1. Executive Summary

Research Questions

Considering the impact teacher retention has on student achievement in my district, the problem of practice I initially identified has evolved and narrowed to supporting novice teachers in the area of lesson plan design.

Research Question aligned to SMART Goal:

By 2020, 75% of teachers with one to two years of experience will show proficiency in teaching practice as indicated by formative observational data and formal evaluation data in the following areas of planning for instruction:

- Objective
- Instructional Scaffolding
- Formative Assessment
- Student Engagement

By 2020, 75% of students in classrooms instructed by a teacher with one to two years of experience will score at or above the district average as measured by the district-wide Galileo mid- and post-test.

Learning Design Implemented

Novice teachers are supported over the course of the first two years of employment in the district with a structured five day New Teacher Orientation. Over the course of the next two years, novice teachers are supported in a variety of ways. Novice teachers are provided professional learning each month based on effective lesson planning and delivery. Novice teachers are supported for two years by a site-based mentor who meets with them weekly to provide feedback on lesson plans, evaluate student data, and reflect on best practices. Additionally, teachers in their first year of employment are supported by a Master Teacher Mentor who meets with them weekly, supporting them in the plan-teach-reflect cycle. Building level administration supports novice teachers by providing timely and actionable feedback following observations and evaluations.

Summary of Findings

The analysis of teacher observation and evaluation data revealed that by the end of the school year approximately 77% of novice teachers demonstrated proficiency in the following areas of planning for instruction: objective, instructional scaffolding, formative assessment, and student engagement. However, proficiency in effective lesson plan design did not transfer to increased student achievement as measured
by Galileo mid- and post-tests. Only 29% of students in novice teachers’ classes scored at or above the district average.

Implications

Implications of findings include a need to align the observation tool to the formal evaluation instrument. An additional implication, is to ensure evaluators have the opportunity to participate in inter-rater reliability training several times a year. Final implications include the need for consistent, timely, actionable feedback on novice teachers’ lesson plans in order to translate into greater student academic success.
2. **Introduction**

- **Purpose of Evaluation**

My problem of practice has evolved and narrowed to supporting novice teachers in the area of lesson plan design. Planning is a vital component of the teaching-learning process. Lesson plans serve as a framework for the learning activities that will occur in the classroom each day. They focus the class on specific learning objectives and maximize instructional time. The lesson plan is the tool effective teachers use to ensure that each part of a lesson supports a specific learning objective and to ensure that the activities and time spent will lead students to master content and skills. Lesson planning provides time for the teacher to think through resources that will best capture the attention of students and choose learning activities that will clearly convey content required for students to meet the lesson objectives. Effective teachers use lesson plans as a reflective opportunity to make decisions on what activities will best meet the needs of students and to predict/plan reactions to student challenges. When teachers take the time to create detailed plans, they are more likely to present content and skills to students that are objective driven, well-paced, clear, and lead students to mastery.

- **SMART Goals**

By 2020, 75% of teachers with one to two years of experience will show proficiency in teaching practice as indicated by formative observational data and formal evaluation data in the following areas of planning for instruction:

- Objective
- Instructional Scaffolding
- Formative Assessment
- Student Engagement

By 2020, 75% of students in classrooms instructed by a teacher with one to two years of experience will score at or above the district average as measured by the district-wide Galileo mid- and post-test.

- **Evaluation Question(s)**

Considering the impact teacher created lesson plan design has on student achievement in my district, the evaluation question I identified is: *How can a clearly defined support structure best support novice teachers in creating effective lesson plan design?*
## Theory of Change

### Engage Stakeholders
- Engage stakeholders from all levels of the organization
- Gather qualitative and quantitative input/data throughout the process

*If stakeholders at all levels are engaged throughout the process, and their input is considered and valued, then there will be system-wide support and commitment to the common goal of moving novice teachers toward proficiency.*

### Define Accomplished Teaching
- Collectively define accomplished teaching
- Collectively define attributes of accomplished teaching
- Collectively determine indicators of accomplished teaching

*If all stakeholders are engaged in authoring the definition of accomplished teaching as well as determining the attributes of accomplished teaching, then a system-wide common language and a common understanding of teaching proficiency will develop.*

### Create a Continuum
- Collectively identify key focus areas
- Collectively determine the focus areas to be mastered at each developmental/experience level
- Align indicators of accomplished teaching to focus areas

*If all stakeholders are engaged in developing a continuum of accomplished teaching, then the indicators are universal, transparent, and equitable across the system. This ensures all novice teachers have the same opportunity to demonstrate proficiency in their teaching practice.*

### Develop Supports
- Create supports or scaffolds to assist teachers in mastering the attributes of accomplished teaching
- Provide professional development to both novice teachers and coaches who support them
- Provide on-going cycles of coaching for novice teachers including:
  - Planning support
  - Observations with feedback
  - Analysis of student work

*If supports are mindfully aligned to the key indicators of accomplished teaching, and if both novice teachers and their supporting colleagues (coaches, mentors, and administrators) are trained in the use of the supports, then novice teachers will show proficiency in their teaching practice.*

### Assess Impact on Students
- Collectively determine a system-wide measure of student achievement to assess novice teachers’ mastery of teaching practice
- Implement student achievement measures and analyze data

*If student achievement data is gathered and analyzed, then trends can be identified and addressed to further support novice teachers in developing proficiency in their teaching practice.*
### Logic Model

| New Teacher Orientation breakout sessions focused on planning for instruction | Novice teachers are introduced to and practice lesson planning using the Lesson Planning Template | Increased knowledge of the attributes of effective lesson plan design (KNOWLEDGE) Attitude of confidence in lesson planning (ATTITUDE) Written lesson plans that include the four lesson plan attributes: • Objectives • Scaffolding • Engagement • Formative Assessment (SKILL, APPLICATION) | Novice teachers apply knowledge of lesson design including: • Objectives • Scaffolding • Engagement • Formative Assessment on a preformatted lesson plan template. By 2020, 75% of teachers with one to two years of experience will show proficiency in teaching practice as indicated by self-assessment, mentor assessment, and evaluator assessment in the following areas of planning for instruction: • Objectives • Scaffolding • Engagement • Formative Assessment By 2020, 75% of students in classrooms instructed by a teacher with one to two years of experience will score at or above the district average as measured by the district-wide Galileo mid- and post-test. |
| Year 1 Professional Development Seminars | All Year 1 Professional Development Seminars throughout the school year will | Increased knowledge of the attributes of effective lesson plan design (KNOWLEDGE) | Novice teachers apply knowledge of lesson design including: • Objectives • Scaffolding By 2020, 75% of teachers with one to two years of experience will show proficiency in |
| Individualized Support and Mentoring | Novice teachers will receive individualized support and mentoring as needed by a site-based mentor, a Master Teacher Mentor, and/or a building level administrator | Increased knowledge of the attributes of effective lesson plan design (KNOWLEDGE) | Novice teachers apply knowledge of lesson design including: • Objectives • Scaffolding • Engagement • Formative Assessment on a preformatted lesson plan template. | By 2020, 75% of teachers with one to two years of experience will show proficiency in teaching practice as indicated by self-assessment, mentor assessment, and evaluator assessment in the following areas of planning for instruction: • Objectives • Scaffolding • Engagement • Formative Assessment on a preformatted lesson plan template. |
• Scaffolding
• Engagement
• Formative Assessment (SKILL, APPLICATION)

By 2020, 75% of students in classrooms instructed by a teacher with one to two years of experience will score at or above the district average as measured by the district-wide Galileo mid- and post-test.

**Learning**

When I began my professional learning as a 2019 Academy member, I had little experience and even less understanding of how to assess professional learning. Through my Academy experience, I have developed the skills necessary to assess the structures and content of professional learning, but most importantly the impact professional learning has on student achievement. I have come to the deep realization that truly effective professional learning is about the work that focuses on student outcomes. As an instructional leader, I integrate norms, protocols, and a professional learning plan to monitor progress toward adult learning goals that ultimately impact student achievement. Professional learning takes place over time. The process as ongoing and not simply a checklist. Even as I near Academy graduation, I realize the work of professional learning in my district is being elevated through ongoing formative assessment and refinement.

Through my ongoing work with the logic model I have refined and narrowed my problem of practice. Other aspects of this work with new teachers including the development of an optimal learning environment and the application of content knowledge are equally as important. However, through collaboration with multiple stakeholders the focus on effective lesson plan design aligns with our work to develop a more refined certified evaluation instrument. It was through my work on the KASABs that stretched my thinking to consider this problem of practice not only from the multiple perspectives of different stakeholders but from different types of change. This has truly given me a deeper and more holistic view of my problem of practice.

The study of the Innovation Configurations led me to a deeper understanding of how to assess the structures and content of our district’s professional learning.
3. Evaluation Design

- Data Sources/Collection Process/Organization
- Data Analysis Methods
- Data Display

Over the course of the 2018-2019 school year I systematically collected data from three sources to measure the impact effective instructional planning had on student academic achievement. Each of the three data sources measured merit or impact against a predetermined criteria. I collected and analyzed both formative and summative evaluations, and considered both qualitative and quantitative data.

The first piece of data collected over the course of the study was quarterly observational data (T4S-Teach for Success) of nine teachers representing grades pre-k through high school. All nine teachers are novice teachers with less than 3 years of experience. These nine teachers represent a 15% sample size of all novice teachers in the district. The observational data included: instructional objectives, instructional scaffolding, formative assessments, and student engagement. The observations were conducted and scored by the teachers’ qualified evaluator, a building administrator. The evaluator marked if the given attribute was present or not during the lesson. The quarterly observational data is considered formative as it was analyzed throughout the year to inform revisions, improvements, and adjustments to the program. Additionally, it is expected that novice teachers receive timely, actionable, constructive feedback from their evaluator in order to improve areas of instruction. The attributes that were present during the lesson are noted in green, those not present noted in red. This data is displayed in an excel spreadsheet with color coded cells.
The second piece of data collected over the course of the study was the first and second formal evaluation results of the same nine teachers. Each teacher’s qualified evaluator, a building administrator conducted and scored the formal evaluations. The lesson indicators measured in the formal evaluations include: instructional objectives, instructional scaffolding, and student engagement. There is no indicator on our formal district evaluation to measure the use of formative assessment. During a formal evaluation teachers are rated as highly effective, effective, developing, or ineffective. This data is considered both formative and summative. The first formal evaluation is considered formative, as the data is used to inform revisions, improvements, and adjustments to the program. Additionally, it is expected that novice teachers receive timely, actionable, constructive feedback from their evaluator in order to improve instruction. The second formal evaluation is considered summative as it informs us as to the program’s merit, worth, performance, and impact. This data is displayed in an excel spreadsheet accompanied by a corresponding pie chart for each lesson indicator. I have also included evaluator’s comments from the second formal evaluation. This qualitative data represents the novice teachers’ growth in instructional planning, and the quality of actionable feedback provided by evaluators.
Formal Evaluation Qualitative Feedback Comments

- One of Mrs. Longo’s strengths is the delivery of instruction. Her lessons are scaffold to support the learning until the students are able to work independently.
- Mr. Buffoni’s lessons are planned to have very little down time so students can actively interact with peers within the planned time.
- Mrs. Sieber constantly evaluates the students during the lesson and during explorations.
- Mrs. Haas uses a variety of methods-hand gestures, white boards, and pulled small groups.
- Ms. Kent plans with the objective in mind, and monitors students to make effective decisions based on data.
The third piece of data collected over the course of the study is student data. Elementary students are given a computerized assessment (Galileo) three times per year (pre-, mid-, and post-) in the content areas of English Language Arts (ELA) and math. The assessments are common among elementary grade levels and content areas. These six teachers represent a 10% sample size of all novice teachers in the district. The scores of the students in the six elementary novice teachers’ classes were then compared to the district average of the corresponding grade level or content area. This data is displayed using bar graphs, with the teachers’ scores represented in blue and the districts’ average represented in red.
4. Findings

- Interpret the Data

The analysis of the quarterly observational data suggests that more than 75% of novice teachers with one to two years of experience showed proficiency in the 4 areas of instructional planning by the fourth quarter. In the area of objectives, novice teachers moved from 66% demonstrating proficiency in the first quarter to 77% demonstrating proficiency in the fourth quarter. In the area of formative assessments, the sample of novice teachers moved from 44% demonstrating proficiency in the first quarter to 77% demonstrating proficiency in the fourth quarter. In the area of instructional scaffolding, 77% of the sample group of novice teachers demonstrated proficiency in the first quarter, and 88% demonstrated proficiency in the fourth quarter. Only 22% of the sample group demonstrated proficiency in the area of engagement in the first quarter. 88% demonstrated proficiency by the fourth quarter.

Analysis of formal evaluation data reveals some consistent trends in the percentage of novice teachers demonstrating proficiency in the three areas of instructional planning. Areas of consistency include proficiency in writing objectives. By the second formal evaluation, 88% of the sample group were rated as “effective” in writing objectives. Additionally, 77.8% of the sample group were rated as “effective” in the area of instructional scaffolding. The data revealed one area of inconsistent data. 88% of the sample group demonstrated proficiency in the area of student engagement on the fourth quarter observation. However, on the final evaluation data it was revealed that only 66% were rated as “effective” or “highly effective” on their second formal evaluation.

Analysis of the sample of elementary mid- and post- Galileo tests suggests that indicated proficiency on planning indicators in observations and formal evaluations are not necessarily translating into higher student achievement. Analyzing a sample size of 24 assessments revealed that novice teachers’ students scored at or above the district average only 29% of the time.

- Study Limitations

Limitations of the data may be some degree of human bias. An evaluator may impose his own beliefs about teaching on the teacher being observed. He may not personally like the teacher or may have unconscious biases related to the teacher's age, gender or ethnic or economic background. If an evaluator is friends with the teacher, this may be reflected in the observation and/or evaluation as well.

A teacher spends approximately six hours a day, 180 days a year teaching. The observational method of teacher evaluation makes the assumption that the evaluator will get an accurate picture of the teacher's effectiveness in the classroom by observing the teacher during one hour or two hours of this time. It is to be expected that a novice teacher may become nervous when being observed, and their performance may suffer. If the evaluator is an administrator, student behavior may also change, as they will not want to suffer the consequences of misbehaving in front of that individual. The result of these observations can often be distorted data.
Limitations of the data include the fact that the observation instrument, Teach for Success (T4S,) and the formal evaluation instrument were not aligned. Indicators and “look fors” present on the observation instrument were either explained in different language or included different “look fors” on the formal evaluation tool. Additionally, the area of formative assessment is not measured on the formal evaluation instrument.

Further limitations of the data include the fact that student mid- and post-test data was only available for elementary students. Additionally, this was the first year of the Galileo mid- and post- computerized test. Teachers and students had limited experience with the platform.

- Implication of Findings

Implications of findings include a need to align the observation tool to the formal evaluation instrument. Consistent alignment of expectations, indicators, “look fors”, ratings, language, and supports and scaffolds will provide clarity to both evaluators and teachers. An additional implication, is to ensure evaluators have the opportunity to participate in inter-rater reliability training several times a year. This will ensure equity of observational and evaluative data, equity of feedback, and reduction of observer/evaluator bias. Final implications include the need for consistent, timely, actionable feedback on novice teachers’ lesson plans in order to translate into greater student academic success.

- Evaluate the Evaluation

The time, personnel, and money allocated for this evaluation were adequate to conduct the evaluation I designed. The data I collected was aligned to the evaluation question, “How can a clearly defined structure best support novice teachers in creating effective lesson plan design?” The data collection procedures were as appropriate and accurate as possible under the current reality of our district’s observation/evaluation system. Stakeholders including district level administration and building level administration were involved in the design of the evaluation. The data was analyzed and displayed in a way that was accurate and appropriate to the audience. One point of data that will be collected in the future is a self-assessment of instructional planning knowledge and skills, completed by each novice teacher. As a result of this data analysis district-wide systematic recommendations have been made and implemented.

5. Recommendations/Next Steps

Based on data analysis the district has revised both observation tool and the evaluation instrument. The observation tool and the evaluation instrument are aligned in all aspects including expectations, indicators, “look fors”, ratings, language. We have also created a district-wide lesson plan template that aligns to the observation tool and the evaluation instrument. The lesson plan template has clearly developed sections for the instructional objective, instructional scaffolding, formative assessment, and student engagement. Additionally, we have created a crosswalk between the lesson plan template and the observation tool and evaluation instrument. Each school site has had two inservice professional development days to clarify the observation tool, the evaluation instrument and the lesson plan template. In order to provide timely,
actionable feedback to novice teachers in the area of lesson plan design we have made it mandatory that each teacher new to our district submit a lesson plan, using the district-wide lesson plan template, to a mentor teacher for feedback once a week. We have also provided mentor teachers training on providing feedback to novice teachers on lesson plan design. Mentor teachers also observe novice teachers twice per year in order to provide feedback on lesson delivery. The lesson plan template is used by every teacher for their formal evaluations. At the end of the school year we will collect data from the revised observation tools and evaluation instruments to determine if these supports have increased novice teachers’ abilities to create effective lesson plans.

Based on the data obtained from the quarterly observations, we have reformatte the Instructional Foundations Seminars that novice teachers attend each month. In addition to the two inservice professional development days at each site, novice teachers take a deep dive into specific sections of the lesson plan template each month. We have designed professional learning that reveals the tight alignment between the observation instrument, the evaluation tool, and the lesson plan template. As the year progresses we compile both qualitative data and quantitative data about the novice teachers’ ability to not only create effective lesson plans but also facilitate effective lesson.

Finally, our district has identified Essential Learning Standards in English Language Arts and has created district-wide curriculum maps and pacing guides. The focus on Essential Learning Standards will translate into student academic achievement as measured on the Galileo mid- and post- test.

6. Reflection

Through my experience as an Academy participant I have learned how to effectively use tools to support continuous improvement cycles. The use of a problem of practice approach with theory of change, logic model, KASAB, and implementation plans enable second order change to be implemented strategically and thoughtfully. The systematic use of these tools allows opportunity to measure results effectively. So often second order change is implemented with no thought of how to measure the impact. The tools allow me to keep the end in mind.

In all honesty, the greatest challenge to my Academy experience was funding. I serve a small remote district in western Arizona. My district simply does not have the funds to send an individual to a conference that costs upwards of a thousand dollars when one considers registration fees and travel. This experience has been one of the greatest and most influential of my professional career. However, Learning Forward Academy is for the rich. If it weren’t for the generosity of my Learning Forward Team I would not have been able to complete my Academy experience. I hope someone at Learning Forward takes my words to heart and considers how to promote equity of opportunity within the organization.

From my current perspective, one thing I would do differently is to collect, organize, and analyze data earlier in the process. Earlier data collection would reveal missing data points or opportunities. Had I collected, organized, and analyzed data earlier in the process, I would have had the time to implement a novice teacher self-reflection.
As I reflect on my Academy experience, one of the most powerful parts of the process for me as formulating the evaluation question and constructing the evaluation framework. I find myself constantly asking, what types of changes are we anticipating and what data will we collect to provide evidence of the change?

The district is committed to developing the knowledge and skills of all teachers in our district. We have a plan in place to systematically support teachers in the first three years of employment in our district. We also have a systematic plan in place to develop teacher leaders as they enter years three through seven of employment. In the coming months, I will be presenting the results of my Academy Learning Plan as well as using the tools from Academy to develop, implement, and evaluate next steps in supporting teachers in their professional trajectory.