plan lesson steps for different reading levels, grouping students, and integrating technology (using</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
technology as a supplemental tool) so that learning is effective and efficient.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Access to resources for differentiation</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Bachelor's</td>
<td>Finding additional resources to support my lesson.</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>Find resources sometimes is difficult so, I need to use the same thing all the times. ESE students learn more from realia material than learn from videos</td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Detail of lesson</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>Is there a specific way lesson plans are to be created?</td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>My greatest concern when using the lesson planner (DIP) I have to leave the lesson plan link to access the research links. I wish they were embedded in the DIP</td>
</tr>
</tbody>
</table>
### Appendix U Pre SoCQ Lesson-planning Resources Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>Do you feel you have adequate resources for lesson-planning?</th>
<th>Yes</th>
<th>No</th>
<th>Some</th>
<th>If yes, which type(s) do you use?</th>
<th>If no, which one or what kind of resources would you prefer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Based on my observation it is my belief that my school has to</td>
<td>x</td>
<td></td>
<td></td>
<td>I have no preference. Having both</td>
<td>Having both digital and paper resources is extremely</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>adequate resources for me to create a lesson.</td>
<td></td>
<td></td>
<td></td>
<td>digital and paper resources is</td>
<td>important to create a lesson.</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Yes</td>
<td>x</td>
<td></td>
<td></td>
<td>Smart board</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>Pretty much.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Yes</td>
<td>x</td>
<td></td>
<td></td>
<td>Wonders, online resources</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Bachelor's</td>
<td>No</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>A set of resources readily available all in one place,</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(a website, folder)</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>Master's</td>
<td>No</td>
<td>x</td>
<td></td>
<td></td>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>No</td>
<td>x</td>
<td></td>
<td></td>
<td>I prefer more audiovisuals tools</td>
<td>I prefer more audiovisuals tools for teaching learning</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>process.</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>Not always, I usually spend a lot of time searching on the</td>
<td>x</td>
<td></td>
<td></td>
<td>Technology software tools would</td>
<td>Technology software tools would be best. Also, print outs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>internet for materials.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>and worksheets.</td>
</tr>
<tr>
<td>3</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>No, format is generally not provided by my administration. I</td>
<td>x</td>
<td></td>
<td></td>
<td>Lesson plan format that is</td>
<td>Lesson plan format that is locked so I can't change the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>do not have the time to look for additional resources to add</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>formatting by mistake and standards already embedded.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to my lessons.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>No</td>
<td>x</td>
<td></td>
<td></td>
<td>I want more resources in CPALMS,</td>
<td>I want more resources in CPALMS, CRISS, and UDL.</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Master's</td>
<td>No</td>
<td>x</td>
<td></td>
<td></td>
<td>more teaching with UDL strategies</td>
<td></td>
</tr>
</tbody>
</table>

185
<table>
<thead>
<tr>
<th></th>
<th>3</th>
<th>High</th>
<th>Bachelor's</th>
<th>No</th>
<th>x</th>
<th>easily accessible electronic resources, including text</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>No</td>
<td>x</td>
<td>Lessons to DI and resources</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Sometimes</td>
<td>x</td>
<td>The pacing guides and teacher editions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Sometimes</td>
<td>x</td>
<td>CPALMS, Canvas, Pedagogy sites</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>I don't fully think I have adequate resources for lesson-planning at this time.</td>
<td>x</td>
<td>Any additional resources that can assist me with lesson-planning.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>somewhat but could be better</td>
<td>x</td>
<td>Bi Weekly format</td>
<td>more ESE centered</td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>no reply</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix V Post SoCQ Lesson-planning Resources Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>Do you feel you have adequate resources for lesson-planning?</th>
<th>Yes</th>
<th>No</th>
<th>Some</th>
<th>If yes, which type(s) do you use?</th>
<th>If no, which one or what kind of resources would you prefer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary Bachelor's</td>
<td>Yes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>Pacing guides, and other only resources</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary Master's</td>
<td>I feel I have adequate resources for lesson-planning.</td>
<td>x</td>
<td></td>
<td></td>
<td>Resources vary and I am not sure not sure which resource is the correct one.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Middle Master's</td>
<td>yes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary Bachelor's</td>
<td>I feel I have some resources</td>
<td>x</td>
<td></td>
<td></td>
<td>Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary Master's</td>
<td>Yes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>Pacing guide No</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Bachelor's</td>
<td>I find I have adequate resources</td>
<td>x</td>
<td></td>
<td></td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary Bachelor's</td>
<td>I find I have adequate resources</td>
<td>x</td>
<td></td>
<td></td>
<td>Technology N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Bachelor's</td>
<td>Yes</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>Technology Edmodo Google Docs Magazine articles for which I buy subscriptions</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle Bachelor's</td>
<td>No, I was looking forward to using the DIP for the links to the strategies. I wish my version of the DIP had links to the resources for the strategies.</td>
<td>x</td>
<td></td>
<td></td>
<td>Links in the digital planner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>High Bachelor's</td>
<td>Not all of the time.</td>
<td>x</td>
<td></td>
<td></td>
<td>ELA Readworks.org Set of exercises geared toward a standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Level</td>
<td>Degree</td>
<td>Response</td>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>---------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>No Answers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Some resources</td>
<td>x Technology - pacing guides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>No. Lesson templates are helpful and other resources to enhance concepts, however, many times it is difficult to reproduce the amount of materials needed and to plan how the tools will be used within the learning environment</td>
<td>Resources that provide feedback, frequent feedback, about student progress is helpful. Also, resources that lend to routine procedures and practicing multiple times with material is helpful too.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>No, I don't</td>
<td>x I prefer resources about how to create a lesson plan for a class with students in standard curriculum and modified curriculum together</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>no</td>
<td>x Time, skeletal lesson plans formatted to the district pacing guide that I can build or modify.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>No, I do not have adequate resources for my lesson.</td>
<td>x The kind resources that I would prefer would be: 1) Educational Technology (Guide to citing online sources, PowerPoint postcards presentation/educational Prezi, student guide to web research, and different teacher webpages), 2) Teaching tips and advice (Parent-teacher communication advice from veteran teachers, lesson-planning advice from veteran teachers, classroom organization tips from veteran teachers, and behavior management tips from veteran teachers).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Elementary Bachelor's

They are many websites that offer resources for lesson-planning; however, having everything I need in one place will make lesson-planning much easier.

x

FCRR Website, CPALMS, and Read Think and Write
## Appendix W Post SoCQ DIP Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>What did you like about the DIP?</th>
<th>Why did you like it?</th>
<th>What did you not like about the DIP?</th>
<th>Why did you not like it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>A form to use as a standard</td>
<td>Simple to follow sections</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>How detailed it was</td>
<td>It allowed me to break down what I was doing better.</td>
<td>The structure tables, I wish it had been: intro, I do, we do, they do, you do, closure. I feel like that would have made more sense since we need to gradually release anyway.</td>
<td>I plan by week and I'm not always sure how an activity will go; so I write down the activity over maybe several days. I feel like this set up is mostly for a one or two day lesson.</td>
</tr>
<tr>
<td>1</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>Drop down menus with standards and strategies</td>
<td>Very easy to fill out</td>
<td>The DIP did not include the links to RBIS</td>
<td>I was looking for a wealth of resources for planning differentiation</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>no answer</td>
<td>Easy to use, checkboxes</td>
<td>Areas that I did not use such as NETS</td>
<td>Had to go to another website to find the links. Wish they were in the DIP</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Bachelor's</td>
<td>The standards are readily available and I just have to select the proper one.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Common lesson plan</td>
<td>Allows you to work with your colleagues</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>I like that it is digital.</td>
<td>I like it because it is editable.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>Master's</td>
<td>Easy to fill out, drop down FSA standards</td>
<td>Easy to use</td>
<td>Links in DIP were not hot links to strategies, I had to go to another website</td>
<td>Extra steps needed to find resources</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Common Lesson plan</td>
<td>It allows you to work with your colleagues</td>
<td>There is nothing specific that I dislike, its just that I don't feel comfortable with technology</td>
<td>I'm not good at technology</td>
</tr>
<tr>
<td>Grade</td>
<td>Degree</td>
<td>Feature</td>
<td>Opinion</td>
<td>Reason</td>
<td>Liked Everything</td>
<td>Disliked Everything</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>2</td>
<td>Elementary Bachelor's</td>
<td>I think now it is easier to create a lesson plan</td>
<td>Because it is a new resource that we can use to create a lesson plan</td>
<td>I liked everything</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Elementary Master's</td>
<td>Easily to use template</td>
<td>Simply to use</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Middle Bachelor's</td>
<td>Drop down menus</td>
<td>It was easy to create my lessons</td>
<td>print view</td>
<td>Could not view in a nice small format. Items not used should disappear</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Bachelor's</td>
<td>I like the following about the DPI: 1) Delivering instruction directly to students, 2) Diagnosing student learning needs, 3) Varying the delivery method of instruction, 4) Tailoring the learning experience to meet individual student needs, 5) Supporting student collaboration and providing interactive experiences, 6) Fostering independent practice of specific skills</td>
<td>It helped me solve my daily classroom work in a faster time rate.</td>
<td>There is nothing that I do not like about DPI</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Master's</td>
<td>Ease of use</td>
<td>Drop down list of standards Correlation of Marzano strategies to CRISS, this was my favorite</td>
<td>Printing took too many pages.</td>
<td>It prints sections that I did not use.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary Bachelor's</td>
<td>Common lesson-planning</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Bachelor's</td>
<td>Easy to use fill-in boxes, checkboxes, and drop-down menus with standards</td>
<td>Made lesson-planning extremely easy. I was also able to duplicate lessons and just tweak for the changes, Very easy.</td>
<td>Would link hot links from the DIP, why should I go to the RBIS site?</td>
<td>I liked it</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elementary Bachelor's</td>
<td>Being able to share the DIP with the teachers I work with during our lesson-planning meetings.</td>
<td>It enabled us to collaborate and create a lesson plan to meet the individual needs of our students.</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix X Post SoCQ RBIS Concerns

<table>
<thead>
<tr>
<th>Years Teaching</th>
<th>School-level Teaching</th>
<th>Degree Held</th>
<th>What did you like about the RBIS?</th>
<th>Why did you like it?</th>
<th>What did you not like about the RBIS?</th>
<th>Why did you not like it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>The resources</td>
<td>Everything was there</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>YouTube Videos with easy to follow instructions</td>
<td>Very easy to follow step by step in the video</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>Lots of resources</td>
<td>CRISS</td>
<td>NETS</td>
<td>Not needed</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Bachelor's</td>
<td>n/a</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>I like that it is researched based.</td>
<td>I like it because it helps develop instructional materials.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>Master's</td>
<td>Did not use</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Elementary</td>
<td>Master's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Middle</td>
<td>Bachelor's</td>
<td>NA</td>
<td>NA</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Grade</td>
<td>Degree</td>
<td>Year</td>
<td>Benefits of Research Base Instructional Strategies</td>
<td>Teacher/Staff Benefits</td>
<td>Learning Resources</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>--------</td>
<td>------</td>
<td>-----------------------------------------------</td>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>I like the two great benefits that Research Base Instructional Strategies have: 1) Benefits for Students: Motivation Students report that they are often inspired by lecturers whom they perceive to be experts in their field, and who convey their enthusiasm for the subject. Active learning: Students tend to learn most when they are actively involved in developing their knowledge. Skills development: Through research-based learning, students can develop the intellectual skills of critical analysis and also valuable transferable skills such as group work, time- and resource-management and data handling. 2) Benefits for Teachers/Staff: Drawing teaching and research activities closely together supports an economy of effort between the two. Less time spent on teaching preparation. The more research-like learning activities that can be devised for students, the less the teacher has to concentrate on preparing a content-based curriculum. A switch of emphasis from teaching content to learning processes (that often include placing more responsibility on the students) can eventually reduce preparation time. Contributions to the research process: The more involved students are with research-like learning, the more likely there will be dialogue between students and teachers which feeds into research activity.</td>
<td>The benefits it offers.</td>
<td>There is nothing that I do not like about it.</td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Master's</td>
<td>N/A</td>
<td>YouTube videos explaining how to use each section.</td>
<td>Organization of sections related to the DIP</td>
<td>Need more ELL resources</td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>High</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>Very organized, with lots of resources.</td>
<td>My favorite section was the CRISS</td>
<td>none</td>
</tr>
<tr>
<td>3</td>
<td>Elementary</td>
<td>Bachelor's</td>
<td>N/A</td>
<td>Being able to have the standards as a drop down link, and the videos for the strategies I was going to implement.</td>
<td>It was like having a mini-PD.</td>
<td>I just think it would be easier if it was all available in one area.</td>
</tr>
</tbody>
</table>
### Appendix Y Changes in Planning – Theme from LoU

<table>
<thead>
<tr>
<th>Sample Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in Planning</td>
</tr>
<tr>
<td>Universal Design of Learning actually is including Marzano’s strategies it is in CRISS strategies. And to me um, I don’t think I connected the 3 together in my head but when you produced it in your tool it kind of made it all together. Well the innovation gives you more conscience planning. It was a reminder of the CRISS strategies. The RBIS allowed me to easily access the strategies that I have forgotten This innovation was very easy to use with my existing materials. I am using the this innovation to um go further I am not just doing surface questions with my students that I am looking at going deeper I really liked the fact the it linked to different teaching models and instructional models without me having to think about that. Having myself a reminder built into my lesson plans to ensure that I am building that depth of knowledge was very very powerful. I liked this tool also because it is almost a one stop shop that includes all the components of an effective lesson.</td>
</tr>
</tbody>
</table>
### Appendix Z Time – Theme from LoU

<table>
<thead>
<tr>
<th>Time</th>
<th>24 Total statement</th>
<th>Sample Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>It actually shortened my planning time and at the same time made it more effective.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I wanted to reemphasize or wanted to reteach and it made using this innovation much less time consuming for me in the classroom I was able to do that.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It use to take me a couple of hours and now I am down with the DIP to 45 minutes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>… before innovation it was probably 50 minutes to an hour. Now is about half the time (refers to time spent planning).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before it would take me probably about an hour. Now I would say it takes me about a half an hour.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>But this has cut down my time. I think I have taken probably five hours off of the time it takes me to do my lesson plans because I don’t have to go back and forth.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>… at first I completed it between 30 to 45 minutes and as I picked up the methods it took me 15 to 30 minutes to finish a lesson plan.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix AA Ease of Use – Theme from LoU

<table>
<thead>
<tr>
<th>Ease of Use</th>
<th>29 total statements</th>
<th>Sample Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>This innovation was very easy to use with my existing materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I was able to quickly draft what I wanted from the previous week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It simplifies it for me in the sense that you have all the strategies already stated in the lesson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The technology is easy, its friendly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This lesson plan is a life saver with the strategies that are already there.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It was kinda like a one stop shop.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m a hands-on learner so, by going in and exploring the links exploring everything on there. Was what made it easier for me</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t have to think about taking up my Marzano strategies book, I don’t have to think about taking my ELL strategies list, I don’t have to think about the CRISS strategies when all the strategies are within one tool.</td>
</tr>
</tbody>
</table>
|             |                     | I liked this tool also because it is almost a one stop shop. For right now in my humble opinion is the best that I have seen. Um, that includes all the components of an effective lesson.
Appendix BB Recommended Changes in DIP – Theme from LoU

Sample Statements

| Recommended Changes in DIP | 9 total statements | It didn’t print in a very nice format. So, if there were things that I did not check I would love it if those would disappear when I printed. So, it would become a smaller document. Instead of showing how many things I did not check for this lesson.

I would like for the tool to have is hyperlinks to Marzano strategies and to um CRISS strategies.

I would like for the access points standards to be added.

The fill in the boxes does not expand to accommodate all my text. |
### Appendix CC Recommended DIP to Others – Theme from LoU

<table>
<thead>
<tr>
<th>Sample Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended DIP to Others</strong></td>
</tr>
<tr>
<td>The DIP was wonderful I think that new teachers especially could use this digital formatting of a lesson plan with built in features.</td>
</tr>
<tr>
<td>I shared it with my other colleague.</td>
</tr>
<tr>
<td>I also shared them with my colleagues as well.</td>
</tr>
<tr>
<td>Yes, I’m planning on sharing it with my English department.</td>
</tr>
<tr>
<td>Actually, the people that I shared this with are my colleagues and my direct supervisors.</td>
</tr>
</tbody>
</table>
### Appendix DD Recommended Student Changes – Theme from LoU

**Student Changes – Theme from LoU**

<table>
<thead>
<tr>
<th>Student Changes</th>
<th>9 total Statements</th>
<th>Sample Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>I got further with their thought process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to get further in conversation reviewing literature and different things in our classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instruction moved more smoothly allowing the students to more easily understand the lesson because I was more clear.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>… the fact I was able to access the everything I needed on there. As far as the resources, the graphic organizers, the handouts. The research for my myself impacts the students because now I know how to better teach based on the videos that were there and accessible to me.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix EE Requests to Use CBAM

Tony Dutra
2310 NE 7th Street
Hallandale Beach FL 33009
(954) 993-7757
tony.dutra@mymail.barry.edu

Dear SEDL Publications Department,

I am presently pursuing a doctoral degree in Educational Leadership at Barry University (11300 NE 2nd Avenue, Miami Shores, Florida). The title of the dissertation is “The experiences of a digital instructional planner on the lesson planning practices of K-12 Reading Teachers”.

The purpose of this study is to identify and explain the experiences K-12 reading teachers while using the Digital Instructional Planner (DIP). This study will use a mixed methods approach collecting both quantitative data from the Survey of Concerns Questionnaire (SoCQ), and qualitative data from interviews with randomly selected participants. The SoCQ is used to collect pre/posttest data of Reading teachers concerns with the innovation, the DIP. This data will shape the professional development of how to use the DIP, and the researcher follow-up with the participants will be targeted to address any concerns identified in the pretest. The posttest and interviews will document the post concern changes after use of innovation, and explore any themes that resulted from instructional planning practices with use of the DIP. This research study will take place in a major urban school district in Florida.

I am requesting permission to reproduce the SoCQ and to administer it to the 60 participants (reading teachers) that will complete the SoCQ for this research study.

I have already purchased the Measuring Implementation in Schools: The Stages of Concern Questionnaire from the lulu.com website. SEDL will be credited for permitting the use and reproduction of the instrument.

Thank you for your cooperation, and permission to use the SoCQ. I look forward to your response.

Sincerely,

Tony Dutra

Doctoral candidate at Barry University
tony.dutra@mymail.barry.edu
Dear SEDL Publications Department,

I am presently pursuing a doctoral degree in Educational Leadership at Barry University (11300 NE 2nd Avenue, Miami Shores, Florida). The title of the dissertation is "Changes in Teachers of Reading Practices Using Research-Based Instructional Strategies: A Mixed-Methods Study ".

The purpose of this study is to identify and explain the concerns and changes of lesson planning of teachers of reading while using the Digital Instructional Planner (DIP), and research based instructional practices (RBIS). This study will address the concerns of teachers regarding reading instructional practices using RBIS and the DIP. An explanatory sequential mixed-methods design will be used, which will involve first collecting quantitative data in Phase 1, explaining the quantitative results with in-depth qualitative data collected in Phase 2, and then merging the two strands of data. In the first quantitative phase of the study, the Stages of Concerns Questionnaire (SoCQ) data will be collected from all participants (pre and post) from a major urban school district to assess whether the instructional practices of teachers of reading change after using the innovation tools (RBIS and DIP). Then in Phase 2, the qualitative phase, 10 in-depth interviews using the LOU will be conducted as a follow-up to help explain the results of the quantitative data analysis. This research study will take place in a major urban school district in Florida.

I am requesting permission to reproduce the SoCQ, and Levels of Use. The SoCQ will be administered to 80 participants (reading teachers) that will complete the SoCQ for this research study. The LOU interviews will be used with 10 participants.

The Stages of Concern Questionnaire, and LOU will be credited for permitting the use and reproduction of the instruments.

Thank you for your cooperation, and permission to use the SoCQ. I look forward to your response.

Sincerely,

Tony Dutra

Doctoral candidate at Barry University
tony.dutra@mymail.barry.edu
Appendix FF Permissions to Use CBAM

SEDL License Agreement

To: Tony Dutra (Licensee)
2310 NE 7th Street
Hallandale Beach, FL 33009

From: Nancy Reynolds
Information Associate
SEDL, and Affiliate of American Institutes for Research
Information Resource Center – Copyright Permissions
4700 Mueller Blvd.
Austin, TX 78723

Subject: License Agreement to reproduce and distribute SEDL materials

Date: February 25, 2015


The SoCQ 075 will be referred to as the “work” in this License Agreement. SEDL is pleased to grant permission to the Licensee who will use the work in a dissertation titled The Experience of a Digital Instructional Planner on the Lesson Planning Practices of K-12 Reading Teachers at Barry University in Miami Shores, FL. The Licensee also is granted permission to administer the work to 60 reading teachers in a major urban school district in Florida. The following are the terms, conditions, and limitations governing this limited permission to reproduce the work:

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Thank you, again, for your interest in using the Stages of Concern Questionnaire (SoCQ 075). If you have any questions about this License Agreement, please contact me at 800-475-6661, ext. 6548 or 512-391-8548, or by e-mail at nancy.reynolds@sedl.org.

Sincerely,

Nancy Reynolds
Head of SEDL, an affiliate of American Institutes for Research

Agreed and accepted:

Signature:

Printed Name: Tony Dutra

Date signed: March 3, 2015
Date signed: 2/25/13
TO: Tony Dutra  
2310 NE 7th Street  
Hallandale Beach, FL 3309

FM: Jason LaTurner  
Senior Consultant – AIR  
4700 Blvd  
Austin, TX  78703

RE: Amendment to SEDL/CBAM License Agreement

DT: January 28, 2016

Tony,

Per our conversations, I am amending your original license agreement to use CBAM tools (dated February 25, 2015). As such you are now granted permission to use the SoCQ 075 with up to 100 teachers. Additionally, you are also granted permission to use the Levels of Use interview protocol with up to 20 participants.

If you have additional questions about this amendment or the use of CBAM tools don’t hesitate to contact me at jlaturner@air.org.

Sincerely,

R. Jason LaTurner
Re: permission to reproduce the SoCQ

LaTurner, Jason <jlaturner@air.org>

To: Dutra, Tony (Barry Student); Cc: Davis, Garry <gdavis@air.org>

Wed 2/24/2016 12:00 PM

Tony,

Please use this email as permission to expand your sample size from 100 to 150 thus amending the initial agreement dated January 28, 2016.

-jason laturner

Jason LaTurner, PhD
Interim Director
Texas Comprehensive Center
American Institutes for Research
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